

## ANATOMY

### Bowel components

[ID 189]

"**Dow Jones Industrial Average Closing Stock Report**":

From proximal to distal:

**Duodenum**

**Jejunum**

**Ileum**

**Appendix**

**Colon**

**Sigmoid**

**Rectum**

Alternatively: to include the cecum, "**Dow Jones Industrial Climbing Average Closing Stock Report**".

Knowledge Level 1, System: Alimentary

Anonymous Contributor

### Bowel components

[ID 1175]

"**Dublin Sisters Ceramic Red Colored Jewelry Apparently Illegal**":

2-4 letters of each component:

**Duodenum**

**Sigmoid**

**Cecum**

**Rectum**

**Colon**

**Jejunum**

**Appendix**

**Ileum**

Knowledge Level 1, System: Alimentary

Frank Hopkins

### Diaphragm apertures

[ID 272]

"**3 holes**, each with **3 things** going through it":

Aortic hiatus: aorta, thoracic duct, azygous vein.

Esophageal hiatus: esophagus, vagal trunks, left gastric vessels.

Caval foramen: inferior vena cava, right phrenic nerve, lymph nodes.

Knowledge Level 1, System: Alimentary

Anonymous Contributor

### Diaphragm apertures: spinal levels

Hi Yield [ID 3225]

**Aortic hiatus** = 12 letters = **T12**

**Oesophagus** = 10 letters = **T10**

**Vena cava** = 8 letters = **T8**

Knowledge Level 1, System: Alimentary

Oriade Adeoye Dept. of Medicine, College of Health Sciences, OAU, Ile-Ife

### Duodenum: lengths of parts

[ID 58]

"Counting **1 to 4** but staggered":

**1st part: 2 inches**

**2nd part: 3 inches**

**3rd part: 4 inches**

**4th part: 1 inch**

Knowledge Level 5, System: Alimentary

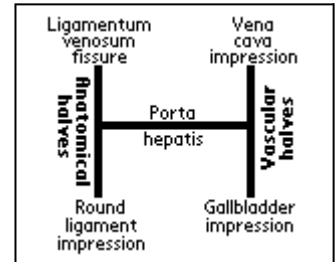
Anonymous Contributor

### Liver inferior markings showing right/left lobe vs. vascular divisions

[ID 114]

There's a **Hepatic "H"** on inferior of liver. One vertical stick of the H is the dividing line for anatomical right/left lobe and the other vertical stick is the divider for vascular halves. Stick that divides the liver into vascular halves is the one with vena cava impression (since vena cava carries blood, it's fortunate that it's the divider for blood halves).

Knowledge Level 5, System: Alimentary  
Robert O'Connor University College Dublin



Hi Yield [ID 72]

### Meckel's diverticulum details

2 inches long.  
2 feet from end of ileum.  
2 times more common in men.  
2% occurrence in population.  
2 types of tissues may be present.

Note: "**di-**" means "**two**", so **diverticulum** is the thing with all the **twos**.

Knowledge Level 2, System: Alimentary  
Robert O'Connor University College Dublin

### Murphy's point organ [for Irish]

[ID 61]

"Murphy was an Irishman (and Murphy is a classic Irish surname), and Ireland=green":

Green organ in body is gallbladder, so Murphy's point is the gall bladder.

Knowledge Level 3, System: Alimentary  
Robert O'Connor University College Dublin

### Aorta vs. vena cava: right vs. left

Hi Yield [ID 2516]

**Aorta** and **right** each have **5** letters, so aorta is on the right.

**Vena** and **cava** and **left** each have **4** letters, so vena cava is on the left.

Knowledge Level 1, System: Cardiovascular  
Robert O'Connor University College Dublin

### Aortic arch: major branch order

[ID 29]

"Know your **ABC'S**":

Aortic arch gives rise to:

**B**rachiocephalic trunk

left **C**ommon Carotid

left **S**ubclavian

Beware though trick question of 'What is first branch of aorta?' Technically, it's the coronary arteries.

Knowledge Level 1, System: Cardiovascular  
Anonymous Contributor

### Atrioventricular valves

Hi Yield [ID 2681]

"**LAB RAT**":

Left Atrium: **B**icuspid

Right Atrium: **T**ricuspid

Knowledge Level 1, System: Cardiovascular

Amir A. Ghaferi Johns Hopkins School of Medicine

### Axillary artery branches

[ID 663]

"**S**end **T**he **L**ord to **S**ay **A** Prayer":

From proximal to distal:

**S**uperior thoracic

**T**horacacromial

**L**ateral thoracic

**S**ubscapular

**A**nterior circumflex humeral

**P**osterior circumflex humeral

Knowledge Level 3, System: Cardiovascular

Michael A. Chaplin SUNY-HSCB Downstate College of Medicine

### Axillary artery branches

[ID 852]

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"**S**uzy **T**hompkins **L**oves **S**ex, **A**lcohol, and **P**ot":

From proximal to distal:

**S**uperior thoracic

**T**horacacromial

**L**ateral thoracic

**S**ubscapular

**A**nterior circumflex humeral

**P**osterior circumflex humeral

Knowledge Level 3, System: Cardiovascular

Karl Boston U. School of Medicine

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#### **Axillary artery branches**

[ID 1208]

"**S**crew **T**he **L**awyer **S**ave **A** Patient":

**S**uperior thoracic

**T**horacoacromiol

**L**ateral thoracic

**S**ubscapular

**A**nterior circumflex humeral

**P**osterior circumflex humeral

Alternatively: "**S**ome **T**imes **L**ife **S**eems **A** Pain".

Knowledge Level 2, System: Cardiovascular

Anonymous contributor and Joe Azzopardi Not specified and Xarabank

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#### **Brachial artery is medial to biceps tendon**

[ID 1577]

"**BAMBI**":

**B**rachial **A**rtery is **M**edial to **B**iceps **I**n elbow.

Knowledge Level 1, System: Cardiovascular

Christopher Jordan UAG-EDU

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#### **Brachial artery: recurrent and collateral branches**

[ID 608]

"**I** Am **P**retty **S**exy"

**I**nferior ulnar collateral artery goes with **A**nterior ulnar recurrent artery.

**P**osterior ulnar recurrent artery goes with **S**uperior ulnar collateral artery.

Alternatively: "**I** Am **P**retty **S**mart".

Knowledge Level 5, System: Cardiovascular

Paul's Boutique Western University College of Osteopathic Medicine of the Pacific

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#### **Branches of Internal Iliac Artery**

[ID 3160]

"**I** Love **G**oing **P**laces **I**n **M**y **V**ery **O**wn **U**nderwear":

**I**leolumbar

**L**ateral sacral

**G**luteal (superior and inferior)

**P**udendal (internal)

**I**nferior vesicle (uterine in females)

**M**iddle rectal

**V**aginal

**O**bturator

**U**mbilical

Knowledge Level 5, System: Cardiovascular

Joe and Betsy Sophie Davis School of Medicine

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#### **Cardiac valves: order in circuit**

[ID 2895]

"**TRI** berore you **BI**":

**T**ricuspid valve is located in left heart and **B**icuspid valve is located in right heart. Blood flows through the **tricuspid before bicuspid**.

Knowledge Level 1, System: Cardiovascular

Chris Gilbreth Cleveland Chiropractic College, Kansas City

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#### **Carotid sheath contents**

[ID 669]

"**I See 10 CC's in the IV**":

I See (I.C.) = **I**nternal **C**arotid artery

10 = **CN 10** (Vagus nerve)

CC = **C**ommon **C**arotid artery

IV = **I**nternal **J**ugular **V**ein

Knowledge Level 1, System: Cardiovascular

Anonymous Contributor

### Cavernous sinus contents

Hi Yield [ID 1094]

**O TOM CAT**:

O TOM are lateral wall components, in order from superior to inferior.

CA are the components within the sinus, from medial to lateral. CA ends at the level of T from O TOM.

See diagram.

**O**cculomotor nerve (III)

**T**rochlear nerve (IV)

**O**phthalmic nerve (V1)

**M**axillary nerve (V2)

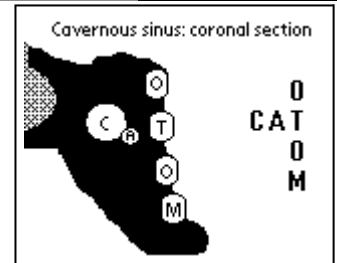
**C**arotid artery

**A**bducens nerve (VI)

**T**: When written, connects to the T of OTOM.

Knowledge Level 4, System: Cardiovascular

Jonathan Vafai New York University School of Medicine



### Coeliac trunk: branches

Hi Yield [ID 1833]

**Left Hand Side (LHS):**

**Left** gastric artery

**H**epatic artery

**S**plenic artery

Knowledge Level 1, System: Cardiovascular

Dr. Harsh Sharma

### Descending abdominal aorta branches from diaphragm to iliacs

[ID 613]

"**P**rostitutes **C**ause **S**agging **S**wollen **R**ed **T**esticles [in men] **L**iving **I**n **S**in":

**P**hrenic [inferior]

**C**eliac

**S**uperior mesenteric

**S**uprarenal [middle]

**R**enal

**T**esticular ["**in men**" only]

**L**umbar

**I**nferior mesenteric

**S**acral

Knowledge Level 2, System: Cardiovascular

Josser Mt. Sinai Medical School

### Descending abdominal aorta: seven divisions

[ID 448]

"**S**ometimes **I**ntestines **G**et **R**eally **S**tretched **C**ausing **L**eakage":

**S**uprarenals [paired]

**I**nferior mesenteric

**G**onadal [paired]

**R**enals [paired]

**S**uperior mesenteric

**C**eliac

**L**umbar [paired]

Knowledge Level 2, System: Cardiovascular

Anonymous Contributor

### External carotid artery branches

[ID 291]

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"Some Anatomists Like F\*#king, Others Prefer S & M":

Superior thyroid  
Ascending pharyngeal  
Lingual  
Facial  
Occipital  
Posterior auricular  
Superficial temporal  
Maxillary

Alternatively: As She Lay Flat, Oscar's Passion Slowly Mounted".  
Knowledge Level 2, System: Cardiovascular  
Anonymous Contributor

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**External carotid artery branches**

[ID 404]

"Sister Lucy's Powdered Face Often Attracts Silly Medicos":

Before entering the parotid gland:  
Superior thyroid  
Lingual  
Posterior auricular  
Facial  
Occipital  
Ascending pharyngeal  
Ends as:

Superficial temporal and  
Maxillary bifurcating in the in the parotid gland  
Knowledge Level 2, System: Cardiovascular  
Dr. Deepu Sudhakaran Dept of Surgery, Royal Adelaide Hospital

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**External carotid artery branches**

[ID 446]

"Some Angry Lady Figured Out PMS":

Superior thyroid  
Ascending pharyngeal  
Lingual  
Facial  
Occipital  
Posterior auricular  
Maxillary  
Superficial temporal  
Knowledge Level 2, System: Cardiovascular  
Anonymous Contributor

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**External carotid artery branches**

[ID 831]

StApLE OPIS:

Superior thyroid  
Ascending pharyngeal  
Lingual  
External maxillary (facial)  
Occipital  
Posterior auricular  
Internal maxillary  
Superficial temporal

Knowledge Level 2, System: Cardiovascular  
Michael S. Florencio, DMD University of Perpetual College of Medicine, Las Pinas, Philippines

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**External carotid artery branches**

[ID 842]

"Some Aberdeen Ladies F#ck, Others Prefer Manual Stimulation":

From inferior to superior:  
Superior thyroid  
Ascending pharyngeal  
Lingual  
Facial  
Occipital  
Posterior auricular  
Maxillary

Superficial temporal  
Knowledge Level 2, System: Cardiovascular  
Anonymous Contributor

External carotid artery branches

[ID 1030]

"So Long For Acting Old Parenting Means Stability":  
Superior thyroid  
Lingual  
Facial  
Ascending pharyngeal  
Occipital  
Posterior auricular  
Maxillary  
Superficial temporal  
Knowledge Level 2, System: Cardiovascular  
Anonymous Contributor

External carotid artery branches

[ID 1033]

"Some Aggressive Lovers Find Odd Positions More Stimulating":  
Superior thyroid  
Ascending pharyngeal  
Lingual  
Facial  
Occipital  
Posterior auricular  
Maxillary  
Superficial temporal  
Knowledge Level 2, System: Cardiovascular  
Anonymous Contributor

External carotid artery branches

[ID 1256]

"Sally Ate Lots Of Fresh Produce March Through September":  
Superior thyroid  
Ascending laryngeal  
Lingual  
Occipital (O before F is an extremely common variation)  
Facial  
Posterior auricular  
Maxillary  
Transverse facial  
Superficial temporal  
Knowledge Level 2, System: Cardiovascular  
Johns Hopkins Class of 2004

External carotid artery branches

[ID 1558]

"She Lay Flaccid As Olaf's Penis Slipped In":  
From caudal to cephalad:  
Superior thyroid  
Lingual  
Facial  
Ascending pharyngeal  
Occipital  
Posterior auricular  
Superficial temporal  
(Internal) maxillary  
Knowledge Level 2, System: Cardiovascular  
T. H. Lee UCLA School of Medicine

External carotid artery branches

[ID 1799]

"Suzy Always Lays Flat On Pillows Making Sex Terrific":

Superior thyroid

Ascending pharyngeal

Lingual

Facial

Occipital

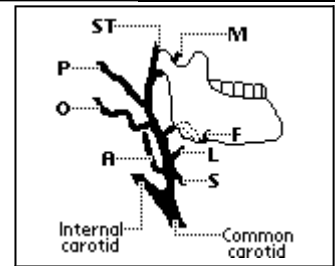
Posterior auricular

Maxillary

Superficial Temporal

Knowledge Level 2, System: Cardiovascular

Ally-Khan Somani University of Toronto, Faculty of Medicine



### External jugular vein: tributaries

[ID 3114]

**PAST:**

Posterior external jugular vein

Anterior jugular vein

Suprascapular vein

Transverse cervical vein

Knowledge Level 3, System: Cardiovascular

Dalia Rashdan Ain Shams University School of Dentistry

### Female pelvic organs' blood supply

[ID 267]

"3 organs, each get 2 blood supplies":

Uterus: uterine, vaginal.

Rectum: middle rectal, inferior rectal [inferior rectal is the end of pudendal].

Bladder: superior vesical, inferior vesical.

Knowledge Level 2, System: Cardiovascular

Anonymous Contributor

### Femoral artery deep branches

[ID 2415]

"Put My Leg Down Please":

Profundus femoris (deep femoral artery)

Medial circumflex femoral artery

Lateral circumflex femoral artery

Descending genicular arteries

Perforating arteries

Knowledge Level 2, System: Cardiovascular

Gene Lee Emory School of Medicine

### Femoral hernia: epidemiology

[ID 997]

**FEM**oral hernias are more common in **FEM**ales.

Knowledge Level 1, System: Cardiovascular

Anonymous Contributor

### Femoral triangle: arrangement of contents

Hi Yield [ID 10]

**NAVEL:**

From lateral hip towards medial **navel**:

Nerve (directly behind sheath)

Artery (within sheath)

Vein (within sheath)

Empty space (between vein and lymph)

Lymphatics (with deep inguinal node)

Nerve/Artery/Vein are all called Femoral.

Knowledge Level 1, System: Cardiovascular

Andrew J. Vasil UMD School of Medicine, Duluth, MN

### Femoral triangle: arrangement of nerve, artery, vein

[ID 11]

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**VAN:**

From medial to lateral:

**V**ein

**A**rtery

**N**erve

Nerve/Artery/Vein are all called Femoral.

Knowledge Level 1, System: Cardiovascular

Anonymous Contributor

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**Femoral triangle: contents**

Hi Yield [ID 1142]

**NAVY:**

In order from lateral to medial:

**N**erve

**A**rtery

**V**ein

**Y** of the groin

Alternatively: Y = **Y**-fronts [male underwear].

Knowledge Level 1, System: Cardiovascular

Anonymous Contributor

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**Heart valve sequence**

[ID 1938]

"**Try Pulling My Aorta**":

**T**ricuspid

**P**ulmonary

**M**itral

**A**orta

Knowledge Level 1, System: Cardiovascular

Michael Franco Melbourne University, Australia

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**Heart valves**

[ID 484]

"**Toilet Paper My A\$\$**":

From right to left:

**T**ricuspid

**P**ulmonic

**M**itral

**A**ortic

Knowledge Level 1, System: Cardiovascular

Jim Colburn Indiana University Medical Center

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**Heart valves: order in circuit**

[ID 3053]

"First learn a **Tricycle**, then learn a **Bicycle**":

Flow through **T**ricuspid first, then **B**icuspid.

Knowledge Level 1, System: Cardiovascular

Anonymous Contributor

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**Inferior vena cava tributaries**

[ID 1091]

"**I Like To Rise So High**":

**I**liacs

**L**umbar

**T**esticular

**R**enal

**S**uprarenal

**H**epatic vein.

Think of the IVC wanting to rise high up to the heart.

Knowledge Level 3, System: Cardiovascular

Usman Ahmad KMC

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**Internal iliac artery: anterior branches**

[ID 1169]



What Bill admitted to Hilary: "**I** Milked **O**ur **I**nsatiable **I**ntern's **U**dders **U**nder the **D**esk":

Inferior gluteal

Middle rectal

Obturator

Inferior vesical artery

Internal pudendal artery

Umbilical

**U/D**=Uterine artery (female)/ Deferential artery (male)

Knowledge Level 4, System: Cardiovascular

Anonymous Contributor

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**Internal iliac artery: posterior branch**

[ID 801]

**PILS:**

Posterior branch

Iliolumbar

Lateral sacral

Superior gluteal

Knowledge Level 5, System: Cardiovascular

Anonymous Contributor

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**Internal jugular vein: tributaries**

[ID 502]

"**M**edical **S**chools **L**et **C**onfident **P**eople **I**n":

From inferior to superior:

Middle thyroid

Superior thyroid

Lingual

Common facial

Pharyngeal

Inferior petrosal sinus

Knowledge Level 6, System: Cardiovascular

LaShawn A. Weaver Medical University of South Carolina

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**Liver: side with ligamentum venosum/ caudate lobe vs. side with quadrate lobe/ ligamentum teres**

[ID 270]

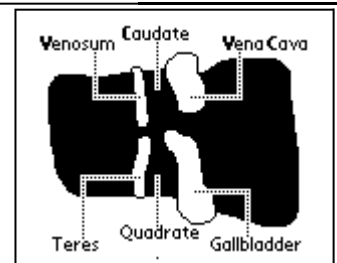
"**VC** goes with **VC**":

The **V**enosum and **C**audate is on same side as **V**ena Cava [posterior]. Therefore, quadrate and teres must be on anterior by default.

See inferior-view diagram.

Knowledge Level 4, System: Cardiovascular

Robert O'Connor University College Dublin



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**Lung lobe numbers: right vs. left**

Hi Yield [ID 79]

**T**ricuspid heart valve and **tri**-lobed lung both on the right side.

**B**icuspid and **bi**-lobed lung both on the left side.

Knowledge Level 1, System: Cardiovascular

Robert O'Connor University College Dublin

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**Maxillary artery branches**

[ID 935]

"**DAM I AM** **P**iss **D**runk **B**ut **S**tupid **D**runk **I** Prefer, **M**ust **P**hone **A**lcoholics **A**nonymous":

Deep auricular

Anterior tympanic

Middle meningeal

Inferior alveolar

Accessory meningeal

Masseteric

Pterygoid

Deep temporal

Buccal

Sphenopalatine

Descending palatine

Infraorbital

Posterior superior alveolar

Middle superior alveolar

Pharyngeal  
Anterior superior alveolar  
Artery of the pterygoid canal  
Knowledge Level 7, System: Cardiovascular  
Imani Walker and Fareeda Hamid New York College of Osteopathic Medicine

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**Portal-systemic anastomoses: main 2 places that retroperitoneals connect into systemic**

[ID 511]

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RetroPeritoneals hook up with Renal and Paravertebral veins.  
Knowledge Level 6, System: Cardiovascular  
Anonymous Contributor

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**Saphenous veins: path of great vs. small at malleolus**

[ID 278]

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"MAGdelaine has varicose veins" [The saphenous veins are important for varicose veins]:  
Medial maleolus, Anterior to maleolus, and Great saphenous go together.  
Then the opposites of these go together: Small saphenous is posterior to the lateral maleolus.  
Knowledge Level 3, System: Cardiovascular  
Robert O'Connor University College Dublin

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**Subclavian artery branches**

[ID 2451]

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"Very Tired Individuals Sip Strong Coffee Served Daily":  
Vertebral artery  
Thyrocervical trunk  
---Inferior thyroid  
---Superficial cervical  
---Suprascapular  
Costocervical  
---Superior intercostal  
---Deep cervical  
Knowledge Level 1, System: Cardiovascular  
Gene Lee Emory School of Medicine

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**Superior thyroid artery branches**

[ID 136]

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"May I Softly Squeeze Charlie's Girl?":  
Muscular  
Infrahyoid  
Superior laryngeal  
Sternomastoid  
Cricothyroid  
Glandular  
Knowledge Level 7, System: Cardiovascular  
Anonymous Contributor

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**Thoracic cage: relations to the important venous structures**

[ID 324]

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Behind the sternoclavicular joints: the brachiocephalic veins begin.  
Behind the 1st costal cartilage on the right the superior vena cava begins.  
Behind the 2nd costal cartilage on the right the azygos vein ends.  
Behind the 3rd costal cartilage on the right the superior vena cava ends.  
Knowledge Level 6, System: Cardiovascular  
Fred Reid Undergrad at St-Andrews, UK

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**Thoracoacromial artery branches**

[ID 662]

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"CALifornia Police Department":  
Clavicular  
Acromial  
Pectoral  
Deltoid  
Knowledge Level 6, System: Cardiovascular  
Michael A. Chaplin SUNY-HSCB Downstate College of Medicine

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**Thoracoacromial artery branches**

[ID 1207]

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**ABCD:**

Acromial

Breast (pectoral)

Clavicular

Deltoid

Knowledge Level 6, System: Cardiovascular

Anonymous contributor UCLA School of Medicine

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**Ulnar nerve to ulnar artery and radial nerve to radial artery relations**

[ID 90]

Think "peripheral nerves":

The ulnar nerve is "ulnar" to the ulnar artery.

Radial nerve is "radial" to the radial artery.

Knowledge Level 7, System: Cardiovascular

Anonymous Contributor

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**Thyroid: isthmus location**

Hi Yield [ID 97]

"Rings **2,3,4** make the **isthmus floor**":

**Isthmus** overlies tracheal rings **2,3,4**

Knowledge Level 3, System: Endocrine

Robert O'Connor University College Dublin

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**Thyroids: relative sizes**

[ID 275]

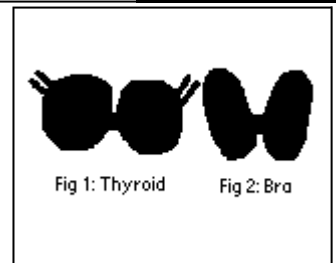
Thyroid looks like a bra (see picture).

Breasts are bigger in women, so thyroid bigger in women.

Pregnant women have biggest breasts of all, so they have the biggest thyroids.

Knowledge Level 7, System: Endocrine

Robert O'Connor University College Dublin



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**Scalp layers**

[ID 258]

**SCALP:**

From superficial to deep:

Skin

Connective tissue

Aponeurosis

Loose areolar tissue

Pericranium

Knowledge Level 1, System: Integumental

Anonymous Contributor

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**Kidney hilums at transpyloric plane [L1]**

[ID 76]

**L-1** goes through hilum of only **1** kidney, and it's the **Left** one.

Knowledge Level 8, System: Kidney/Urine

Anonymous Contributor

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**Ureter to ovarian/testicular artery relation**

[ID 56]

"**Water under** the bridge":

The **ureters** (which carry water), are **posterior** to the ovarian/testicular artery.

Clinically important, since a common surgical error is to cut ureter instead of ovarian artery when removing uterus.

Knowledge Level 2, System: Kidney/Urine

Anonymous Contributor

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**Leino- definition**

[ID 75]

"**Leino**" rhymes with "**spleen-o**":

Therefore leino- means something to do with the spleen.

Knowledge Level 1, System: Lymphoid

Anonymous Contributor

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**Spleen: dimensions, weight, surface anatomy**

[ID 54]

"**1,3,5,7,9,11**":

Spleen dimensions are **1** inch x **3** inches x **5** inches.

Weight is **7** ounces.

It underlies ribs **9** through **11**.

Knowledge Level 5, System: Lymphoid

Anonymous Contributor

#### Thoracic duct: relation to azygous vein and esophagus

[ID 26]

"The **duck** between **2** geoses":

Thoracic **duct** (duck) is between 2 geoses, azy**gous** and esophagus.

Knowledge Level 5, System: Lymphoid

Anonymous Contributor

#### Thoracic duct: which half of upper body does it drain

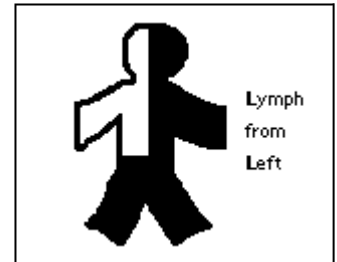
[ID 98]

Know drains all of lower body, but was it the right or the left part of the upper body?

Answer: its **Lymph** from the **Left** of the upper body.

Knowledge Level 3, System: Lymphoid

Robert O'Connor University College Dublin



#### Abdominal muscles

[ID 162]

"Spare **TIRE** around their abdomen":

**T**ransversus abdominis

**I**nternal abdominal oblique

**R**ectus abdominis

**E**xternal abdominal oblique

Knowledge Level 1, System: Muscle

Anonymous Contributor

#### Adductor magnus innervation

[ID 255]

"**AM SO!**":

Adductor **M**agnus innervated by **S**ciatic and **O**bturator.

Knowledge Level 3, System: Muscle

Robert O'Connor University College Dublin

#### Anterior forearm muscles: superficial group

[ID 273]

There are five, like five digits of your hand.

Place your thumb into your palm, then lay that hand palm down on your other arm, as shown in diagram.

Your 4 fingers now show distribution: spells **PFPF** [pass/fail, pass/fail]:

**P**ronator teres

**F**lexor carpi radialis

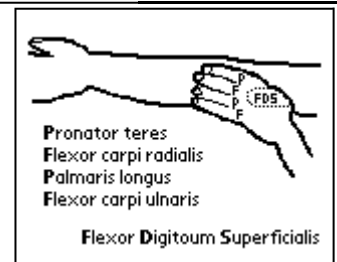
**P**almaris longus

**F**lexor carpi ulnaris

Your thumb below your 4 fingers shows the muscle which is deep to the other four: Flexor digitorum superficialis.

Knowledge Level 3, System: Muscle

Robert O'Connor University College Dublin



#### Anterior forearm muscles: superficial group

[ID 1117]

"**Pimps F\*ck Prostitutes For Fun**":

**P**ronator teres

**F**lexor carpi radialis

**P**almaris longous

**F**lexor carpi ulnaris

**F**lexor digitorum superficialis

Knowledge Level 3, System: Muscle

Rob

#### Biceps brachii muscle: origins

[ID 1876]

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"You walk **shorter** to a street **corner**. You ride **longer** on a **superhighway**."

**Short** head originates from **cor**acoid process.

**Long** head originates from the **supra**glenoid cavity.

Knowledge Level 1, System: Muscle

Rommel L. de los Reyes College of Physical Therapy - Pamantasan ng Lungsod ng Maynila (University of the City of Manila)

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**Bicipital groove: attachments of muscles near it**

[ID 27]

"The **lady** between **two majors**":

Teres **major** attaches to medial lip of groove.

Pectoralis **major** to lateral lip of groove.

**Latissimus** (Lady) is on floor of groove, between the 2 majors.

Knowledge Level 3, System: Muscle

Sandeep

---

**Brachioradialis: function, innervation, one relation, one attachment**

[ID 92]

**Brachio****Radialis**:

Function: Its the **Beer Raising** muscle, flexes elbow, strongest when wrist is oriented like holding a beer.

Innervation: **Breaks Rule**: it's a flexor muscle, **But Radial**. (Radial nerve usually is for extensors: Recall BEST rule: B was for brachioradialis).

Important relation: **Behind** it is the **Radial** nerve in the cubital fossa.

Attachment: Attaches to **Bottom** of **Radius**.

Knowledge Level 4, System: Muscle

Robert O'Connor University College Dublin

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**Elbow: muscles that flex it**

[ID 94]

Three **B's** **Bend** the **elBow**:

**Brachialis**

**Biceps**

**Brachioradialis**

Knowledge Level 2, System: Muscle

Anonymous Contributor

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**Elbow: which side has common flexor origin**

[ID 6]

**FM** (as in FM Radio):

**Flexor Medial**, so Common Flexor Origin is on the medial side.

Knowledge Level 2, System: Muscle

Anonymous Contributor

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**Erector spinae muscles**

[ID 661]

"**I Love Sex**":

From lateral to medial:

**Iliocostalis**

**Longissimus**

**Spinalis**

Alternatively: "**I Long for Spinach**"

"Sex" helps you think of "Erector", but "Long" and "Spinach" help you remember the muscles' names.

Knowledge Level 7, System: Muscle

Michael A. Chaplin SUNY-HSCB Downstate College of Medicine

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**Erector spinae muscles**

[ID 2108]

"**I Like Standing**":

From lateral to medial

**Iliocostalis**

**Longissimus**

**Spinalis**

Knowledge Level 7, System: Muscle

Wayne Feder

---

**Erector spinae muscles: order**

[ID 2551]

**Spinalis** is on the **spine** (most medial).  
**Iliocostalis** is on the **ribs** (most lateral).  
And it's a **Long (Longissimus)** way between the spine and the ribs!  
Knowledge Level 5, System: Muscle  
Nikki Stamp Student, Faculty of Medicine and Dentistry, University of Western Australia

---

**Extensor expansion location in the hand**

[ID 93]

The **eXtensor eXpansion** is on the **proXimal phalynX**.  
Knowledge Level 6, System: Muscle  
Robert O'Connor University College Dublin

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**Extrinsic muscles of tongue [for pro soccer fans]**

[ID 421]

"**Paris St. Germain's Hour**":  
**Palatoglossus**  
**Styloglossus**  
**Genioglossus**  
**Hyoglossus**  
PSG is a French soccer team (foreign), hence extrinsic comes to mind.  
Knowledge Level 3, System: Muscle  
Evren Tufan Istanbul University Medical Student

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**Eye rotation by oblique muscles**

[ID 1416]

"**I Love S&M**":  
**Inferior oblique: Lateral eye rotation.**  
**Superior oblique: Medial eye rotation.**  
Knowledge Level 1, System: Muscle  
CS Eddleman Medical Student, Texas Tech SOM

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**Femoral triangle: boundaries**

[ID 2776]

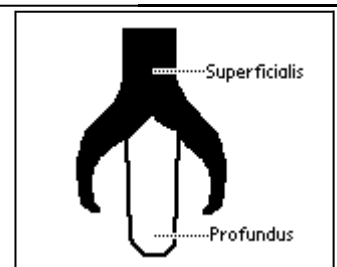
"**So I May Always Love Sally**":  
**Superiorly: Inguinal ligament**  
**Medially: Adductor longus**  
**Laterally: Sartorius**  
Knowledge Level 3, System: Muscle  
Anonymous Contributor

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**Flexor digitorum muscles: how they insert onto fingers**

[ID 89]

A little rhyme:  
**Superficialis Splits in two,**  
**To Permit Profundus Passing through.**  
Knowledge Level 7, System: Muscle  
Anonymous Contributor



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**Hip: lateral rotators**

[ID 657]

"**Piece Goods Often Go On Quilts**":  
**Piriformis**  
**Gemellus superior**  
**Obturator internus**  
**Gemellus inferior**  
**Obturator externus**  
**Quadratus femoris**  
Knowledge Level 4, System: Muscle  
Anonymous Contributor

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**Hip: lateral rotators**

[ID 833]

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"Play Golf Or Go On Quaaludes":

From top to bottom:

**P**iriformis

**G**emellus superior

**O**bturator internus

**G**emellus inferior

**O**bturator externus

**Q**uadratus femoris

Alternatively: "**P-GO-GO-Q**".

Knowledge Level 4, System: Muscle

Lior Greenberg Technion Faculty of Medicine, Haifa, Israel

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#### Interossei muscles: actions of dorsal vs. palmar in hand

[ID 293]

"**PAd** and **DAb**":

The **Palmar Adduct** and the **Dorsal Abduct**.

Use your **hand** to **dab** with a **pad**.

Knowledge Level 5, System: Muscle

Dr. Atif Farooq and Anonymous Contributor Rawalpindi Medical College, Pakistan and Not Specified

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#### Interossei muscles: number of palmars vs. dorsals

[ID 96]

"**3** on the **P**, **4** on the **Dor**":

There are **3** Palmar, and **4** Dorsal interossei.

Knowledge Level 7, System: Muscle

Robert O'Connor University College Dublin

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#### Intrinsic muscles of hand (palmar surface)

[ID 646]

"**A OF A OF A**":

Thenar, lateral to medial:

**A**bductor pollicis longus

**O**pponens pollicis

**F**lexor pollicis brevis

**A**dductor pollicis.

Hypothenar, lateral to medial:

**O**pponens digiti minimi

**F**lexor digiti minimi

**A**bductor digiti minimi

Knowledge Level 4, System: Muscle

Anonymous Contributor

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#### Inversion vs. eversion muscles in leg

[ID 102]

Second letter rule for inversion/eversion:

**E**version muscles:

p**E**roneus longus

p**E**roneus brevis

p**E**roneus terius

**I**nversion muscles:

t**I**bialis anterior

t**I**bialis posterior

Knowledge Level 6, System: Muscle

Robert O'Connor University College Dublin

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#### Leg: anterior muscles of leg

[ID 916]

"Tom's **H**airy **A**ND **D**irty **P**enis":

**T**: Tibialis anterior

**H**: extensor **H**ollicis longus

**A**N: anterior tibial **A**rtery & deep fibular **N**erve

**D**: extensor **D**igitorum longus

**P**: Peronius tertius [aka fibularis tertius]

Knowledge Level 1, System: Muscle

Anonymous Contributor

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#### Leg: anterior muscles of leg

[ID 1347]

"The Hospitals Are Not Dirty Places":

**T:** Tibialis anterior

**H:** extensor **H**allucis longus

**A:** anterior tibial **A**rtery

**N:** deep fibular **N**erve

**D:** extensor **D**igitorum longus

**P:** Peronius tertius [aka fibularis tertius]

Knowledge Level 1, System: Muscle

Hemant Ekbote/Amit Dixit Mgm's medical college India

### Lower limb peripheral nerve injuries

Hi Yield [ID 2175]

"**Drop** into a **DEeP PIT** and **shuffle** your way out":

Foot **Drop** results from **D**orsiflexors and **E**vertors paralysis, due to common **P**eroneal nerve lesion.

**P**lantarflexion and **I**nversion impairment due to **T**ibial nerve lesion, results in a **shuffling** gait.

Knowledge Level 1, System: Muscle

Monica Therese Cating University of the Philippines College of Medicine

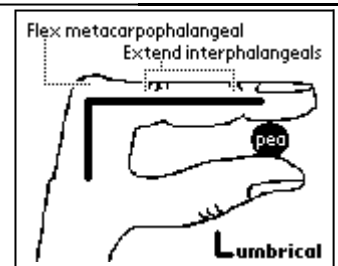
### Lumbricals action

[ID 5]

Lumbrical action is to hold a pea, that is to flex the metacarpophalangeal joint and extend the interphalangeal joints. When look at hand in this position, can see this makes an "L" shape, since **L** is for **L**umbrical.

Knowledge Level 4, System: Muscle

Robert O'Connor University College Dublin



### Muscles: potentially absent ones

[ID 1291]

Muscles which may be absent but may be important:

5 P's:

**P**almaris longus [upper limb]

**P**lantaris [lower limb]

**P**eroneus tertius [lower limb]

**P**yramidalis [anterior abdominal wall]

**P**soas minor [posterior abdominal wall]

Knowledge Level 3, System: Muscle

Shebrain Cairo University

### Oblique muscles: direction of externals vs. internals

[ID 57]

"Hands in your pockets":

When put hands in your pockets, fingers now lie on top of external obliques and fingers point their direction of fibers: down and towards midline.

Note: "oblique" tells that must be going at an angle.

Internal obliques are at right angles to external.

Knowledge Level 1, System: Muscle

Anonymous Contributor

### Plantarflexion vs. dorsiflexion

[ID 202]

**P**lantar flexion occurs when you squish a **P**lant with your foot.

Knowledge Level 1, System: Muscle

Anonymous Contributor

### Popliteal fossa: medial to lateral arrangement

[ID 2747]

"Serve And Volley Next Ball":

**S**emimembranosus/ **S**emitendonosus

**A**rtery

**V**ein

**N**erve

**B**iceps femoris

Lateral and medial heads of Gastrocnemius are inferior borders.

Knowledge Level 3, System: Muscle

Tympany W. Quintosh Saba University School of Medicine

### Popliteal fossa: muscles arrangement

[ID 9]



The two Semi's go together, Semimembranosus and Semitendinosus.  
The **M**embranosus is **M**edial and since the two semis go together, Semitendinosus is also medial.  
Therefore, Biceps Femoris has to be lateral.  
Of the semi's, to remember which one is superficial: the **T**endonosus is on **T**op.  
Knowledge Level 3, System: Muscle  
Anonymous Contributor

#### Psoas major: innervation

[ID 1090]

If you hit **L2, 3, 4**  
Psoas gets **sore**!  
Knowledge Level 2, System: Muscle  
Usman Ahmad KMC

#### Pterygoid muscles: function of lateral vs. medial

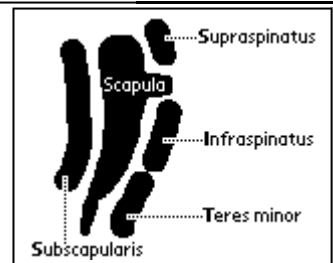
[ID 70]

"Look at how your jaw ends up when saying first syllable of '**L**ateral' or '**M**edial'":  
"**La**": your jaw is now **open**, so **L**ateral **o**pens mouth.  
"**Me**": your jaw is still **closed**, so **m**edial **c**loses the mandible.  
Knowledge Level 4, System: Muscle  
Robert O'Connor University College Dublin

#### Rotator cuff muscles

Hi Yield [ID 35]

"The **SITS** muscles":  
Clockwise from top:  
**S**upraspinatus  
**I**nfraspinatus  
**T**eres **minor**  
**S**ubscapularis  
A pro baseball pitcher has injured his rotator cuff muscles. As a result, he **SITS** out for the rest of the game, and then gets sent to the **minor** leagues.  
Knowledge Level 2, System: Muscle  
Anne Conlin and Robert O'Connor University of Western Ontario Medical School, London, Canada and University College Dublin



#### Serratus anterior: innervation

[ID 547]

**SALT**:  
**S**erratus Anterior = **L**ong Thoracic.  
Knowledge Level 2, System: Muscle  
Erin B. Dominiak Loyola University Chicago Stritch School of Medicine

#### Serratus anterior: innervation and action

Hi Yield [ID 25]

"**C5-6-7** raise your arms up to **heaven**":  
Long thoracic nerve roots (567) innervate Serratus anterior.  
Test C567 roots clinically by ability to raise arm past 90 degrees.  
Knowledge Level 2, System: Muscle  
Anonymous Contributor

#### Soleus vs. gastrocnemius muscle function

[ID 101]

"**Stand** on your **S**oles. **Explosive gas**":  
You **stand** on soles of your shoes, so **S**oleus is for posture.  
Gasoline is explosive, so **G**astrocnemius is for **explosive** movement.  
Knowledge Level 3, System: Muscle  
Robert O'Connor University College Dublin

#### Supination vs. pronation

[ID 2346]

"**SOUP**ination": Supination is to turn your arm palm up, as if you are holding a bowl of **soup**.  
"**POUR**-nation": Pronation is to turn your arm with the palm down, as if you are **pouring** out whatever is your bowl.  
Alternatively, **Pronation donation**: **Pronation** is palm facing downward, as if making a **donation**.  
Knowledge Level 1, System: Muscle  
LCK and Anonymous Contributor University of Ottawa and Not Specified

#### Supination vs. pronation: which is more powerful

[ID 121]

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Screws were designed to be tightened well by majority of people.  
"Righty tighty": to tighten screws you turn to the right.  
Majority of people are right-handed.  
Turning right-hand to the right is supination.  
Knowledge Level 7, System: Muscle  
Robert O'Connor University College Dublin

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**Ansa cervicalis nerves**

[ID 1042]

"**GH**ost **TH**ought **SO**meone **ST**upid **SH**ot Irene":

**Genio**hyoid

**Thyro**hyoid

**Superior Omohyoid**

**Sterno**thyroid

**Sterno**hyoid

**Inferior omohyoid**

Knowledge Level 6, System: Nervous

Anonymous Contributor

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**Autonomics to the gut**

[ID 439]

"The **PARA**sympathetics follow a rule of **TWO**" [pair = two]:

The vagus does the top, the sacral splanchnics the outflow tract.

"The sympathetics follow a rule of threes":

Greater, lesser, least splanchnic nerves go to the celiac, superior and inferior mesenteric ganglion.

Knowledge Level 2, System: Nervous

Anonymous Contributor

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**Bell's palsy: symptoms**

Hi Yield [ID 1943]

**BELL'S Palsy:**

**Blink** reflex abnormal

**Earache**

**Lacrimation** [deficient, excess]

**Loss of taste**

**Sudden onset**

**Palsy** of VII nerve muscles

All symptoms are unilateral.

Knowledge Level 4, System: Nervous

Robert O'Connor University College Dublin

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**Brachial plexus branches**

Hi Yield [ID 135]

"**My Aunt Raped My Uncle**":

From lateral to medial:

**Musculocutaneous**

**Axillary**

**Radial**

**Median**

**Ulnar**

Knowledge Level 1, System: Nervous

Anonymous Contributor

---

**Brachial plexus organization**

Hi Yield [ID 580]

"The **Castrated Dog Turns Rabid**":

From lateral to medial:

**Terminal branches**

**Cords**

**Divisions**

**Trunks**

**Roots**

Knowledge Level 1, System: Nervous

Chip Louisiana State University Medical Center

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**Brachial plexus subunits**

[ID 18]

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"**Randy Travis Drinks Cold Beer**":

**Roots**

**Trunks**

**Divisions**

**Cords**

**Branches**

Alternatively: "**Read The Damn Cadaver Book!**"

Alternatively: "**Real Texans Drink Coors Beer**".

Knowledge Level 1, System: Nervous

Karl and Anonymous Contributor Boston U. School of Medicine and Not Specified

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### Brachial plexus: branches of posterior cord

[ID 465]

**STAR:**

Subscapular [upper and lower]

Thoracodorsal

Axillary

**Radial**

Knowledge Level 2, System: Nervous

Zaineb Vakil Gulf Medical College Ajman

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### Brachial plexus: numbers of each section

Hi Yield [ID 2741]

It is the same backwards and forwards:

**5-3-2-3-5:**

**5** Rami

**3** Trunks

**2** Divisions

**3** Cords

**5** Terminal nerves

Knowledge Level 1, System: Nervous

Melissa L. Toth UMDNJ School of Osteopathic Medicine, Stratford, NJ

---

### Buttock quadrant safest for needle insertion

Hi Yield [ID 14]

"**Shut up and butt out**":

The **Upper Outer** quadrant of the **Buttock** safely avoids hitting sciatic nerve.

Knowledge Level 2, System: Nervous

Anonymous Contributor

---

### Carpal tunnel syndrome causes

Hi Yield [ID 126]

**MEDIAN TRAP:**

Myxoedema

Edema premenstrually

**Diabetes**

**Idiopathic**

Acromegaly

**Neoplasm**

**Trauma**

**Rheumatoid arthritis**

**Amyloidosis**

**Pregnancy**

Mnemonic fits nicely since median nerve is trapped.

Knowledge Level 4, System: Nervous

Anonymous Contributor

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### Carpal tunnel syndrome: causes

Hi Yield [ID 1770]

**TRAMP:**

**Trauma** (occupational)

**Rheumatoid arthritis**

**Acromegaly**

**Myxoedema**

**Pregnancy**

Alternatively: **ARMPIT** to include **Idiopathic**.

Knowledge Level 3, System: Nervous

Isae Kilonzo University College Cork, Ireland

### Cervical plexus: arrangement of the important nerves

[ID 268]

"GLAST":

4 compass points: clockwise from north on the right side of neck:

Great auricular

Lesser occipital

Accessory nerve pops out between L and S

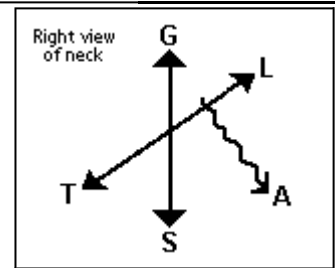
Supraclavicular

Transverse cervical

See diagram.

Knowledge Level 3, System: Nervous

Robert O'Connor University College Dublin



### CN VII innervated muscles (branchial arch 2 derivatives)

[ID 305]

"Imagine someone making the **facial** expression to say 'PSS...'":

**Facial** expression muscles

Posterior belly of digastric

Stapedius

Stylohyoid

Knowledge Level 3, System: Nervous

Christian Erickson Duke University

### Deep tendon reflexes: root supply

Hi Yield [ID 185]

"1,2,3,4,5,6,7,8":

S1-2: ankle

L3-4: knee

C5-6: biceps, supinator

C7-8: triceps

Knowledge Level 2, System: Nervous

Anonymous Contributor

### Deep tendon reflexes: root supply

Hi Yield [ID 550]

God designed body reflexes according to a nursery rhyme:

**One, two--** buckle my shoe. **Three, four--** kick the door. **Five, six--** pick up sticks. **Seven, eight--** shut the gate.

S1,2 = ankle jerk

L3,4 = knee jerk

C5,6 = biceps and brachioradialis

C7,8 = triceps

Knowledge Level 2, System: Nervous

Bryan Traynor Massachusetts General Hospital and Brigham and Women's Hospital, Boston, USA

### Dermatome C6 location

Hi Yield [ID 91]

Stick **arm out like crucifixion** stance. Curl your **thumb** and forefinger into an "OK" symbol while keeping your other fingers straight.

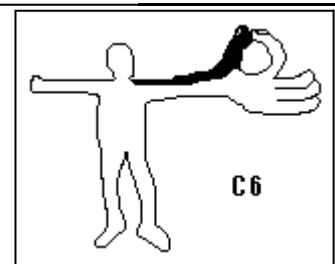
Your hand should now look like a **6** shape.

So C6 dermatome is your **thumb** and top of **arm** (reason for crucifix stance).

See diagram.

Knowledge Level 5, System: Nervous

Anonymous Contributor



### Dermatome C7 location

Hi Yield [ID 568]

C7 gives **the finger to heaven** (as in middle finger).

Knowledge Level 5, System: Nervous

Jules Bristol University

### Diaphragm innervation

Hi Yield [ID 23]

"3, 4, 5 keeps the diaphragm alive":

Diaphragm innervation is cervical roots **3, 4, and 5**.

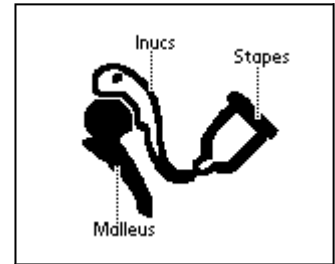
Knowledge Level 1, System: Nervous

Michael Nawfal

### Ear: bones of inner ear

[ID 1403]

Take a Hammer: Malleus  
 Hit an Indian Elephant: Incus  
 It puts its foot in a stirrup: Stapes  
 Describes the shape, and relative position (from out to in) of the inner ear bones.  
 Alternatively: "**M**ailing **I**ncludes **S**tamps".  
 Knowledge Level 1, System: Nervous  
 Robert Lueken and Frank Hopkins Eastern Virginia Medical School



Hi Yield [ID 572]

### Extraocular muscles cranial nerve innervation

"**LR6SO4 rest 3**":  
**L**ateral **R**ectus is **6**th  
**S**uperior **O**blique is **4**th  
**rest** are all **3**rd cranial nerve  
 Knowledge Level 2, System: Nervous  
 Atul Singh Detroit Medical Center

### Extraocular muscles: movements

[ID 2811]

"**O**bliq**L**iques cause **L**ateral rotation of eyeball":  
 Obliques cause lateral, all other rectii are medial rotators of the eyeball.  
 Action of the obliques is opposite to their names.  
 Action of the rectii is rightly fitting to their names.  
 Both superiors cause intorsion and both inferiors cause extorsion.  
 Knowledge Level 3, System: Nervous  
 Varsha RMC, Loni, India

### Face muscles: large muscle groups' cranial innervation

[ID 71]

**M**andibular nerve: **M**astication.  
**F**acial nerve: **F**acial expression.  
 Knowledge Level 1, System: Nervous  
 Anonymous Contributor

### Facial nerve branches

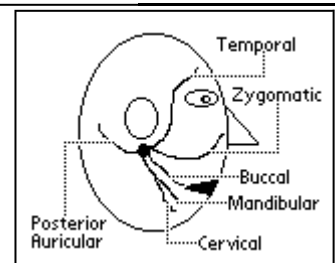
[ID 825]

"**T**wo **Z**ombies **B**uggered **M**y **C**at":  
 From superior to inferior:  
**T**emporal branch  
**Z**ygomatic branch  
**B**uccal branch  
**M**andibular branch  
**C**ervical branch  
 Alternatively: "**T**wo **Z**ulus **B**it **M**y **C**at".  
 Alternatively: "**T**wo **Z**ebbras **B**it **M**y **C**occyx".  
 Alternatively: "**T**o **Z**anzibar **B**y **M**otor **C**ar".  
 Alternatively: "**T**all **Z**ulus **B**ear **M**any **C**hildren".  
 Knowledge Level 1, System: Nervous  
 Anonymous Contributor and Rohan hall University of Otago, NZ and Anatomist

### Facial nerve: branches after Stylomastoid foramen

[ID 863]

"**T**en **Z**ulus **B**uggered **M**y **C**at (**P**ainfully)":  
 From superior to inferior:  
**T**emporal branch  
**Z**ygomatic branch  
**B**uccal branch  
**M**andibular branch  
**C**ervical branch  
 (Posterior auricular nerve)  
 Alternatively: "**P**Assing **T**hrough **Z**anzibar **B**y **M**otor **C**ar" (**PA** for **P**osterior **A**uricular).  
 Knowledge Level 1, System: Nervous  
 Stephan Sanders and Kris Downing Nottingham Medical School, UK and UCR/UCLA Biomedical Sciences Program, USA



### Horner's syndrome components

Hi Yield [ID 889]

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**SPAM:**

Sunken eyeballs/ Sympathetic plexus (cervical) affected

**P**tosis

**A**nhydrosis

**M**iosis

Knowledge Level 1, System: Nervous

Samuel Atom Baek-Kim

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**Horner's syndrome components**

Hi Yield [ID 1823]

"**HORNy PAM**"

**H**orner's is:

**P**tosis

**A**nhidrosis

**M**iosis

Knowledge Level 1, System: Nervous

Ocean University of Texas Medical Branch

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**Lacrimal nerve course**

[ID 757]

"Lacrimal's story of 8 L's":

**L**acrimal nerve runs on **L**ateral wall of orbit above **L**ateral rectus, then **L**ets communicating branch join in, then supplies **L**acrimal gland, then

**L**eaves it and supplies **L**ateral upper eye **L**id!

Knowledge Level 4, System: Nervous

Usman Ahmad KMC

---

**Lingual nerve course**

[ID 329]

The Lingual nerve

Took a curve

Around the Hyoglossus.

"Well I'll be f\*#ked!"

Said Wharton's Duct,

"The bastard's gone and crossed us!"

Knowledge Level 6, System: Nervous

Sam Hinton University of California, San Diego

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**Lumbar plexus**

[ID 643]

"**I, I Get Laid On Fridays**":

**I**liohypogastric [L1]

**I**lioinguinal [L1]

**G**enitofemoral [L1, L2]

**L**ateral femoral cutaneous [L2, L3]

**O**btruator [L2, L3, L4]

**F**emoral [L2, L3, L4]

Alternatively: "**I** twice **G**et **L**aid **O**n **F**ridays".

Alternatively: "**I**nterested **I**n **G**etting **L**aid **O**n **F**ridays?"

Knowledge Level 3, System: Nervous

Alfred Munoz MCP-Hahnemann School Of Medicine

---

**Lumbar plexus roots**

[ID 263]

"**2 from 1, 2 from 2, 2 from 3**":

**2** nerves from **1** root: Ilioinguinal (L1), Iliohypogastric (L1).

**2** nerves from **2** roots: Genitofemoral (L1,L2), Lateral Femoral (L2,L3).

**2** nerves from **3** roots: Obturator (L2,L3,L4), Femoral (L2,L3,L4).

Knowledge Level 4, System: Nervous

Robert O'Connor University College Dublin

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**Median and ulnar nerves: common features**

[ID 274]

Each supply 1/2 of flexor digitorum profundus.  
 Each supplies 2 lumbricals.  
 Each has a palmar cutaneous nerve that pops off prematurely.  
 Each supplies an eminence group of muscles [ulnar: hypothenar. median: thenar].  
 Each enters forearm through two heads [ulnar: heads of flexor carpi ulnaris. median: heads of pronator teres].  
 Each has no branches in upper arm.  
 Each makes two fingers claw when cut at wrist.  
 Each supplies a palmaris [median: palmaris longus. ulnar: palmaris brevis].  
 Knowledge Level 6, System: Nervous  
 Robert O'Connor University College Dublin

### Median nerve: hand muscles innervated

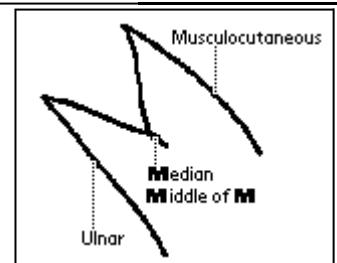
[ID 36]

"The **LOAF** muscles":  
**L**umbricals 1 and 2  
**O**pponens pollicis  
**A**bductor pollicis brevis  
**F**lexor pollicis brevis  
 Alternatively: **LLOAF**, with 2 L's, to recall there's 2 lumbricals.  
 To remember that these are the **Median** nerve muscles, think "**Meat LOAF**".  
 Knowledge Level 2, System: Nervous  
 Samuel Atom Baek Kim

### Median nerve: recognizing it in an opened axilla

[ID 86]

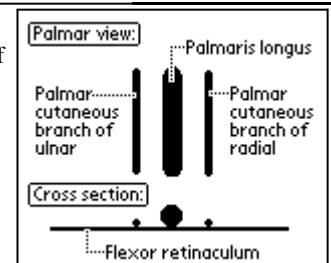
The **Median** nerve is the **Middle** of a giant capital "**M**" formed by the musculocutaneous and ulnar nerves.  
 Knowledge Level 2, System: Nervous  
 Robert O'Connor University College Dublin



### Palmaris longus: location, relative to wrist nerves

[ID 125]

"The **Palmaris** between **two Palmars**":  
**Palmaris** longus is between the **Palmar** cutaneous branch of Ulnar nerve and **Palmar** cutaneous branch of Median nerve.  
 Knowledge Level 7, System: Nervous  
 Robert O'Connor University College Dublin



### Pectoral nerves: path of lateral vs. medial

[ID 127]

"**Lateral Less, Medial More**":  
 Lateral pectoral nerve only goes through Pectoralis major, but  
 Medial pectoral nerve goes through both Pectoralis major and minor.  
 Knowledge Level 5, System: Nervous  
 Anonymous Contributor

### Pelvis: sacral innervation

[ID 33]

"**S2,3,4** keeps the 3 **P**'s off the floor (**Penis, Poo, and Pee**).  
 S2,3,4 innervates the anal sphincter, urethral sphincter, and causes erection.  
 Knowledge Level 2, System: Nervous  
 Anonymous Contributor National University of Ireland, Galway and University of Sydney, Australia

### Penis autonomic innervation actions

[ID 28]

"**Parasympathetic Puts it up. Sympathetic Spurts it out**".  
 Alternatively: "**Point and Shoot**": **Parasympathetic Points it, Sympathetic Shoots out the semen**.  
**Erection and Ejaculation (Emission)**.  
 Knowledge Level 2, System: Nervous  
 Andrew J. Vasil and John Nguyen University of Minnesota School of Medicine and University of Texas Medical Branch at Galveston

### Radial nerve: muscles innervated

[ID 1184]

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"Try **A** Big Chocolate **C**hip **S**undae, **D**ouble **D**ip **C**herries **A**nd **P**eanuts **P**referably **I**ncluded":

In order of their innervation, proximal to distal:

**T**riceps

**A**nconeus

**B**rachioradialis

ext. **C**arpi radialis longus

ext. **C**arpi radialis brevis

**S**upinator

ext. **D**igitorum

ext. **D**igiti minimi

ext. **C**arpi ulnaris

**A**bductor poll. longus

ext. **P**oll. brevis

ext. **P** poll. longus

ext. **I**ndicis

For the neighboring words that start with the same letter (eg: chocolate and chip), notice that the **longer** word in the mnemonic, corresponds to the longer of the two muscle names (ex: ext. carpi radialis **longus** and ext. carpi radialis brevis)

Knowledge Level 6, System: Nervous

Anonymous Contributor Medical College of Ohio

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### Radial nerve: muscles supplied (simplified)

[ID 16]

"**BEST** muscles":

**B**rachioradialis

**E**xtensors

**S**upinator

**T**riceps

Knowledge Level 1, System: Nervous

Anonymous Contributor

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### Scalp: nerve supply

[ID 2046]

**GLASS**:

**G**reater occipital/ **G**reater auricular

**L**esser occipital

**A**uriculotemporal

**S**upratrochlear

**S**upraorbital

Knowledge Level 5, System: Nervous

Anonymous Contributor

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### Spinal cord: length in vertebral column

Hi Yield [ID 1040]

**SCULL**:

**S**pinal **C**ord **U**ntil **L2** (LL).

Knowledge Level 3, System: Nervous

Lior Greenberg Technion Faculty of Medicine, Haifa, Israel

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### Thigh: innervation by compartment

Hi Yield [ID 2382]

"**MAP OF Sciatic**":

**M**edial compartment: **O**bturator

**A**nterior compartment: **F**emoral

**P**osterior compartment: **S**ciatic

So all the thigh muscles in that compartment get innervated by that nerve.

Knowledge Level 1, System: Nervous

Anonymous Contributor

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### Trigeminal nerve: where branches exit skull

Hi Yield [ID 38]

"**S**tanding **R**oom **O**nly":

**S**uperior orbital fissure is **V1**

foramen **R**otundum is **V2**

foramen **O**vale is **V3**

Knowledge Level 1, System: Nervous

Anonymous Contributor

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### V3 innervated muscles

Hi Yield [ID 463]



"My A\$\$ Meets The Toilet":

**My**lohyoid

Anterior digastric

Muscles of **M**astication

Tensor veli palatini

Tensor tympani

Knowledge Level 2, System: Nervous

Anonymous Contributor

### V3 innervated muscles (branchial arch 1 derivatives)

Hi Yield [ID 304]

"**M.D. My TV**":

**M**astication [masseter, temporalis, pterygoids]

**D**igastric [anterior belly]

**My**lohyoid

tensor **T**ympani

tensor **V**eli palatini

Knowledge Level 2, System: Nervous

Christian Erickson Duke University

### V3: sensory branches

[ID 1024]

"**Buccaneers Are Inferior Linguists**":

**Buccal**

**Auriculotemporal**

**Inferior** alveolar

**Lingual**

Knowledge Level 5, System: Nervous

Jennifer Chuang University of Vermont School of Medicine

### Vagus nerve: path into thorax

[ID 1783]

Vagus nerve, unlike phrenic, continues through diaphragm with esophagus--it is "**Not Left Behind**":

The **left** vagus is **anterior**, right is posterior [behind].

Knowledge Level 4, System: Nervous

Anonymous Contributor University of Arizona College of Medicine

### Vagus nerve: path into thorax

[ID 449]

"**I Left my Aunt in Vegas**":

**Left Vagus** nerve goes **Anterior** descending into the thorax.

Knowledge Level 4, System: Nervous

Anonymous Contributor

### Anatomical planes: coronal, horizontal, sagittal

[ID 262]

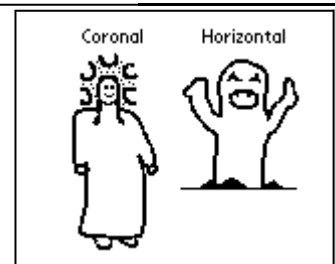
**Coronal**: A classic painting/stained glass window of a saint/angel has a **corona** radiating around the person's head. The plane of the glass/page is cutting their head in the coronal plane.

**Horizontal**: Someone coming over the **horizon** has their abdomen cut in the horizontal plane.

Sagittal: the remaining one by default.

Knowledge Level 1, System: Other/Miscellaneous

Robert O'Connor University College Dublin



### Ankle: anterior compartment of leg contents

[ID 1257]

"**The Hamptons Are Never Dull Parties**":

From medial malleolus:

**Tibialis** anterior tendon

(Extensor) **H**allacus longus

**A**rtery (anterior tibial)

**N**erve (deep peroneal)

(Extensor) **D**igitorum

**P**eroneus tertius

Knowledge Level 3, System: Other/Miscellaneous

Jonhs Hopkins Class of 2004

### Cubital fossa contents

[ID 45]

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**"N-MAN":**

From lateral to medial:

**N**erve

**M**uscle

**A**rtery

**N**erve

Specifics are radial Nerve, biceps Muscle tendon, brachial Artery, median Nerve.

Knowledge Level 2, System: Other/Miscellaneous

Peter Stefanides University College Dublin

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**Cubital fossa contents**

[ID 631]

**"My Bottoms Turned Red":**

From medial to lateral:

**M**edian nerve

**B**rachial artery

**T**endon of biceps

**R**adial nerve

Knowledge Level 2, System: Other/Miscellaneous

Dell Piero University Malaya Medical School, Malaysia

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**Cubital fossa contents**

[ID 1271]

**"Really Need Booze To Be At My Nicest":**

From lateral to medial:

**R**adial Nerve

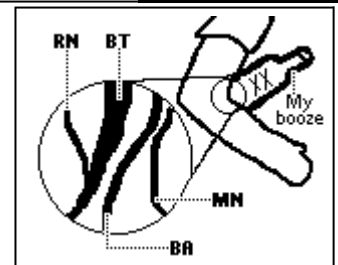
**B**iceps Tendon

**B**rachial Artery

**M**edian Nerve

Knowledge Level 2, System: Other/Miscellaneous

Anonymous Contributor



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**Cubital fossa contents**

[ID 1283]

**MBBR:**

From medial to lateral:

**M**edian nerve

**B**rachial artery

**B**iceps tendon

**R**adial nerve

Knowledge Level 2, System: Other/Miscellaneous

Dr. Atif Farooq Rawalpindi Medical College, Pakistan

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**Diaphragm apertures: spinal levels**

Hi Yield [ID 2657]

**"Come Enter the Abdomen:**

Vena Cava [8]

Esophagus [10]

Aorta [12]

Knowledge Level 2, System: Other/Miscellaneous

Phillip Snider (originally by Sherry Roles) Med student: Arizona College of Osteopathic Med

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**Hand: nerve lesions**

Hi Yield [ID 3262]

**DR CUMA:**

**D**rop=**R**adial nerve

**C**law=**U**lnar nerve

**M**edian nerve=**A**pe hand (or **A**postol [preacher] hand)

Knowledge Level 1, System: Other/Miscellaneous

Anonymous Contributor

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**Inguinal canal: walls**

Hi Yield [ID 2010]

"**MALT**: 2**M**, 2**A**, 2**L**, 2**T**":

Starting from superior, moving around in order to posterior:

Superior wall (roof): 2 **M**uscles:

internal oblique **M**uscle

transverse abdominus **M**uscle

Anterior wall: 2 **A**poneuroses:

Aponeurosis of external oblique

Aponeurosis of internal oblique

Lower wall (floor): 2 **L**igaments:

inguinal **L**igament

lacunar **L**igament

Posterior wall: 2 **T**s:

Transversalis fascia

conjunct **T**endon

Knowledge Level 1, System: Other/Miscellaneous

Miruna Segarceanu UMF Carol Davila, Bucharest, Romania

### Internal pudendal branches

[ID 2503]

"**I** **P**ee **P**ee **B**ut **D**on't **D**ump!":

Inferior rectal

Posterior scrotal (or labial)

Perineal

Bulb

Deep artery

Dorsal artery

Knowledge Level 4, System: Other/Miscellaneous

Anonymous Contributor

### Inversion vs. eversion direction in the foot

[ID 103]

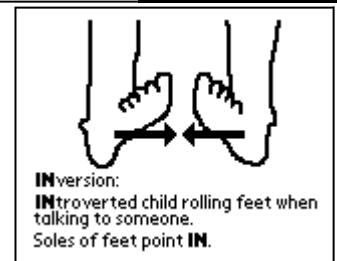
Little **I**Ntro**V**erted boys **roll their feet in** when talking to girls.

Also, can just watch which way the sole of the foot goes: does it face in or out?

See diagram.

Knowledge Level 2, System: Other/Miscellaneous

Robert O'Connor University College Dublin



### L4 landmark: 2 items

[ID 186]

"**B4U**" [before you]:

Bifurcation of aorta

L4

Umbilicus

Knowledge Level 2, System: Other/Miscellaneous

Anonymous Contributor

### Mediastinums: posterior mediastinum structures

[ID 2355]

There are 4 birds:

The esopha**GOOSE** (esophagus)

The va**GOOSE** nerve

The azy**GOOSE** vein

The thoracic **DUCK** (duct)

Knowledge Level 2, System: Other/Miscellaneous

Aron Flagg Finch University of Health Sciences / The Chicago Medical School

### Obturator canal: relations of structures

[ID 756]

"Who's flying in the top of Obturator canal? **Obviously Not A Vein!**":

Obturator

Nerve

Artery

**Vein**

Knowledge Level 2, System: Other/Miscellaneous

Usman Ahmad KMC

## Perineal vs. peroneal

[ID 166]

**Perineal** is **in** between the legs.

**Peroneal** is **on** the leg.

Knowledge Level 1, System: Other/Miscellaneous

Anonymous Contributor

## Retroperitoneal organs (major)

[ID 1676]

"**AC/DC Rocker Kids Party Down**":

**Ascending Colon**

**Descending Colon**

**Rectum**

**Kidneys**

**Pancreas**

**Duodenum**

Knowledge Level 1, System: Other/Miscellaneous

Anonymous Contributor

## Retroperitoneal structures list

Hi Yield [ID 510]

**SAD PUCKER:**

**Suprarenal glands**

**Aorta & IVC**

**Duodenum (half)**

**Pancreas**

**Ureters**

**Colon (ascending & descending)**

**Kidneys**

**Esophagus (anterior & left covered)**

**Rectum**

Knowledge Level 2, System: Other/Miscellaneous

Ron Norman AECC

## Superior mediastinum contents

[ID 1123]

"**BATS & TENT**":

**Brachiocephalic veins**

**Arch of aorta**

**Thymus**

**Superior vena cava**

**Trachea**

**Esophagus**

**Nerves (vagus & phrenic)**

**Thoracic duct**

Knowledge Level 2, System: Other/Miscellaneous

Sumeet Verma East Carolina University SOM

## Superior mediastinum: contents

Hi Yield [ID 1986]

**PVT Left BATTLE:**

**Phrenic nerve**

**Vagus nerve**

**Thoracic duct**

**Left recurrent laryngeal nerve (not the right)**

**Brachiocephalic veins**

**Aortic arch (and its 3 branches)**

**Thymus**

**Trachea**

**Lymph nodes**

**Esophagus**

Knowledge Level 2, System: Other/Miscellaneous

Anonymous Contributor University of Pittsburgh School of Medicine

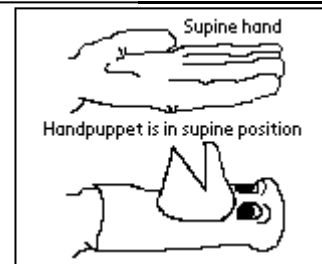
## Supine vs. prone body position

[ID 1]

Know **SUP**ination is your hand while carrying a bowl of **SOUP**. Your face follows where your palm is facing [i.e. up]. Put a handpuppet on your hand while hand is in supination and the puppet will be the supine position.

See diagram.

Knowledge Level 1, System: Other/Miscellaneous  
Robert O'Connor University College Dublin



### Supine vs. prone body position

[ID 392]

"**Supine** is on your **spine**."

Therefore, prone's the "other" one.

Also, **prone** to suffocate in **prone** position.

Knowledge Level 1, System: Other/Miscellaneous

Carol Kasper and Sandy Honeycutt MacMurray College, Jacksonville, IL, USA and Nursing student

### Bronchi: which is more vertical

Hi Yield [ID 832]

"**Right on Red**":

Many places allow making a **right** hand turn at a **red** light, if you first come to a complete **stop**.

A child swallowing a **red** penny is more likely to get it **stopped** down the **right** bronchus, since it is more vertical.

Knowledge Level 4, System: Pulmonary

Lior Greenberg Technion Faculty of Medicine, Haifa, Israel

### Bronchi: which one is more vertical

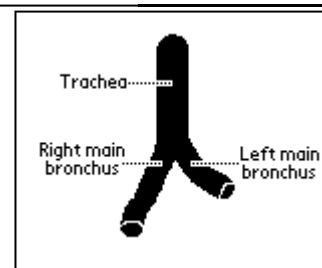
Hi Yield [ID 12]

"Inhale a **bite**, goes down the **right**":

Inhaled objects more likely to lodge in right bronchus, since it is the one that is more vertical.

Knowledge Level 4, System: Pulmonary

Robert O'Connor University College Dublin



### Bronchopulmonary segments of right lung

[ID 1049]

"**A PALM** Seed Makes Another Little **Palm**":

In order from superior to inferior:

Apical

Posterior

Anterior

Lateral

Medial

Superior

Medial basal

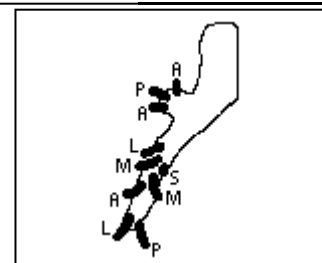
Anterior basal

Lateral basal

Posterior basal

Knowledge Level 7, System: Pulmonary

Derek Bell University of Queensland



### Bronchopulmonary segments of the left lung

[ID 1782]

"**Astute Anatomists Share Inside Secrets About Lungs**":

Apicoposterior (S1+2)

Anterior (S3)

Superior (S4)

Inferior (S5)

Superior (S6)

Anteromedial basal (S7+8)

Lateral basal (S9)

Knowledge Level 7, System: Pulmonary

Gregory Allen Loma Linda University

### Cricothyroids: abductor vs. adductor

Hi Yield [ID 2610]

When aliens **abduct** you, they **Probe** you.

**Posterior cricoarytenoids abduct.** Lateral therefore is adduct by default.

Knowledge Level 1, System: Pulmonary

Anonymous Contributor

### Horner's syndrome: components

Hi Yield [ID 2829]

**PAM:**

**P**tosis

**A**nhydrosis

**M**iosis

Knowledge Level 1, System: Pulmonary

C. Lu University of Glasgow

### Lung lobes: one having lingula, lobe numbers

Hi Yield [ID 3100]

Lingula is on **Left**.

The lingula is like an atrophied lobe, so the left lung must have 2 "other" lobes, and therefore right lung has 3 lobes.

Knowledge Level 1, System: Pulmonary

Teresa Myers Student, UNC

### Lung lobes: segments of right middle lobe

[ID 192]

"**ML=ML**":

Segments of **M**iddle **L**obe are **M**edial & **L**ateral.

Knowledge Level 8, System: Pulmonary

Anonymous Contributor

### Nasal cavity components

[ID 201]

"**Never Call Me Needle Nose!**":

**N**ares [external]

**C**onchae

**M**eatuses

**N**ares [internal]

**N**asopharynx

Note mnemonic sentence is nasally-related.

Knowledge Level 5, System: Pulmonary

Anonymous Contributor

### Pleura surface markings

Hi Yield [ID 123]

"All the even ribs, in order: **2,4,6,8,10,12** show its route":

**Rib2**: sharp angle inferiorly

**Rib4**: the left pleura does a lateral shift to accommodate heart

**Rib6**: both diverge laterally

**Rib8**: midclavicular line

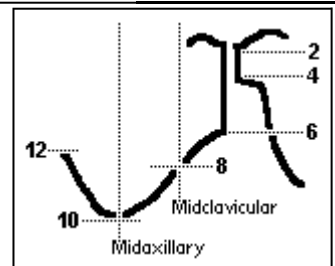
**Rib10**: midaxillary line

**Rib12**: the back

See diagram.

Knowledge Level 2, System: Pulmonary

Anonymous Contributor



### Tonsils: The three types

[ID 39]

"**PPL** (people) have tonsils":

**P**haryngeal

**P**alatine

**L**ingual

Knowledge Level 3, System: Pulmonary

Anonymous Contributor

### Voicebox: names of parts in sagittal cross-section

[ID 117]

"There's 3 V's in your Voicebox":

Vestibular fold

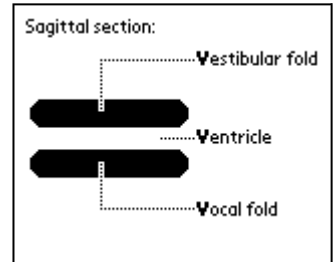
Ventricle

Vocal fold

Note: Vestibular and Vocal cord also known as false and true cords respectively.

Knowledge Level 5, System: Pulmonary

Robert O'Connor University College Dublin



### Anteflexed vs. anteverted: what bodypart each describes

[ID 62]

"Anteflexed and Anteverted both bend toward Anterior".

The "V" words go together: Verted is for the cerVix (therefore flexed must be uterus).

Knowledge Level 4, System: Reproductive

Robert O'Connor University College Dublin

### Broad ligament: contents

[ID 2995]

**BROAD:**

Bundle (ovarian neurovascular bundle)

Round ligament

Ovarian ligament

Artefacts (vestigial structures)

Duct (oviduct)

Knowledge Level 1, System: Reproductive

David Colbert UWA Medicine

### Scrotum layers

[ID 666]

"Some Damn Englishman Called It The Testis":

From superficial to deep:

Skin

Dartos

External spermatic fascia

Cremaster

Internal spermatic fascia

Tunica vaginalis

**Testis**

Knowledge Level 2, System: Reproductive

Anonymous Contributor

### Scrotum layers

[ID 1227]

"Some Days Eddie Can Irritate People Very Thouroughly":

Skin

Dartos layer

External spermatic fascia

Cremaster muscle

Internal spermatic fascia

Parietal tunica vaginalis

Visceral tunica vaginalis

Tunica albuginea

Knowledge Level 2, System: Reproductive

Eddie Amores Columbia University

### Sperm pathway through male reproductive tract

[ID 319]

**SEVEN UP:**

Seminiferous tubules

Epididymis

Vas deferens

Ejaculatory duct

Nothing

Urethra

Penis

Knowledge Level 2, System: Reproductive

Ken Evans Saskatchewan Health, Acute and Emergency Services

### Sperm pathway through male reproductive tract

[ID 878]

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"**STaRT DEEP--VD!**":

Sperm duct system progression, from smallest to largest:

**ST**: Seminiferous Tubules

**RT**: Rete Testes

**DE**: Ductus Efferentes

**EP**: Epididymis

**VD**: Vas Deferens

Knowledge Level 2, System: Reproductive

Lior Greenberg and Tomer Maoz Technion Faculty of Medicine, Haifa, Israel

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**Sperm: path through male reproductive system**

[ID 2424]

"My boyfriend's name is **STEVE**":

Seminiferous Tubules

Epididymis

Vas deferens

Ejaculatory duct

Knowledge Level 1, System: Reproductive

Amy Harrington MCP Hahнемann

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**Spermatic cord contents**

[ID 288]

"**3** arteries, **3** nerves, **3** other things":

**3** arteries: testicular, ductus deferens, cremasteric.

**3** nerves: genital branch of the genitofemoral, cremasteric, autonomics.

**3** other things: ductus deferens, pampiniform plexus, lymphatics.

Note some argument about this: Moore doesn't put in cremasteric nerve, Lumley puts in inguinal...

Knowledge Level 2, System: Reproductive

Anonymous Contributor

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**Spermatic cord contents**

[ID 926]

"**Piles Don't Contribute To A Good Sex Life**":

Pampiniform plexus

Ductus deferens

Cremasteric artery

Testicular artery

Artery of the ductus deferens

Genital branch of the genitofemoral nerve

Sympathetic nerve fibers

Lymphatic vessels

Knowledge Level 2, System: Reproductive

TR Columbia PandS

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**Arm fractures: nerves affected by humerus fracture location**

Hi Yield [ID 2797]

**ARM** fracture:

From superior to inferior:

**A**xillary: head of humerus

**R**adial: mid shaft

**M**edian: supracondylar

Knowledge Level 1, System: Skeletal

Ritesh Patel M.D.

---

**Carpal bone having the hook**

[ID 88]

The **H**amate has the **H**ook.

Knowledge Level 3, System: Skeletal

Anonymous Contributor

---

**Carpal bones**

[ID 334]



---

"**Scottish Lads Take Prostitutes To The Caledonian Hotel**":

Proximal row, then distal row:

**S**caphoid  
**L**unate  
**T**riquetrium  
**P**isiform  
**T**rapezium  
**T**rapezoid  
**C**apate  
**H**amate

Alternatively: "**S**tudents **L**ike **T**aking **P**rostitutes **T**o **T**he **C**arelton **H**otel".

Knowledge Level 1, System: Skeletal

Fred Reid Undergrad at St-Andrews, UK

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**Carpal bones**

[ID 381]

"**S**he **L**ooks **T**oo **P**retty; **T**ry **T**o **C**atch **H**er":

Proximal row then distal row, both lateral-to-medial:

**S**caphoid  
**L**unate  
**T**riquetrium  
**P**isiform  
**T**rapezium  
**T**rapezoid  
**C**apate  
**H**amate

Alternatively: "**S**he **L**ikes **T**o **P**lay; **T**ry **T**o **C**atch **H**er".

Knowledge Level 1, System: Skeletal

Anurag Gupta Dept of Surgery, Royal Adelaide Hospital, Australia

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**Carpal bones**

[ID 384]

"**S**he **L**icks **T**oms **P**rick; **H**er **C**u\*t's **T**oo **T**ight":

**S**caphoid  
**L**unate  
**T**riquetrum  
**P**isiform  
**H**amate  
**C**apitate  
**T**rapezoid  
**T**rapezium

Knowledge Level 1, System: Skeletal

Anonymous Contributor

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**Carpal bones**

[ID 414]

"**S**ome **L**overs **T**ry **P**ositions **T**hat **T**hey **C**an't **H**andle":

Proximal row then distal row, both lateral-to-medial:

**S**caphoid  
**L**unate  
**T**riquetrium  
**P**isiform  
**T**rapezium  
**T**rapezoid  
**C**apate  
**H**amate

Alternatively: "**S**cared **L**overs..."

Alternatively: "**S**enior **L**ecturers..."

Knowledge Level 1, System: Skeletal

Jason Mounts and Anonymous Contributor Medical College of Georgia and Cambridge

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**Carpal bones**

[ID 455]

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"Her C#nt's Too Tight So Lubricate The Penis":

Anticlockwise:

**H**amate

**C**apate

**T**rapezoid

**T**rapezium

**S**caphoid

**L**unate

**T**riquetral

**P**isiform

Knowledge Level 1, System: Skeletal

Dr. Smirkenheimer Viewbank University

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#### Carpal bones

[ID 461]

"Happy Cat Tom Took Pie To Little Sister":

**H**amate

**C**apitate

**T**rapezoid

**T**rapezium

**P**isiform

**T**riquitral

**L**unate

**S**caphoid

Knowledge Level 1, System: Skeletal

Nirab Kayastha Chuvash State University Medical Institute, Russia

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#### Carpal bones

[ID 552]

"Stop Letting Those People Touch The Cadaver's Hand":

Proximal row, lateral-to-medial:

**S**caphoid

**L**unate

**T**riquetrum

**P**isiform

Distal row, lateral-to-medial:

**T**rapezium

**T**rapezoid

**C**apitate

**H**amate

Knowledge Level 1, System: Skeletal

Edward Tanner University of Alabama SOM

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#### Carpal bones

[ID 1162]

"The **boat** sailed to the **moon** with **3 pEas** in a **rOw**, at the wheel was **Captain Hook**":

Carpal bones in order of occurrence:

Boat is scaphoid. Moon is lunate. 3 is triquetrum. Peas is pisiform (stressing the E sound for trapezium). Row is trapezoid (stressing the O for trapezOid). Captain is capitate. Hook is hamate (hamate has the hook).

Knowledge Level 1, System: Skeletal

Caoimhín P. Connell Industrial Hygienist

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#### Carpal bones (multangular names)

[ID 1791]

"Never Lower Tillie's Pants. Mother May Come Home.":

**N**avicular

**L**unate

**T**riquetrium

**P**isiform

greater **M**ultangular (trapezium)

lesser **M**ultangular (trapezoid)

**C**apitate

**H**amate

Knowledge Level 1, System: Skeletal

Martin Herman Le Bonheur Children's Medical Center

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#### Carpal bones: trapezium vs. trapezoid location

[ID 4]

---

Since there's two T's in carpal bone mnemonic sentences, need to know which T is where:

Trapezi**UM** is by the th**UMB**, Trapezi**OID** is in**SIDE**.

Alternatively, Trapezi**UM** is by the th**UMB**, Trapez**OID** is by its **SIDE**.

Knowledge Level 1, System: Skeletal

Tom Ball Imperial College, UK

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### Carpel bones

Hi Yield [ID 2291]

"**So Long To Pinky, Here Comes The Thumb**":

Proximal row, lateral-to-medial, then distal row, medial-to-medial:

Scaphoid

Lunate

Triquetrium

Pisiform

Hamate

Capate

Trapezoid

Trapezium

Knowledge Level 1, System: Skeletal

Anonymous Contributor

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### Carpum and tarsum

[ID 567]

"**SCIT**":

(Artum) **S**uperior **C**arpum

(Artum) **I**nferior **T**arsum

Knowledge Level 1, System: Skeletal

Michelangelo Penzo Cardiology Dept, Vicenza Hospital - Italy

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### Cartilage derivatives of 1st pharyngeal arch (mandibular)

[ID 834]

"**TM A Super Sexy Guy**" (or Girl):

**I**ncus

**M**alleus

**A**nterior ligament of malleus

**S**pine of sphenoid

**S**phenomandibular ligament

**G**enial tubercle of mandible

Knowledge Level 7, System: Skeletal

Ron Norman AECC

---

### Cranial bones

[ID 146]

"**Old Pygmies From Thailand Eat Skulls**":

**O**ccipital

**P**arietal

**F**rontal

**T**emporal

**E**thmoid

**S**phenoid

Note: 'skull-eating pygmies' helps remind that mnemonic is for the skull.

Alternatively: "**Old People From Texas Eat Spiders**".

Alternatively: "**Prostitutes Offer Free Sex To Everyone**".

Knowledge Level 1, System: Skeletal

Anonymous Contributor

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### Cranial bones

[ID 171]

"**PEST OF 6**":

**P**arietal

**E**thmoid

**S**phenoid

**T**emporal

**O**ccipital

**F**rontal

The 6 just reminds that there's 6 of them to remember.

Knowledge Level 1, System: Skeletal

Anonymous Contributor

## Cranial bones

[ID 1121]

"**F**raternity **P**arties **O**ccasionally **T**each **S**pam **E**tiquette":

The first two letters of each bone:

**F**rontal

**P**arietal

**O**ccipital

**T**emporal

**S**phenoid

**E**thmoid

Knowledge Level 1, System: Skeletal

Frank Hopkins

## Cruciate ligaments: insertions

Hi Yield [ID 2081]

**PAMS APPLES:**

**P**osterior [passes] **A**nterior [inserts] **M**edially.

**A**nterior [passes] **P**osteriorly [inserts] **L**aterally.

Knowledge Level 1, System: Skeletal

Anonymous Contributor

## Elbow joint: capitulum vs. trochlea

[ID 3259]

**CUTER:**

**C**apitulum: **U**lnar

**T**rochlea: **R**adial

Knowledge Level 1, System: Skeletal

Anonymous Contributor

## Elbow joint: radius vs. ulna ends

[ID 2936]

**CRAzy TULips:**

**C**apitulum = **U**lnar

**T**rochlear = **R**adius

Knowledge Level 1, System: Skeletal

Borum Suh

## Facial bones

[ID 535]

"**V**irgil **C**an **N**ot **M**ake **M**y **P**et **Z**ebra **L**augh!":

**V**omer

**C**onchae

**N**asal

**M**axilla

**M**andible

**P**alatine

**Z**ygomatic

**L**acrimal

Knowledge Level 3, System: Skeletal

Rita Warren State University of New York

## Fibula vs. tibia: which is the bigger one

[ID 100]

People talk of telling just a "little white lie", or a "**little fib**":

Therefore, the fibula is smaller.

Alternatively: **TIB**ia is the **T**hicker **I**nnner **B**one.

Alternatively: "Little lat **FIB**, big fat **TIB**".

Knowledge Level 1, System: Skeletal

Dr. Rabiddrashikys and Robert O'Connor UWCM and University College Dublin

## Foramen ovale contents

[ID 599]

**MALE:**

**M**andibular nerve

**A**ccessory meningeal artery

**L**esser petrosal nerve

**E**missary veins

Alternatively: also include **M**otor root of Trigeminal and **M**iddle meningeal vein under 'M'.

Knowledge Level 6, System: Skeletal

Dr. Rajesh Gadhiya and Dalia Rashdan Not Specified and Ain Shams University School of Dentistry

## Foramen ovale contents

[ID 1743]

### OVALE:

Otic ganglion (just inferior)

V3 cranial nerve

Accessory meningeal artery

Lesser petrosal nerve

Emissary veins

Knowledge Level 6, System: Skeletal

Syukree UKM

## Foramen spinosum: location on base of skull

[ID 66]

Foramen **spinosum** is adjacent to the **spine** of sphenoid.

Knowledge Level 4, System: Skeletal

Robert O'Connor University College Dublin

## Genu valgum vs. genu vargum

Hi Yield [ID 2187]

Genu val**GUM** (knock-knee): knees are **GUM**med together.

Varum (bowleg) is the other by default, or **Far** rhymes with **Var**, so knees are **far** apart.

Knowledge Level 1, System: Skeletal

Andrew J. Vasil UMD School of Medicine, Duluth, MN

## Hand fractures: Colle's vs. Smith's

Hi Yield [ID 2771]

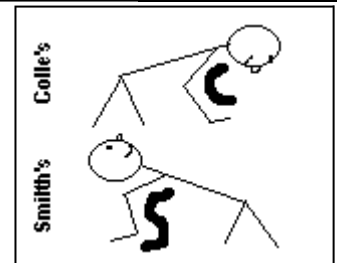
Colle's fracture: arm in fall position makes a 'C' shape.

Smith's fracture: arm in fall position makes a 'S' shape.

See diagram.

Knowledge Level 1, System: Skeletal

Soichiro Fushimi Okayama University Medical School, Japan



## Hip posterior dislocation: most likely arrangement for one

[ID 13]

"Hitting the brake pedal before the accident":

You are sitting, so hip is **flexed**, and **adducted** and **medially rotated** so can move your foot away from the gas pedal over to the brake pedal.

Note: car accidents are most likely cause of posterior dislocation because in this position.

Knowledge Level 8, System: Skeletal

Anonymous Contributor

## Hyoid bone: muscle attachments

[ID 352]

"Christ, He Didn't Screw Girls Much. That's Obvious, Stupid":

The first sentence is for 6 muscles attaching superiorly, the second sentence is for 3 muscles attaching inferiorly.

Both sentences are in order from lateral to medial:

Constrictor (middle)

Hyoglossus

Digastric

Stylohyoid

Geniohyoid

Mylohyoid

Thyrohyoid

Omohyoid

Sternohyoid

Knowledge Level 5, System: Skeletal

Anonymous Contributor

## Joints in the midline

[ID 271]

"SC":

In medial line, below **Second Cervical**, joints are **Secondary Cartilaginous** and usually have a di**SC**.

Notes: secondary cartilaginous is also known as symphysis. The one that doesn't have a disc is xiphi-sternal.

Knowledge Level 1, System: Skeletal

Anonymous Contributor

## Lordosis vs. kyphosis

[ID 395]

Lordosis: Lumbar.

**KY**phosis is **HY** up on the spine.

Knowledge Level 3, System: Skeletal

Anonymous Contributor

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**Medial malleolus: order of tendons, artery, nerve behind it**

[ID 7]

"**T**om, **D**ick, And Nervous **H**arry":

From anterior to posterior:

**T**ibialis

**D**igitorum

**A**rtery

**N**erve

**H**allicus

Full names for these are: Tibialis Posterior, Flexor Digitorum Longus, Posterior Tibial Artery, Posterior Tibial Nerve, Flexor Hallicus Longus.

Alternatively: "**T**om, **D**ick **ANd** **H**arry".

Alternatively: "**T**om, **D**ick And Not **H**arry".

Knowledge Level 3, System: Skeletal

Deepa S. and LCK Medical student and University of Ottawa

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**Menisci attachments in knee**

[ID 279]

"Each meniscus has something attached to it":

The medial meniscus has the medial collateral ligament.

The lateral meniscus is attached to the popliteal muscle.

Knowledge Level 6, System: Skeletal

Anonymous Contributor

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**Navicular contacts 3 of 5 cuneiform bones**

[ID 30]

"**N**avicular is like the **N**avigator logo":

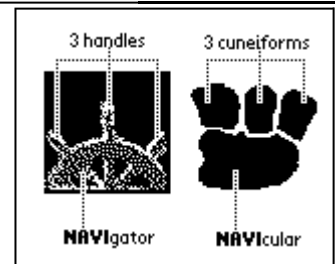
There are 3 things coming off each.

See diagram.

Therefore, cuboid has to contact 2 of the 5.

Knowledge Level 6, System: Skeletal

Robert O'Connor University College Dublin



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**Orbit: bones of medial wall**

[ID 655]

"**M**y **L**ittle **E**ye **S**its in the orbit":

**M**axilla (frontal process)

**L**acrimal

**E**thmoid

**S**phenoid (body)

Knowledge Level 7, System: Skeletal

Usman Ahmad

---

**Ossification ages**

[ID 1689]

"**E**very **P**otential **A**natomist **S**hould **K**now **W**hen"

When they ossify, in order of increasing year:

**E**lbow: **16** years

**P**elvis, **A**nkle: **17** years

**S**houlder, **K**nee: **18** years

**W**rist: **19** years

Knowledge Level 4, System: Skeletal

Saurabh Sikka

---

**Rib costal groove: order of intercostal blood vessels and nerve**

[ID 17]

---

**VAN:**

From superior to inferior:

**Vein**

**Artery**

**Nerve**

Knowledge Level 2, System: Skeletal

Anonymous Contributor

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**Superior orbital fissure: structures passing through**

[ID 42]

"**Lazy French Tarts Lie Naked In Anticipation Of Sex**":

**Lacrimal nerve**

**Frontal nerve**

**Trochlear nerve**

**Lateral nerve**

**Nasociliary nerve**

**Internal nerve**

**Abducens nerve**

**Ophthalmic veins**

**Sympathetic nerves**

Knowledge Level 4, System: Skeletal

Anonymous Contributor

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**Superior orbital fissure: structures passing through**

[ID 454]

"**Lonely Fat Teenage Virgins Rarely Like Swallowing And Never Ingest**":

**Lacrimal nerve**

**Frontal nerve**

**Trochlear nerve**

**Vein: ophthalmic**

**Ring: tendinous**

From the ring, arises:

**Lateral rectus**

**Superior division III**

**Abducent nerve**

**Nasociliary nerve**

**Inferior division III**

Knowledge Level 4, System: Skeletal

Dr. Smirkenheimer Viewbank University

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**Superior orbital fissure: structures passing through**

[ID 1001]

"**Live Free To See Absolutely No Insult**":

**Lacrimal nerve**

**Frontal nerve**

**Trochlear nerve**

**Superior branch of oculomotor nerve**

**Abducent nerve**

**Nasociliary nerve**

**Inferior branch of oculomotor nerve**

Knowledge Level 4, System: Skeletal

Anonymous Contributor

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**Tarsal bones**

[ID 1352]

"**Traverse City (is) Noted (for) Michigan's Lovely Cherries**":

**Talus**

**Calcaneus**

(new row)

**Navicular**

(new row)

**Medial Intermediate cuneiforms**

**Lateral cuneiform**

**Cuboid**

Knowledge Level 3, System: Skeletal

Scott Strom Michigan State University College of Osteopathic Medicine

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**Tarsal bones**

[ID 1408]

"**Tall Californian Navy Medcial Interns Lay Cuties**":

In order (right foot, superior to inferior, medial to lateral):

**T**alus

**C**alcaneous

**N**avicular

**M**edial cuneiform

**I**ntermediate cuneiform

**L**ateral cuneiform

**C**uboid

Knowledge Level 3, System: Skeletal

Frank Hopkins

#### Tarsal tunnel: contents

[ID 1182]

"**Tiny Dogs Are Not Hunters**":

From superior to inferior:

**T**: Tibialis posterior

**F**: flexor **D**igitorum longus

**A**: posterior tibial **A**rtery

**N**: tibial **N**erve

**H**: flexor **H**allucis longus

Knowledge Level 5, System: Skeletal

Anonymous Contributor Baylor College of Medicine

#### Tibia vs. fibula: which is lateral

[ID 8]

The Fibu**L**A is **L**ateral.

Knowledge Level 1, System: Skeletal

Anonymous Contributor

#### Tibia: muscles of pes anserinus (the muscles attached to tibia's medial side)

[ID 2095]

"**A Girl between Two Sargeants**":

**G**racilis is **b**etween

**S**artorius and

**S**emitendonsus

Knowledge Level 4, System: Skeletal

Beenish Dow Medical College

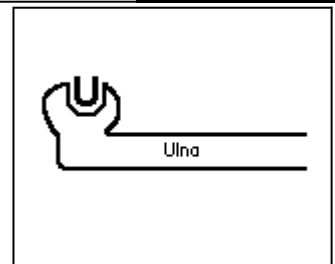
#### Ulna bone: quick recognition in oral exam

[ID 120]

The **U**lnar bone has a "**U**" at the end where it goes over the trochlea.

Knowledge Level 1, System: Skeletal

Robert O'Connor University College Dublin



#### Vertebrae: number of facets a typical thoracic has

[ID 99]

Typical **T**horacic has **T**en facets.

Knowledge Level 7, System: Skeletal

Anonymous Contributor

#### Vertebrae: recognizing a thoracic from lumbar

[ID 80]

Examine vertebral body shape:

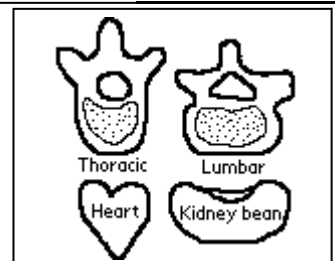
**T**horacic is **h**eart-shaped body since your **h**eart is in your **t**horax.

**L**umbar is **k**idney-bean shaped since **k**idneys are in **l**umbar area.

See diagram.

Knowledge Level 3, System: Skeletal

Robert O'Connor University College Dublin



#### Vertebrae subtypes

[ID 1333]



"Certain Doctors Luv Saddling Coeds":

From superior to inferior:

Cervical

Dorsal

Lumbar

Sacrum

Coccyx

Knowledge Level 1, System: Skeletal

Frank Hopkins

#### Wrist: radial side vs. ulnar side

[ID 81]

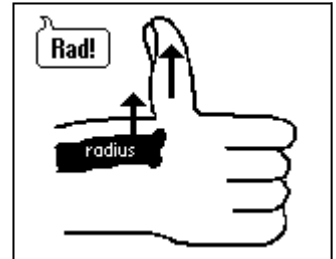
Make a fist with your thumb up in the air and say "**Rad!**".

Your thumb is now pointing to your **Radius**.

Note: 'Rad!' was a late 80's catchphrase, short for 'Radical'. Things that were good were called 'Rad'.

Knowledge Level 1, System: Skeletal

Patrick Esperanzate University College Dublin



## ANESTHESIOLOGY

#### Xylocaine: where not to use with epinephrine

Hi Yield [ID 1404]

"Nose, Hose, Fingers and Toes"

Vasoconstrictive effects of xylocaine with epinephrine are helpful in providing hemostasis while suturing. However, may cause local ischemic necrosis in distal structures such as the digits, tip of nose, penis, ears.

Knowledge Level 5, System: Integumental

Robert Lueken Eastern Virginia Medical School

#### Spinal anesthesia agents

[ID 131]

"Little Boys Prefer Toys":

Lidocaine

Bupivacaine

Procaine

Tetracaine

Knowledge Level 3, System: Nervous

Anonymous Contributor

#### Anesthesia machine/room check

[ID 2253]

**MS MAID:**

**M**onitors (EKG, SpO2, EtCO2, etc)

**S**uction

**M**achine check (according to ASA guidelines)

**A**irway equipment (ETT, laryngoscope, oral/nasal airway)

**I**V equipment

**D**rugs (emergency, inductions, NMBs, etc)

Knowledge Level 1, System: Other/Miscellaneous

Anonymous Contributor

#### Anesthesia: quick check

[ID 2481]

**SOAP:**

**S**uction

**O**xygen

**A**irway

**P**harmacology

Knowledge Level 1, System: Other/Miscellaneous

Anonymous Contributor

#### General anaesthesia: equipment check prior to inducing

[ID 1875]

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**MALES:****Masks****Airways****Laryngoscopes****Endotracheal tubes****Suction/ Stylette, bougie**

Knowledge Level 2, System: Other/Miscellaneous

Steve Gust HMO, Gove District Hospital, NT Australia

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**Anesthetics equipment check**

[ID 3291]

**MISMADE:****Machine check****IV supplies****Suction****Monitors****Airways****Drugs****Equipment**

Knowledge Level 3, System: Pulmonary

Anonymous Contributor

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**Endotracheal intubation: diagnosis of poor bilateral breath sounds after intubation**

Hi Yield [ID 1899]

**DOPE:****Displaced** (usually right mainstem, pyreform fossa, etc.)**Obstruction** (kinked or bitten tube, mucuous plug, etc.)**Pneumothorax** (collapsed lung)**Esophagus**

Knowledge Level 5, System: Pulmonary

Marc Colbeck

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**BEHAVIOURAL SCIENCE / PSYCHOLOGY**

---

**AIDS Dementia Complex (ADC): features**

[ID 1685]

**AIDS:****Atrophy** of cortex**Infection/ Inflammation****Demyelination****Six months** death

Knowledge Level 8, System: Nervous

Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan, Gujranwala

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**Autistic disorder: features**

[ID 1994]

**AUTISTICS:****Again and again** (repetitive behavior)**Unusual Abilities****Talking** (language) delay**IQ** subnormal**Social development** poor**Three years** onset**Inherited component** [35% concordance]**Cognitive impairment****Self injury**

Knowledge Level 5, System: Nervous

Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan, Gujranwala

---

**Cluster personality disorders**

Hi Yield [ID 697]

Cluster **A** Disorder = **Atypical**. Unusual and eccentric.Cluster **B** Disorder = **Beast**. Uncontrolled wildness.Cluster **C** Disorder = **Coward** [avoidant type], **Compulsive** [obsessive-compulsive type], or **Clingy** [dependent type].

Knowledge Level 1, System: Nervous

Robert O'Connor University College Dublin

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**Depression: major episode characteristics**

Hi Yield [ID 767]

---

**SPACE DIGS:**

Sleep disruption

Psychomotor retardation

Appetite change

Concentration loss

Energy loss

Depressed mood

Interest wanes

Guilt

Suicidal tendencies

Knowledge Level 2, System: Nervous

Robert O'Connor University College Dublin

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**Depression: symptoms**

Hi Yield [ID 1889]

---

**BAD CRISES:**

Behavioural change (slowing down or agitation)

Appetite change (weight loss or weight gain in the young)

Depressed look (looking down)

Concentration decrease (does not do serial 7s well)

Ruminations (constant negative thoughts, hopelessness good indicator of suicidality)

Interest (reduced interest in what is normally pleasurable)

Sleep change (insomnia or hypersomnia, sleeping early, waking up at night, waking up feeling tired)

Energy change (fatigue)

Suicide

Knowledge Level 2, System: Nervous

Peter Loa Medical Student at Adelaide University

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**Gain: primary vs. secondary vs. tertiary**

Hi Yield [ID 766]

Primary: Patient's Psyche improved.

Secondary: Symptom Sympathy for patient.

Tertiary: Therapist's gain.

Knowledge Level 3, System: Nervous

Robert O'Connor University College Dublin

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**HM: this classic patient's lesion**

[ID 416]

HM had Hippocampus Missing.

Hippocampus and surrounding areas were removed surgically: prevented formation of new memories.

Knowledge Level 7, System: Nervous

Anonymous Contributor

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**Middle adolescence (14-17 years): characteristics**

[ID 1990]

---

**HERO:**

Heterosexual crushes/ Homosexual Experience

Education regarding short term benefits

Risk taking

Omnipotence

And there is interest in being a Hero (popular).

Knowledge Level 5, System: Nervous

Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan, Gujranwala

---

**Narcolepsy: symptoms, epidemiology**

Hi Yield [ID 2044]

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**CHAP:**

Cataplexy

Hallucinations

Attacks of sleep

Paralysis on waking

Usual presentation is a young male, hence "chap".

Knowledge Level 3, System: Nervous

Robert O'Connor University College Dublin

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**REM: features**

[ID 1717]

---

**REM:**

Rapid pulse/ Respiratory rate

Erection

Mental activity increase/ Muscle paralysis

Knowledge Level 6, System: Nervous

Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan, Gujranwala

---

**Sleep stages: features**

Hi Yield [ID 1204]

DELta waves during DEEpest sleep (stages 3 & 4, slow-wave).

dREaM during REM sleep.

Knowledge Level 3, System: Nervous

Anonymous Contributor

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**Keober-Ross dying process: stages**

[ID 1692]

"Death Always Brings Great Acceptance":

Denial

Anger

Bargaining

Grieving

Acceptance

Knowledge Level 3, System: Other/Miscellaneous

Sung H. Kim and Samuel Atom Baek-Kim Tuckahoe, NY

---

**Reinforcement schedules: variable ratio**

Hi Yield [ID 2221]

SLOT machines show SLOWesT extinction.

Knowledge Level 1, System: Other/Miscellaneous

Sung Hoon Kim El Paso, TX

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**Impotence causes**

[ID 1088]

PLANE:

Psychogenic: performance anxiety

Libido: decreased with androgen deficiency, drugs

Autonomic neuropathy: impede blood flow redirection

Nitric oxide deficiency: impaired synthesis, decreased blood pressure

Erectile reserve: can't maintain an erection

Knowledge Level 3, System: Reproductive

Ben Beckwith University of Queensland, Australia

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**Male erectile dysfunction (MED): biological causes**

[ID 1969]

MED:

Medicines(propranalol, methyl dopa, SSRI, etc.)

Ethanol

Diabetes mellitus

Knowledge Level 4, System: Reproductive

Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan, Gujranwala

---

**Male Erectile Dysfunction (MED): drugs causing it**

[ID 2034]

"STOP erection":

SSRI (fluoxetine)

Thioridazone

methyl dOpa

Propranalol

Knowledge Level 1, System: Reproductive

Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan, Gujranwala

---

**Premature ejaculation: treatment**

[ID 2037]

---

2 S's:  
SSRIs [eg: fluoxetine]  
Squeezing technique [glans pressure before climax]  
More detail with 2 more S's:  
Sensate-focus exercises [relieves anxiety]  
Stop and start method [5-6 rehearsals of stopping stimulation before climax]  
Knowledge Level 7, System: Reproductive  
Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan, Gujranwala

## BIOCHEMISTRY

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### B vitamin names

Hi Yield [ID 399]

"The Rhythm Nearly Proved Contagious":

In increasing order:

Thiamine (B1)

Riboflavin (B2)

Niacin (B3)

Pyridoxine (B6)

Cobalamin (B12)

Knowledge Level 2, System: Alimentary

Anonymous Contributor

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### Catabolism steps of branched chain amino acids

[ID 652]

"Truck hit the Ox to Death":

Transamination

Oxidative decarboxylation

Dehydrogenation

Knowledge Level 6, System: Alimentary

Usman Ahmad

---

### Essential amino acids

Hi Yield [ID 128]

**PVT. TIM HALL:**

Phe

Val

Thr

Trp

Ile

Met

His

Arg

Leu

Lys

Pvt. is short for Private in the military.

Arg and His are considered semiessential.

Alternatively: "MATT VIL PHLy".

Knowledge Level 3, System: Alimentary

Dr. Kishore Chandki MGM Medical College, Indore, India

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### Essential amino acids

Hi Yield [ID 442]

"PVT. TIM HALL always **arg**ues, never **tir**es":

Phe

Val

Thr

Trp

Ile

Met

His

Arg

Lue

Lys

Always argues: the A is for Arg, not Asp.

'Never tires': T is not Tyr, but is both Thr and Trp.

Knowledge Level 3, System: Alimentary

Anonymous Contributor

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**Fasting state: branched-chain amino acids used by skeletal muscles**

[ID 784]

"Muscles **LIVE** fast":

**L**eucine

**I**soleucine

**V**aline

Knowledge Level 2, System: Alimentary

Daniel Marcano Medical school graduate

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**Folate deficiency: causes**

[ID 1410]

**A FOLIC DROP:**

**A**lcoholism

**F**olic acid antagonists

**O**ral contraceptives

**L**ow dietary intake

**I**nfection with Giardia

**C**eliac sprue

**D**ilatin

**R**elative folate deficiency

**O**ld

**P**regnant

Knowledge Level 5, System: Alimentary

Robert O'Connor University College Dublin

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**Glycogen storage: Anderson's (IV) vs. Cori's (III) enzyme defect**

Hi Yield [ID 2248]

**ABCD:**

Anderson's=**B**ranching enzyme.

Cori's=**D**ebranching enzyme.

Otherwise, can't really distinguish clinically.

Knowledge Level 3, System: Alimentary

Anonymous Contributor

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**Glycogen storage: names of types I through VI**

Hi Yield [ID 2638]

"**V**iagra **P**ills Cause **A** Major **H**ardon":

**V**on Gierke's

**P**ompe's

**C**ori's

**A**nderson's

**M**cArdle's

**H**er's

Knowledge Level 1, System: Alimentary

Chris Reed Medical College of Wisconsin

---

**Glycolysis steps**

Hi Yield [ID 317]

"**G**oodness **G**racious, **F**ather **F**ranklin **D**id **G**o **B**y **P**icking **P**umpkins (to) **P**repare **P**ies":

**G**lucose

**G**lucose-6-P

**F**ructose-6-P

**F**ructose-1,6-diP

**D**ihydroxyacetone-P

**G**lyceraldehyde-P

1,3-**B**iphosphoglycerate

3-**P**hosphoglycerate

2-**P**hosphoglycerate (to)

**P**hosphoenolpyruvate [**PEP**]

**P**yruvate

'Did', 'By' and 'Pies' tell you the first part of those three: di-, bi-, and py-.

'PrEPare' tells location of PEP in the process.

Knowledge Level 4, System: Alimentary

Ken Evans Saskatchewan Health, Acute and Emergency Services

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**Hypervitaminosis A: signs and symptoms**

Hi Yield [ID 755]

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"Increased Vitamin A makes you **HARD**":

**H**eadache/ **H**epatomegaly

**A**norexia/ **A**lopecia

**R**eally painful bones

**D**ry skin/ **D**rowsiness

Knowledge Level 1, System: Alimentary

Usman Ahmad KMC

---

### Infantile Beriberi symptoms

Hi Yield [ID 754]

Restlessness

Sleeplessness

Breathlessness

Soundlessness (aphonia)

Eatlessness (anorexia)

Great heartedness (dilated heart)

Alternatively: Get 5 of 'em with **BERI**: **B**reathless/ **B**ig hearted, **E**atless, **R**estless, **I**nsomnia.

Knowledge Level 3, System: Alimentary

Usman Ahmad KMC

---

### Niacin deficiency: signs and symptoms

Hi Yield [ID 1456]

The famous 4 D's:

**D**iarrhoea

**D**ermatitis

**D**ementia

**D**eath (if untreated)

Knowledge Level 1, System: Alimentary

Dr. Atif Farooq Rawalpindi Medical College, Pakistan, Gujranwala

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### Phosphorylation cascade: action during low glucose

[ID 138]

"In the Phasted State, Phosphorylate":

The phosphorylation cascade becomes active when blood glucose is low.

Knowledge Level 5, System: Alimentary

Anonymous Contributor

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### Type 1 glycogen storage disease

Hi Yield [ID 562]

Type **1** = one (**Von**), ie Von Gierke's disease

Knowledge Level 3, System: Alimentary

Dr. Waqas H. Sheikh BVI Co.

---

### Van den Bergh reaction (Jaundice test)

Hi Yield [ID 559]

"Indirect reacting bilirubin = Unconjugated bilirubin":

Both start with vowels, so they go together: **I**ndirect & **U**nconjugated.

Knowledge Level 2, System: Alimentary

Dr. Waqas H. Sheikh BVI Co.

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### Vitamin B3 (niacin, nicotinic acid) deficiency: pellagra

Hi Yield [ID 2234]

The 3 **D**'s of pellagra:

**D**ermatitis

**D**iarrhea

**D**ementia

Note vitamin **B3** is the 3 **D**'s.

Knowledge Level 3, System: Alimentary

Andrew J. Vasil UMD School of Medicine, Duluth, MN

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### Vitamins: which are fat soluble

Hi Yield [ID 149]

**KADE**:

Vitamin **K**

Vitamin **A**

Vitamin **D**

Vitamin **E**

Knowledge Level 2, System: Alimentary

Anonymous Contributor

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### Vitamins: which are fat soluble

Hi Yield [ID 1343]

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"The **FAT** cat is in the **ADEK** (attic)":

**Fat** soluble vitamins are **A,D,E,K**.

Knowledge Level 2, System: Alimentary

Presley Ross Medicine

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**Coagulation common pathway: factors in order**

Hi Yield [ID 3014]

**10 + 5 - 2 = 13**

Coagulation common pathway:

Factor **X** to Factor **V** to Factor **II** to Factor **XIII**

Knowledge Level 1, System: Cardiovascular

John Chung University of Hawaii John A. Burns School of Medicine

---

**Fabry's disease**

Hi Yield [ID 574]

**FABRY'S:**

Foam cells found in glomeruli and tubules/ Febrile episodes

Alpha galactosidase A deficiency/ Angiokeratomas

Burning pain in extremities/ **BUN** increased in serum/ **Boys**

Renal failure

**YX** genotype (male, X linked recessive)

Sphingolipidoses

Knowledge Level 3, System: Cardiovascular

Rinku Uberoi UNIBE

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**Heme synthesis: amino acid precursors to basic unit of porphyrins, heme (pyrrole ring)**

[ID 2051]

"Dracula wants to **Suck** a **Co**-ed's blood [think **heme**] with his **Gly**stening teeth!":

**Succinyl CoA** and **Glycine** are precursor amino acids to pyrrole rings, which is the basic unit of porphyrins and **heme**.

Knowledge Level 5, System: Cardiovascular

Christian Garaycochea Medical student

---

**Hemoglobin binding curve: causes of shift to right**

Hi Yield [ID 2561]

"**CADET**, face **right**!":

**CO2**

**Acid**

**2,3-DPG** (aka 2,3 BPG)

**Exercise**

**Temperature**

Knowledge Level 1, System: Cardiovascular

Anonymous Contributor

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**Porphyrias: acute intermittent porphyria symptoms**

Hi Yield [ID 2062]

5 P's:

**Pain** in abdomen

**Poly**neuropathy

**Psych**ological abnormalities

**Pink** urine

**Precipitated** by drugs (eg barbiturates, oral contraceptives, sulpha drugs)

Knowledge Level 3, System: Cardiovascular

Anuradha

---

**Sickle cell anemia: mutation**

[ID 1320]

"Hb**S** isn't **V**ery **G**ood":

At **S**ixth position of HB beta chain, **V**aline is present instead of **G**lutamic acid.

Knowledge Level 5, System: Cardiovascular

Dr. Khawaja Atif Farooq Rawalpindi Medical College, Islamabad, Pakistan

---

**Sickle cell disease pathophysiology**

[ID 745]

**SICK**le cell disease is due to a **S**ubstitution of the **SICK**sth amino acid of the B chain.

Knowledge Level 4, System: Cardiovascular

Anonymous Contributor

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**Vitamin K dependent cofactors**

Hi Yield [ID 3143]



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"**Several Tend To Nicely Stop Clots**":

Factor **Seven, Ten, Two, Nine**.

Protein **S**, Protein **C**.

Knowledge Level 1, System: Cardiovascular

Medical Student Class 2004 University of Western Ontario

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**Adrenaline mechanism**

[ID 654]

"**ABC** of Adrenaline":

Adrenaline--> activates **Beta** receptors--> increases Cyclic AMP

Knowledge Level 1, System: Endocrine

Usman Ahmad

---

**Galactosaemia: enzyme deficiency**

Hi Yield [ID 1995]

**GALIPUT**:

**Galactose 1 Phosphate Uridyl Transferase**.

There is an assay called the Galiput test for this.

Knowledge Level 2, System: Endocrine

Anonymous Contributor

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**Glucagon function**

[ID 753]

"Mr. **Gluca** has **Gone** to the **cAMP** to bring **out** some **Glucose**":

Glucagon elevates glucose by cAMP mechanism.

Knowledge Level 1, System: Endocrine

Usman Ahmad KMC

---

**Hyperglycemia: 3 classic signs and symptoms**

[ID 2712]

**DKA**:

**Dehydrated**

**Ketoacidosis**

**Acetone breath**

Knowledge Level 1, System: Endocrine

Chris B.

---

**Insulin: function**

Hi Yield [ID 172]

**INSULIN** stimulates **2** things to go

**IN 2** cells: Potassium and Glucose.

Knowledge Level 1, System: Endocrine

Anonymous Contributor

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**Collagen concisely covered**

[ID 600]

**COLLAGEN**:

**C**-terminal propeptide (procollagen)/ **C**ovalent **C**ross links/ **C** vitamin/ **C**onnective tissue/ **C**artilage/ **C**hondroblasts/ **C**opper **C**ofactor (Covalent **C**ross linking)

**O**utside the cell is where collagen normally functions/ **O**steoblasts/ **O**steogenesis imperfecta

**L**ysyl hydroxylase/ **L**ysyl oxidase (oxidatively deaminates lysyl and hydroxylysyl residues to form collagen cross links, last biosynthesis step)

**L**ong triple helical fibers/ **L**igaments

**A**lpha chains/ **A**ttached by H bonds form triple helix/ **A**scorbate for hydroxylation of lysyl and prolyl residues of pro-**A**lpha chains (postranslational modification)

**G**ly in every third position/ **G**lycosylation of hydroxyl group of hydroxylysine with **G**lucose and **G**alactose; **G**OLgi allows procollagen to **G**O outside of cell

**E**xtracellular matrix/ **E**ye (cornea, sclera)/ **E**hlers-Danlos Syndrome

**N**-terminal propeptide (procollagen)/ **N**onhelical terminal extensions

Note: Procollagen **L**EAVES the cell to be **c**LEAVEd by procollagen peptidases

Knowledge Level 7, System: Integumental

Rinku S Uberoi UNIBE

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**BUN:creatinine elevation: causes**

Hi Yield [ID 2159]

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**ABCD:**

Azotremia (pre-renal)

Bleeding (GI)

Catabolic status

Diet (high protein parenteral nutrition)

Knowledge Level 3, System: Kidney/Urine

Anthony Chan

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**G6PD: oxidant drugs inducing hemolytic anemia**

Hi Yield [ID 2208]

**AAA:**

Antibiotic (eg: sulfamethoxazole)

Antimalarial (eg: primaquine)

Antipyretics (eg: acetaminophen, but not aspirin or acetaminophen)

Knowledge Level 3, System: Lymphoid

Andrew J. Vasil UMD School of Medicine, Duluth, MN

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**Creatine phosphate: amino acid precursors**

[ID 2049]

"Nice **GAMs!**":

Glycine

Arginine

Methionine

Gam is slang for a person's leg, especially an attractive female's leg: "Nice gams = nice legs!"

Creatine phosphate is a muscle energy store, and spontaneously converts to creatinine which is excreted in the urine in direct proportion to muscle mass: clinically useful, such as in MS Dx.

Knowledge Level 5, System: Muscle

Christian Garaycochea medical student

---

**AcetylCoA and acetoacetylCoA: amino acids forming them**

[ID 558]

"**A Lighter Lease**" (A LyTr LeIs):

A=AcetylCoA or Acetoacetyl CoA

Ly=Lysine

Tr=Tryptophan

Le=Leucine

Is=Isoleucine

Knowledge Level 6, System: Other/Miscellaneous

Dr. Waqas H. Sheikh BVI Co.

---

**Carbon monoxide: electron transport chain target**

[ID 639]

"CO blocks CO":

Carbon monoxide (CO) blocks Cytochrome Oxidase (CO)

Knowledge Level 3, System: Other/Miscellaneous

Anonymous Contributor

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**Citric acid cycle compounds**

Hi Yield [ID 318]

"Oh Citric Acid Is Of (course) A SiLly STupid Funny Molecule":

Oxaloacetate

Citrate

Aconitate

Isocitrate

Oxalosuccinate

Alpha-ketoglutarate

Succinyl-CoA

Succinate

Fumarate

Malate

SiLly and sTupid used to differentiate succinyl and succinate

Knowledge Level 1, System: Other/Miscellaneous

Ken Evans Saskatchewan Health, Acute and Emergency Services

---

**Citric acid cycle compounds**

Hi Yield [ID 656]

---

"Can I Keep Selling Sex For Money, Officer?":

Citrate

Isocitrate

alpha **K**etoglutarate

Succinyl CoA

Succinate

Fumerate

Malate

Oxaloacetate

Knowledge Level 1, System: Other/Miscellaneous

Ramon Ter-Oganesyan and Rebecca University of California Irvine

---

**Citric acid cycle compounds**

Hi Yield [ID 1368]

"Oh! Can I Keep Some **Succinate** For Myself?":

Oxaloacetate

Citrate

Isocitrate

**K**etoglutarate

Succinyl coA

**Succinate**

Fumarate

Malate

Knowledge Level 1, System: Other/Miscellaneous

Serene NUS, Singapore

---

**Citric acid cycle compounds**

Hi Yield [ID 1929]

"Our City Is Kept Safe And Sound From **Malice**":

Oxaloacetate

**C**itrate

Isocitrate

alpha-**K**etoglutarate

Succinyl-CoA

Succinate

Fumarate

**M**alate

Knowledge Level 1, System: Other/Miscellaneous

Borels

---

**Citric acid cycle compounds**

Hi Yield [ID 1962]

"Can I Ask Sharon Stone For My **O**rgasm?":

Citrate

Isocitrate

Alpha-**K**etoglutarate

Succinyl CoA

Succinate

Fumerate

Maleate

Oxaloacetate

Knowledge Level 1, System: Other/Miscellaneous

Arun Mathews The Royal College of Surgeons in Ireland

---

**Dicarboxylic acids (alpha, omega) C2 through C10: common names**

[ID 130]

"Oh My, Such Good Apple Pie, Sweet As Sugar!":

Oxalic

Malonic

Succinic

Glutaric

Adipic

Pimelic

Suberic

Azelaic

Sebacic

Knowledge Level 8, System: Other/Miscellaneous

Anonymous Contributor

## DNA bond strength (nucleotides)

[ID 1008]

"Crazy Glue":

Strongest bonds are between Cytosine and Guanine, strong like Crazy Glue (3 H-bonds), whereas the A=T only have 2 H-bonds.

This is relevant to DNA replication, as the weaker A=T will be the site where RNA primer makes the initial break.

Knowledge Level 4, System: Other/Miscellaneous

Lior Greenberg Technion Faculty of Medicine, Haifa, Israel

## Electron transport chain: Rotenone's site of action

Hi Yield [ID 649]

Rotenone is a site specific inhibitor of complex one.

Knowledge Level 3, System: Other/Miscellaneous

Anonymous Contributor

## Enzyme kinetics: competitive vs. non-competitive inhibition

Hi Yield [ID 2696]

With **K**ompetitive inhibition: **K**m increases; no change in Vmax.

With **N**on-**k**ompetitive inhibition: No change in **K**m; Vmax decreases.

Knowledge Level 1, System: Other/Miscellaneous

Patricia Sanchez INTEC University, Santo Domingo, Dominican Republic

## Enzymes: classification

Hi Yield [ID 2054]

"Over The **HILL**":

Oxidoreductases

Transferases

Hydrolases

Isomerases

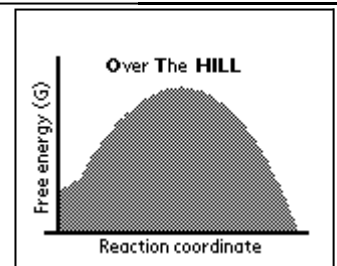
Ligases

Lyases

Enzymes get reaction over the hill. See diagram.

Knowledge Level 2, System: Other/Miscellaneous

Kenny Livingstone St. Andrews medical student



## Enzymes: competitive inhibitors

Hi Yield [ID 563]

"**C**ompetition is hard because we have to travel **m**ore **k**ilometers (**K**m) with the **s**ame **v**elocity":

With **c**ompetitive inhibitors, **v**elocity **r**emains **s**ame but **K**m **i**ncreases

Knowledge Level 1, System: Other/Miscellaneous

Dr. Waqas H. Sheikh BVI Co.

## G protein type for respective receptors

[ID 1395]

"**K**ISS and **K**ICK till you're **S**ICK of **S**EX" (QISS and QIQ till you're SIQ of SQS):

This gives the G-protein type (**G**q, **G**i, or **G**s) for all the receptors. Receptors are in alphabetical order:

alpha1=**Q**

alpha2=**I**

beta1=**S**

beta3=**S**

M1=**Q**

M2=**I**

M3=**Q**

D1=**S**

D2=**I**

H1=**Q**

H2=**S**

V1=**Q**

V2=**S**

Knowledge Level 4, System: Other/Miscellaneous

Khawaja Atif Farooq and Julien Pham Rawalpindi Medical College, Horizon Medical Institute, Pakistan and University of Washington

## Golgi complex: functions

[ID 890]

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"Golgi **Distributes A SPAM**":

**Distributes** proteins and lipids from ER

Add mannose onto specific lysosome proteins

Sulfation of sugars and selected tyrosine

Proteoglycan assembly

Add O-oligosugars to serine and threonine

Modify N-oligosugars on asparagine

Knowledge Level 3, System: Other/Miscellaneous

Samuel Atom Baek-Kim

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**Malate-aspartate shuttle**

[ID 989]

"**MAD** commute":

Malate in.

Alpha-ketoglutarate and **D** (Aspartate) out.

Knowledge Level 5, System: Other/Miscellaneous

Samuel

---

**Metabolic acidosis (normal anion-gap): causes**

[ID 2001]

With hyperkalemia: **RAISE** K<sup>+</sup>:

RTA type 4

Aldosterone or mineralocorticoid deficiency

Iatrogenic: NH<sub>4</sub>Cl, HCl

"Stenosis": obstructive uropathy

Early uremia

With hypokalemia: **ReDUCE** K<sup>+</sup>:

Renal TA type 1 and 2

Diarrhoea

Urine diversion into gut

Carbonate anhydrase inhibitor

Ex-hyperventilation

Knowledge Level 2, System: Other/Miscellaneous

Anthony Chan

---

**Metabolism sites**

[ID 612]

"Use **both** arms to **HUG**":

Heme synthesis

Urea cycle

Gluconeogenesis

These reactions occur in **both** cytoplasm and mitochondria.

Knowledge Level 4, System: Other/Miscellaneous

Rinku Uberoi

---

**Mitochondrial DNA (mt DNA) properties**

[ID 637]

"**mt** DNA".

mt stands for:

Maternal Transfer

Mutates Tremendously (high mutation rate)

Knowledge Level 4, System: Other/Miscellaneous

Anonymous Contributor

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**Na/K pump action**

Hi Yield [ID 491]

(Sing loudly to the chorus of "Kiss Him Goodbye"): "**Na, Na, Na -- out! Na, Na, Na -- out! K, K goes...inside!**"

Action of pump is 3 Na out and 2 K in

Knowledge Level 1, System: Other/Miscellaneous

Graham Austin University of Georgia, Cell Bio Dept

---

**Na/K pump: concentrations of Na vs. K on inside/outside of cell, pump action, number of molecules moved**

Hi Yield [ID 160]

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**HIKIN':**

There is a **HI**gh K concentration **IN**side the cell.

From this can deduce that the Na/K pump pumps K into cell and Na out of cell.

Alternatively: When I was learning this pump (circa 1992), a band that was "**in**" was **Kris K**ross, and a band that was "**out**" was "**Sha Na Na Na**":

So pump moves **K K** (2 K) **in** and **Na Na Na** (3 Na) out.

Sadly, as infectious as their debut album was, Kris Kross can really no longer be classed as "in".

Knowledge Level 2, System: Other/Miscellaneous

Anonymous Contributor

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**Na+/K+ pump: movement of ions and quantity**

Hi Yield [ID 2529]

**K+** and **in** each consist of **2** characters, so so 2 K+ are pumped in.

**Na+** and **out** each consist of **3** characters, so 3 Na+ are pumped out.

Knowledge Level 1, System: Other/Miscellaneous

Anonymous Contributor

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**Nitric oxide: amino acid precursor**

[ID 2050]

When the dentist works on your teeth, you say, "**AAArg! (Arginine)**" before he administers **Nitric Oxide (NO)** to take the pain away.

Other players necessary for NO synthesis: NO synthase, Ca++, NADPH.

Knowledge Level 5, System: Other/Miscellaneous

Christian Garaycochea Medical student

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**Phenylketonuria: which enzyme is deficient**

Hi Yield [ID 915]

**P**henylketonuria is caused by a deficiency of:

**P**henylalanine

**H**ydroxylase

Knowledge Level 3, System: Other/Miscellaneous

Anonymous Contributor

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**Pompe's disease: type**

Hi Yield [ID 824]

"**P**olice = **Po** + **lys**":

**Pompe's** disease is a **lysosomal** storage disease (alpha 1,4 glucosidase).

Knowledge Level 1, System: Other/Miscellaneous

Lior Greenberg Technion Faculty of Medicine, Haifa, Israel

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**Pyruvate: products of complete oxidation**

Hi Yield [ID 1133]

"**4** Naked **Fun 3** Coeds + **1** Guy":

Complete oxidation of pyruvate yields:

**4** NADH

**F**ADH2

**3** CO2

**1** GTP

Knowledge Level 1, System: Other/Miscellaneous

Anonymous Columbia College of Physicians and Surgeons

---

**Tangier's disease: hallmark**

[ID 2249]

"**T**angierene tonsils":

Hallmark is large orange tonsils.

Important clinical note: there is **no** increased risk of atherosclerosis, just like eating tangerenes.

Knowledge Level 4, System: Other/Miscellaneous

Anonymous Contributor

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**tRNA: molecular shape**

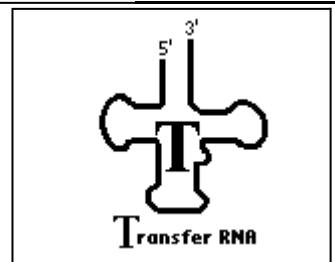
[ID 142]

Fortunately, **tRNA** (Transfer RNA) is shaped like a capital **T**.

See diagram.

Knowledge Level 1, System: Other/Miscellaneous

Robert O'Connor University College Dublin



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**Cell cycle**

[ID 507]

"George Sucked Gina's Mammary":

**G1-S-G2-M.**

Knowledge Level 1, System: Other/Miscellaneous

Josh Kunken Undergrad, Univ of Calif., Berkeley

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**Mitosis: events at 4 stages**

[ID 506]

Prophase, Metaphase, Anaphase, Telophase:

Prophase: Chromosomes and spindles are **Produced**.

Metaphase: chromosomes **MetAlign** themselves.

Anaphase: [**Ana**] divorced or separated.

Telophase: **Tell-O**'Brien his daughter cells are ready.

Knowledge Level 1, System: Other/Miscellaneous

Josh Kunken Undergrad, Univ of Calif, Berkeley

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**CARDIOLOGY**

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**Anti-arrhythmics: for AV nodes**

[ID 2508]

"Do Block AV":

**D**igoxin

**B**-blockers

**A**denosine

**V**erapamil

Knowledge Level 1, System: Cardiovascular

Azira Azmi University of Otago

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**Aortic regurgitation: causes**

[ID 3074]

**CREAM:**

**C**ongenital

**R**heumatic damage

**E**ndocarditis

**A**ortic dissection/ **A**ortic root dilatation

**M**arfan's

Knowledge Level 3, System: Cardiovascular

Jamal Khan Birmingham University Medical Student

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**Aortic stenosis characteristics**

Hi Yield [ID 197]

**SAD:**

**S**yncope

**A**ngina

**D**yspnoea

Knowledge Level 1, System: Cardiovascular

Anonymous Contributor

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**Apex beat: abnormalities found on palpation, causes of impalpable**

[ID 1582]

**HILT:**

**H**eaving

**I**mpalpable

**L**aterally displaced

**T**hrusting/ **T**apping

If it is impalpable, causes are **COPD:**

**COPD**

**O**besity

**P**leural, **P**ericardial effusion

**D**extrocardia

Knowledge Level 2, System: Cardiovascular

Sushant Varma Medical student, University of Sheffield, UK

---

**Apex beat: differential for impalpable apex beat**

[ID 2798]

---

**DOPES:**

**D**extrocardia

**O**besity

**P**ericarditis/ **P**ericardial tamponade/ **P**neumothorax

**E**mphysema

**S**inus inversus/ **S**tudent incompetence/ **S**coliosis/ **S**keletal abnormalities (eg pectus excavatum)

Knowledge Level 2, System: Cardiovascular

Fiona Hayes and Moses Lee Tong Chsia and Dalton Boyo UWCM, Cardiff, UK and Not Specified and Medical Student

---

**Atrial fibrillation: causes**

Hi Yield [ID 1092]

**A S#!T:**

**A**lcohol

**S**tenosis (mitral valve)

**H**ypertension

**I**nfarction/ **I**schaemia

**T**hyrotoxicosis

Knowledge Level 1, System: Cardiovascular

Anonymous Contributor

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**Atrial fibrillation: causes**

[ID 2468]

**PIRATES:**

**P**ulmonary: PE, COPD

**I**atrogenic

**R**heumatic heart: mitral regurgitation

**A**therosclerotic: MI, CAD

**T**hyroid: hyperthyroid

**E**ndocarditis

**S**ick sinus syndrome

Knowledge Level 1, System: Cardiovascular

Anonymous Contributor

---

**Atrial fibrillation: management**

Hi Yield [ID 2469]

**ABCD:**

**A**nti-coagulate

**B**eta-block to control rate

**C**ardiovert

**D**igoxin

Knowledge Level 1, System: Cardiovascular

Anonymous Contributor

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**Beck's triad (cardiac tamponade)**

Hi Yield [ID 660]

3 D's:

**D**istant heart sounds

**D**istended jugular veins

**D**ecreased arterial pressure

Knowledge Level 3, System: Cardiovascular

Anonymous Contributor

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**Betablockers: cardioselective betablockers**

Hi Yield [ID 1537]

"Betablockers Acting Exclusively At Myocardium"

Cardioselective betablockers are:

**B**etaxolol

**A**cebutelol

**E**smolol

**A**tenolol

**M**etoprolol

Knowledge Level 5, System: Cardiovascular

Diljot Singh Bedi GMCH Chandigarh, India

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**CHF: causes of exacerbation**

Hi Yield [ID 919]



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**FAILURE:**

Forgot medication

Arrhythmia/ Anaemia

Ischemia/ Infarction/ Infection

Lifestyle: taken too much salt

Upregulation of CO: pregnancy, hyperthyroidism

Renal failure

Embolism: pulmonary

Knowledge Level 6, System: Cardiovascular

Lau Yue Young Geoffrey

---

**CHF: causes of exacerbation**

[ID 3059]

**A SMITH PEAR:**

Anemia

Salt/ Stress/ Stopping meds

MI

Infection/ Ischemia

Thyroid (high/low)

HTN

Pericarditis

Endocarditis (valve disease)

Arrhythmia

Rx (beta blocker, etc)

Knowledge Level 6, System: Cardiovascular

Andrew Mackie, PA Rhode Island Hospital

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**Coronary artery bypass graft: indications**

Hi Yield [ID 1607]

**DUST:**

Depressed ventricular function

Unstable angina

Stenosis of the left main stem

Triple vessel disease

Knowledge Level 1, System: Cardiovascular

Sushant Varma Medical student, University of Sheffield, UK

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**Coronary artery bypass graft: indications**

Hi Yield [ID 2067]

**DUST:**

Depressed ventricular function

Unstable angina

Stenosis of the left main stem

Triple vessel disease

Knowledge Level 1, System: Cardiovascular

Sushant Varma University of Sheffield, UK

---

**Depressed ST-segment: causes**

Hi Yield [ID 1167]

**DEPRESSED ST:**

Drooping valve (MVP)

Enlargement of LV with strain

Potassium loss (hypokalemia)

Reciprocal ST- depression (in I/W AMI)

Embolism in lungs (pulmonary embolism)

Subendocardial ischemia

Subendocardial infarct

Encephalon haemorrhage (intracranial haemorrhage)

Dilated cardiomyopathy

Shock

Toxicity of digitalis, quinidine

Knowledge Level 8, System: Cardiovascular

Dr. Sonali V.

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**ECG: left vs. right bundle block**

[ID 218]

---

"**WiLLiaM MaRRoW**":

**W** pattern in V1-V2 and **M** pattern in V3-V6 is **Left** bundle block.

**M** pattern in V1-V2 and **W** in V3-V6 is **Right** bundle block.

Note: consider bundle branch blocks when QRS complex is wide.

Knowledge Level 3, System: Cardiovascular

Anonymous Contributor

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**ECG: T wave inversion causes**

[ID 2090]

**INVERT:**

Ischemia

Normality [esp. young, black]

Ventricular hypertrophy

Ectopic foci [eg calcified plaques]

**RBBB**, **LBBB**

Treatments [digoxin]

Knowledge Level 2, System: Cardiovascular

Robert O'Connor University College Dublin

---

**Exercise ramp ECG: contraindications**

[ID 2068]

**RAMP:**

Recent MI

Aortic stenosis

**MI** in the last 7 days

**Pulmonary** hypertension

Knowledge Level 3, System: Cardiovascular

Sushant Varma University of Sheffield, UK

---

**Heart compensatory mechanisms that 'save' organ blood flow during shock**

[ID 433]

"Heart **SAVER**":

Sympathoadrenal system

Atrial natriuretic factor

Vasopressin

Endogenous digitalis-like factor

**Renin**-angiotensin-aldosterone system

In all 5, system is activated/factor is released

Knowledge Level 3, System: Cardiovascular

Anonymous Contributor

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**Heart failure: signs**

[ID 3194]

**TAPED TORCH:**

Tachycardia

Ascites

**Pulsus alternans**

Elevated jugular venous pressure

**Displaced** apex beat

**Third** heart sound

**Oedema**

**Right** ventricular heave

Crepitations or wheeze

**Hepatomegaly** (tender)

Knowledge Level 6, System: Cardiovascular

Sandeep Samrat Sharma Armed Forces Medical College

---

**Heart murmurs**

Hi Yield [ID 1682]

"**hARD ASS MRS. MSD**":

**hARD**: Aortic **Regurg** = **Diastolic**

**ASS**: Aortic **Stenosis** = **Systolic**

**MRS**: Mitral **Regurg** = **Systolic**

**MSD**: Mitral **Stenosis** = **Diastolic**

Knowledge Level 1, System: Cardiovascular

Jack Pasquale, MD St. George's University, School of Medicine

---

**Jugular venous pressure (JVP) elevation: causes**

Hi Yield [ID 1087]

---

**HOLT:** Grab Harold Holt around the neck and throw him in the ocean:

**H**eat failure

**O**bstruction of vena cava

**L**ymphatic enlargement - supraclavicular

**I**ntra-Thoracic pressure increase

Knowledge Level 3, System: Cardiovascular

Daniel Clarke University of Queensland

---

**JVP: wave form**

Hi Yield [ID 2022]

**ASK ME:**

**A**trial contraction

**S**ystole (ventricular contraction)

**C**losure (closure) of tricusps, so atrial filling

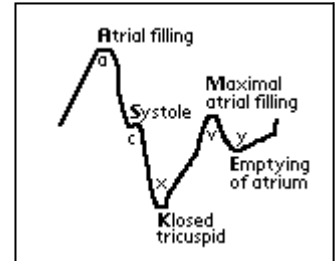
**M**aximal atrial filling

**E**mpying of atrium

See diagram.

Knowledge Level 3, System: Cardiovascular

Hafizur Rahman Manchester Royal Infirmary, Manc Medical School



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**MI: basic management**

[ID 207]

**BOOMAR:**

**B**ed rest

**O**xygen

**O**piate

**M**onitor

**A**nticoagulate

**R**educe clot size

Knowledge Level 1, System: Cardiovascular

Anonymous Contributor

---

**MI: signs and symptoms**

Hi Yield [ID 413]

**PULSE:**

**P**ersistent chest pains

**U**pset stomach

**L**ightheadedness

**S**hortness of breath

**E**xcessive sweating

Knowledge Level 1, System: Cardiovascular

Sara Nemetz

---

**MI: therapeutic treatment**

Hi Yield [ID 850]

**ROAMBAL:**

**R**eassure

**O**xygen

**A**spirin

**M**orphine (diamorphine)

**B**eta blocker

**A**rthroplasty

**L**ignocaine

Knowledge Level 1, System: Cardiovascular

Anonymous Contributor

---

**MI: therapeutic treatment**

Hi Yield [ID 981]

**"O BATMAN!":**

**O**xygen

**B**eta blocker

**A**SA

**T**hrombolytics (eg heparin)

**M**orphine

**A**ce prn

**N**itroglycerin

Knowledge Level 1, System: Cardiovascular

Kristy Thomas, PA-C Mesquite Medical Associates, Mesquite, NV

---

**MI: therapeutic treatment**

Hi Yield [ID 1137]

**MONAH:****M**orphine**O**xygen**N**itrogen**A**spirin**H**eparin

Knowledge Level 1, System: Cardiovascular

Anonymous Contributor

---

**MI: treatment of acute MI**

Hi Yield [ID 1588]

**COAG:****C**yclomorph**O**xygen**A**spirin**G**lycerol trinitrate

Knowledge Level 1, System: Cardiovascular

Alan Desmond Cork University Hospital

---

**Mitral regurgitation**

Hi Yield [ID 1710]

When you hear holosystolic murmurs, think "MR-THEM ARE holosystolic murmurs".

Knowledge Level 1, System: Cardiovascular

James Noble Emory University School of Medicine

---

**Mitral stenosis (MS) vs. regurgitation (MR): epidemiology**

[ID 996]

**MS** is a female title (**Ms.**) and it is female predominant.**MR** is a male title (**Mr.**) and it is male predominant.

Knowledge Level 4, System: Cardiovascular

Anonymous Contributor

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**Murmur attributes**

[ID 1437]

"IL PQRST" (person has ill PQRST heart waves):

**I**ntensity**L**ocation**P**itch**Q**uality**R**adiation**S**hape**T**iming

Knowledge Level 6, System: Cardiovascular

Ghassan Abu Said 4th year Medical Student

---

**Murmurs: innocent murmur features**

Hi Yield [ID 1243]

8 S's:

**S**oft**S**ystolic**S**hort**S**ounds (S1 & S2) normal**S**ymptomless**S**pecial tests normal (X-ray, EKG)**S**tanding/ **S**itting (vary with position)**S**ternal depression

Knowledge Level 4, System: Cardiovascular

Ziad Jaradat Jordan University School of Medicine

---

**Murmurs: locations and descriptions**

[ID 1535]

"MRS A\$\$":

**MRS**: Mitral Regurgitation--Systolic**A\$\$**: Aortic Stenosis--Systolic

The other two murmurs, Mitral stenosis and Aortic regurgitation, are obviously diastolic.

Knowledge Level 2, System: Cardiovascular

Alex Gitelman SUNY Downstate

---

**Murmurs: louder with inspiration vs expiration**

Hi Yield [ID 3061]

---

**L**eft sided murmurs louder with **E**xpiration  
**R**ight sided murmurs louder with **I**nspiration.  
Knowledge Level 3, System: Cardiovascular  
Anonymous Contributor

---

**Murmurs: questions to ask**

[ID 3073]

**SCRIPT:**

Site

Character (eg harsh, soft, blowing)

Radiation

Intensity

Pitch

Timing

Knowledge Level 2, System: Cardiovascular

Jamal Khan Birmingham University Medical Student

---

**Murmurs: right vs. left loudness**

[ID 475]

"**RILE**":

**R**ight sided heart murmurs are louder on **I**nspiration.

**L**eft sided heart murmurs are loudest on **E**xpiration.

Knowledge Level 2, System: Cardiovascular

Anonymous Contributor

---

**Murmurs: systolic**

[ID 2767]

**MR PV TRAPS:**

**M**itral

**R**egurgitation and

**P**rolapse

**V**SD

**T**ricuspid

**R**egurgitation

**A**ortic and

**P**ulmonary

**S**tenosis

Knowledge Level 4, System: Cardiovascular

Ugonna Duru Yale University School Of Medicine

---

**Murmurs: systolic types**

[ID 341]

**SAPS:**

**S**ystolic

**A**ortic

**P**ulmonic

**S**tenosis

Systolic murmurs include aortic and pulmonary stenosis.

Similarly, it's common sense that if it is aortic and pulmonary stenosis it could also be mitral and tricuspid regurgitation].

Knowledge Level 2, System: Cardiovascular

Anonymous Contributor

---

**Murmurs: systolic vs. diastolic**

Hi Yield [ID 967]

**PASS:** Pulmonic & Aortic Stenosis=**S**ystolic.

**PAID:** Pulmonic & Aortic Insufficiency=**D**iastolic.

Knowledge Level 1, System: Cardiovascular

W. Ciulla, RN, PA-C New Life Medical Clinic

---

**Murmurs: systolic vs. diastolic**

Hi Yield [ID 980]

Systolic murmurs: **MR AS:** "**MR. AS**ner".

Diastolic murmurs: **MS AR:** "**MS. AR**den".

The famous people with those surnames are Mr. Ed Asner and Ms. Jane Arden.

Knowledge Level 1, System: Cardiovascular

Kristy Thomas, PA-C Mesquite Medical Associates, Mesquite, NV

---

**Myocardial infarctions: treatment**

Hi Yield [ID 2181]

---

**INFARCTIONS:**

IV access

Narcotic analgesics (eg morphine, pethidine)

Facilities for defibrillation (DF)

Aspirin/ Anticoagulant (heparin)

Rest

Converting enzyme inhibitor

Thrombolysis

IV beta blocker

Oxygen 60%

Nitrates

Stool Softeners

Knowledge Level 2, System: Cardiovascular

Anonymous Contributor

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**Pericarditis: causes**

[ID 245]

**CARDIAC RIND:**

Collagen vascular disease

Aortic aneurysm

Radiation

Drugs (such as hydralazine)

Infections

Acute renal failure

Cardiac infarction

Rheumatic fever

Injury

Neoplasms

Dressler's syndrome

Knowledge Level 5, System: Cardiovascular

Anonymous Contributor

---

**Pericarditis: EKG**

Hi Yield [ID 1067]

"Pericarditi**S**":

**PR** depression in **p**recordial leads.

**ST** elevation.

Knowledge Level 3, System: Cardiovascular

Anonymous Contributor

---

**Peripheral vascular insufficiency: inspection criteria**

Hi Yield [ID 1615]

**SICVD:**

Symmetry of leg musculature

Integrity of skin

Color of toenails

Varicose veins

Distribution of hair

Knowledge Level 1, System: Cardiovascular

Jeffrey Turner Memorial University, Canada

---

**Pulseless electrical activity: causes**

Hi Yield [ID 1869]

**PATCH MED:**

Pulmonary embolus

Acidosis

Tension pneumothorax

Cardiac tamponade

**Hypokalemia/ Hyperkalemia/ Hypoxia/ Hypothermia/ Hypovolemia**

Myocardial infarction

Electrolyte derangements

Drugs

Knowledge Level 2, System: Cardiovascular

Will Anderson University of Alberta, Edmonton, Alberta, Canada

---

**Rheumatic fever: Jones 5 major criteria**

Hi Yield [ID 2866]

---

**STREP:**

Sydenhams chorea

Transient migratory arthritis

Rheumatic subcutaneous nodules

Erythema marginatum

Pancarditis (endocarditis, myocarditis, pericarditis)

STREP, since Rheumatic fever is caused by group A strep.

Knowledge Level 1, System: Cardiovascular

Anonymous Contributor

---

**Rheumatic fever: Jones criteria**

Hi Yield [ID 1933]

Major criteria: **CANCER**:

Carditis

Arthritis

Nodules

Chorea

Erythema

Rheumatic anamnesis

Minor criteria: **CAFE PAL**:

CRP increased

Arthralgia

Fever

Elevated ESR

Prolonged PR interval

Anamnesis of rheumatism

Leucocytosis

Knowledge Level 3, System: Cardiovascular

AAG Student

---

**Rheumatic fever: Jones major criteria**

Hi Yield [ID 2104]

**JONES:**

Joints (migrating polyarthritis)

Obvious, the heart (carditis, pancarditis, pericarditis, endocarditis or valvulitis)

Nodes (subcutaneous nodules)

Erythema marginatum

Sydenham's chorea

Knowledge Level 3, System: Cardiovascular

Anonymous Contributor

---

**Rheumatic fever: Revised Jones criteria**

Hi Yield [ID 1764]

**JONES PEACE:**

Major criteria:

Joints: migratory

**O** (heart shaped) Carditis: new onset murmur

Nodules, subcutaneous: extensor surfaces

Erythema marginatum

Sydenham's chorea

Minor criteria:

**P**R interval, prolonged

**E**SR elevated

**A**rthralgias

**C**RP elevated

**E**levated temperature (fever)

Need 2 major or 1 major and 2 minor criteria, plus evidence of recent GAS infection (throat cx, rapid antigen test, or rising strep antibody titer).

Knowledge Level 3, System: Cardiovascular

Vince Yamashiroya

---

**Rheumatic fever: Revised Jones' criteria**

Hi Yield [ID 1648]

---

**JONES crITERIA:**

Major criteria:

**Joint** (arthritis)

**Obvious** (Cardiac)

**Nodule** (Rheumatic)

**Erythema marginatum**

**Sydenham chorea**

Minor criteria:

**Inflammatory cells** (leukocytosis)

**Temperature** (fever)

**ESR/CRP** elevated

**Raised PR interval**

**Itself** (previous Hx of Rheumatic fever)

**Arthralgia**

Knowledge Level 3, System: Cardiovascular

Anthony Chan Chinese University of Hong Kong

---

**Sino-atrial node: innervation**

[ID 1713]

Sympathetic acts on **Sodium** channels (SS).

Parasympathetic acts on **Potassium** channels (PS).

Knowledge Level 9, System: Cardiovascular

Anonymous Contributor

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**Sinus bradycardia: aetiology**

[ID 1913]

"**SINUS BRADICARDIA**" (sinus bradycardia):

**Sleep**

**Infections** (myocarditis)

**Neap thyroid** (hypothyroid)

**Unconsciousness** (vasovagal syncope)

**Subnormal temperatures** (hypothermia)

**Biliary obstruction**

**Raised CO2** (hypercapnia)

**Acidosis**

**Deficient blood sugar** (hypoglycemia)

**Imbalance of electrolytes**

**Cushing's reflex** (raised ICP)

**Aging**

**Rx** (drugs, such as high-dose atropine)

**Deep anaesthesia**

**Ischemic heart disease**

**Athletes**

Knowledge Level 8, System: Cardiovascular

Dr. Sonali Vadi

---

**Sinus tachycardia**

[ID 3058]

**TACH FEVER:**

**Tamponade/ Thyrotoxicosis**

**Anemia**

**CHF**

**Hypotension**

**Fever**

**Excrutiating pain**

**Volume depletion**

**Exercise**

**Rx** (Theo, Dopa, Epi, etc)

Knowledge Level 3, System: Cardiovascular

Andrew Mackie, PA Rhode Island Hospital

---

**ST elevation causes in ECG**

Hi Yield [ID 516]



## ELEVATION:

Electrolytes

LBBB

Early repolarization

Ventricular hypertrophy

Aneurysm

Treatment (eg pericardiocentesis)

Injury (AMI, contusion)

Osborne waves (hypothermia)

Non-occlusive vasospasm

Knowledge Level 4, System: Cardiovascular

Ken Evans Saskatchewan Health, Acute and Emergency Services

## Supraventricular tachycardia: treatment

Hi Yield [ID 1737]

### ABCDE:

Adenosine

Beta-blocker

Calcium channel antagonist

Digoxin

Excitation (vagal stimulation)

Knowledge Level 5, System: Cardiovascular

Richard Thompson Queens University, Belfast, NI

## Ventricular tachycardia: treatment

Hi Yield [ID 1739]

### LAMB:

Lidocaine

Amiodarone

Mexiltene/ Magnesium

Beta-blocker

Knowledge Level 5, System: Cardiovascular

Richard Thompson Queens University, Belfast, NI

## CHEMISTRY

## Anion vs. cation charge

[ID 480]

**A**Nion is **A** Negative ion.

Knowledge Level 1, System: Other/Miscellaneous

Anonymous Contributor

## Benzene ring: effects of substituents on further additions

[ID 523]

"Benzene likes to **ROMP**. We **HOPED** she's be safe, but now she's knocked up. **ADOPT** or **WEDD'M**?":

**ROMP**: Substituents in order: **R**-group, **O**рто, **M**eta, **P**ara.

**HOPED**: Halogens are **O**рто, **P**ara, **E**lectron withdrawing, **D**eactivating.

**ADOPT**: Additive substituents **D**irect **O**рто & **P**ara.

**WEDD'M**: **W**ithdrawing **E**lectrons **D**eactivates, **D**irects **M**eta.

Knowledge Level 4, System: Other/Miscellaneous

Sabra

## Benzene ring: order of substituents

[ID 259]

**Meta**: the two sticks representing functional groups make a capital letter **M** with the ring.

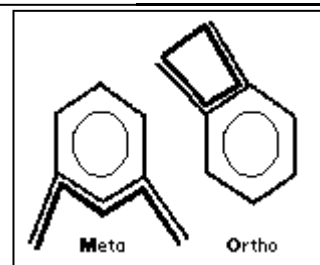
**Otho**: can close the top of the functional groups and make a boxy capital letter **O**.

See diagram.

Remaining one must therefore be para.

Knowledge Level 1, System: Other/Miscellaneous

Robert O'Connor University College Dublin



## Benzene ring: order of substituents

[ID 522]

"Benzene likes to **ROMP**":

From R group moving around the ring:

**R** group

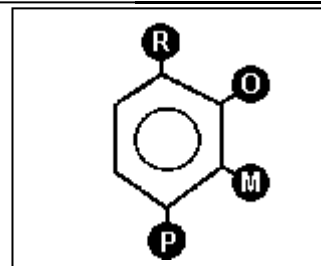
**O**rtho

**M**eta

**P**ara

Knowledge Level 1, System: Other/Miscellaneous

Sabra and Josh Kunken Undergrad, Univ. of Calif, Berkeley



#### Benzene ring: order of substituents

[ID 566]

"Oh My Penis!":

Putting R at top and moving around the ring:

**O**rtho

**M**eta

**P**enis

Penis is the one pointing down, like the penis of a man pointing downwards.

Knowledge Level 1, System: Other/Miscellaneous

Ricky Lee

#### Cathode: what happens during electrolysis

[ID 1020]

Current Carries Cations to the Cathode for reduCtion.

Knowledge Level 1, System: Other/Miscellaneous

Andreas Efsthadiades

#### Cation vs. anion: positive vs. negative

[ID 322]

The **t** in cation looks like a plus sign: "ca+ion".

Cation is positive, anion is negative.

Knowledge Level 1, System: Other/Miscellaneous

Ken Evans Saskatchewan Health, Acute and Emergency Services

#### Cis/trans (geometric) isomer nomenclature

[ID 297]

"**Z**ame **Z**ide. **E**pposite.":

Z is the 2 functional groups on the same side of double bond.

E is for opposite sides.

Knowledge Level 1, System: Other/Miscellaneous

Anonymous Contributor

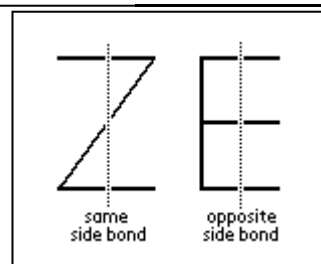
#### Cis/trans (geometric) isomer nomenclature

[ID 1148]

The letter "Z" is written in a zigzag way. If you draw a vertical line splitting it down the middle then its the same halves (same sides of double bond). The letter "E" is written differently so a vertical line splits it into different halves (different sides of double bond).

Knowledge Level 1, System: Other/Miscellaneous

Peter J. Kos



#### Cis/trans (geometric) isomers: arrangement of functional groups

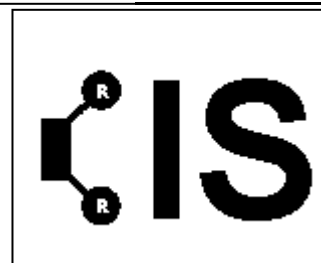
Hi Yield [ID 2440]

Cis starts with a **C** and the functional groups form a **C**.

Trans, therefore is the other one by default.

Knowledge Level 1, System: Other/Miscellaneous

Spencer Oates



#### Gibb's free energy formula

[ID 383]

"Good Honey Tastes Sweet":

$(\Delta)G = H - T(\Delta)S$

Knowledge Level 1, System: Other/Miscellaneous

Ken Evans Saskatchewan Health, Acute and Emergency Services

#### Orbital names before alphabetical order begins

[ID 155]

---

"Sober People Don't Find Good In Killing":

Orbital names for electrons are **S,P,D,F,G,I,K**. After that, alphabetical order begins.

Knowledge Level 8, System: Other/Miscellaneous

Anonymous Contributor

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**Oxidation vs. reduction: electrochemical cell and electron gain/loss**

[ID 340]

**AN OIL RIG CAT:**

At the **A**Node, **O**xidation **I**nvolves **L**oss of electrons.

**R**eduction **I**nvolves **G**aining electrons at the **C**AThode.

Knowledge Level 1, System: Other/Miscellaneous

Susan Monash (Peninsula) Undergrad

---

**Oxidation vs. reduction: electron gain/loss**

[ID 158]

"**LEO** the lion says **GER**":

**L**ose **E**lectrons = **O**xidation.

**G**ain **E**lectrons = **R**eduction.

Knowledge Level 1, System: Other/Miscellaneous

Anonymous Contributor

---

**Oxidation vs. reduction: electron gain/loss**

[ID 315]

**OIL RIG:**

**O**xidation **I**s **L**oss (of electrons).

**R**eduction **I**s **G**ain (of electrons).

Knowledge Level 1, System: Other/Miscellaneous

Fred Reid Undergrad at St-Andrews, UK

## DERMATOLOGY

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**Albinism: type I vs. II classification**

[ID 261]

"**One** has **None**. **Two** Accumulates":

Type I: have no pigment.

Type II: No pigment at birth, but accumulates as person ages.

Knowledge Level 3, System: Integumental

Robert O'Connor University College Dublin

---

**Clubbing: causes**

Hi Yield [ID 1047]

**CLUBBING:**

Cyanotic heart disease

Lung disease (hypoxia, lung cancer, bronchiectasis, cystic fibrosis)

UC/Crohn's disease

Biliary cirrhosis

Birth defect (harmless)

Infective endocarditis

Neoplasm (esp. Hodgkins)

GI malabsorption

Knowledge Level 2, System: Integumental

Anonymous Contributor

---

**Cutaneous inflammation patterns**

[ID 1085]

"**Pus of Pig Valve**"

Remove the vowels: **PSFPGVLV**:

**P**soriaform

**S**pongiotic (eczematous)

**F**olliculitis

**P**anniculitis

**G**ranulomatous

**V**asculopathic

**L**ichenoid

**V**essiculobullous

Knowledge Level 3, System: Integumental

Daniel Clarke University of Queensland

---

**Generalized skin hyperpigmentation: causes**

Hi Yield [ID 923]

---

"With generalized, none of skin is **SPARED**":

Sunlight

Pregnancy

Addison's disease

Renal failure

Excess iron (haemochromatosis)

Drugs (eg busulphan)

Knowledge Level 9, System: Integumental

Lau Yue Young Geoffrey HKU

---

**Malignant melanoma: 3 sites with poor prognosis**

[ID 208]

**BANS:**

Back of Arm

Neck

Scalp

Knowledge Level 6, System: Integumental

Anonymous Contributor

---

**Nodules: painful cutaneous nodules causes**

[ID 2856]

**BENGAL CO.:**

Blue rubber bleb nevus

Ecrrine spiradenoma

Neurilemmoma/ Neuroma

Glomus tumor

Angiolipoma/ Angioleiomyoma/ Angiosarcoma

Leiomyoma

Cutaneous endometriosis/ Calcinosis cutis

Osteoma cutis

Knowledge Level 5, System: Integumental

Jaggi Rao University of Alberta

---

**Psoriasis: pathophysiology**

[ID 1601]

**PSORIASIS:**

Pink Papules/ Plaques/ Pinpoint bleeding (Auspitz sign)/ Physical injury (Koebner phenomenon)/ Pain

Silver Scale/ Sharp margins

Onycholysis/ Oil spots

Rete Ridges with Regular elongation

Itching

Arthritis/ Abscess (Munro)

Stratum corneum with nuclei, neutrophils

Immunologic

Stratum granulosum absent/ Stratum Spinosum thickening

Knowledge Level 6, System: Integumental

Rinku Uberoi New York Hospital

---

**Raynaud's phenomenon: causes**

[ID 2857]

**COLD HAND:**

Cryoglobulins/ Cryofibrinogens

Obstruction/ Occupational

Lupus erythematosus, other connective tissue disease

Diabetes mellitus/ Drugs

Hematologic problems (polycythemia, leukemia, etc)

Arterial problems (atherosclerosis)

Neurologic problems (vascular tone)

Disease of unknown origin (idiopathic)

Knowledge Level 5, System: Integumental

Jaggi Rao University of Alberta

---

**White patch of skin: differential**

Hi Yield [ID 1390]

---

**"Vitiligo PATCH":**

Vitiligo

Pityriasis alba/ **P**ost-inflammatory hypopigmentation

Age related hypopigmentation

Tinea versicolor/ **T**uberous sclerosis (ashleaf macule)

Congenital birthmark

**H**ansen's (leprosy)

Knowledge Level 5, System: Integumental

Dr. Chetan Wasekar Set G.S. Medical College, KEM Hospital, Bombay

---

**Wound healing: factors delaying**

[ID 1387]

---

**DID NOT HEAL:**

Drugs

Infection/ **I**cterus/ **I**schemia

**D**iabetes

Nutrition

**O**xygen (hypoxia)

Toxins

**H**ypothermia/ **H**yperthermia

**E**tOH

Acidosis

Local anesthetics

Knowledge Level 4, System: Integumental

Mohamed Azim Assistant lecturer of Pediatric Surgery, Alexandria University, Egypt

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**EMBRYOLOGY**

---

**Foregut derivatives**

Hi Yield [ID 2452]

"**L**ittle **E**mbryo **P**eople **D**o **L**ike **S**wallowing, **P**roducing **G**as":

Lungs

Esophagus

Pancreas

Duodenum (proximal)

Liver

Stomach

Pancreas

Gall bladder

Knowledge Level 2, System: Alimentary

Jason Wild Georgetown School of Medicine

---

**Branchial arch giving rise to aorta**

Hi Yield [ID 187]

"**A**or- from **F**our":

Aorta is from fourth arch.

Knowledge Level 4, System: Cardiovascular

Robert O'Connor University College Dublin

---

**Tetralogy of Fallot**

Hi Yield [ID 527]

"Don't **D**R**O**P the baby":

**D**efect (VSD)

**R**ight ventricular hypertrophy

**O**verriding aorta

**P**ulmonary stenosis

Knowledge Level 1, System: Cardiovascular

K. Ennix University of Tennessee at Memphis

---

**Tetralogy of Fallot**

Hi Yield [ID 607]

"**I**H**O**P-International House of Pancakes":

**I**nterventricular septal defect

**H**ypotrophy of right ventricle

**O**verriding aorta

**P**ulmonary stenosis

Knowledge Level 1, System: Cardiovascular

Bradey T. Kleman Wright State University School of Medicine

## Tetrology of Fallot

Hi Yield [ID 1785]

### PROVe:

Pulmonary stenosis

Right ventricular hypertrophy

Overriding aorta

Ventricular septal defect

Knowledge Level 1, System: Cardiovascular

Young Byun Emory Med

## Vasculogenesis vs. angiogenesis

[ID 199]

"Vascu is **new**. Angi is **pre**":

Vasculogenesis is **new** vessels developing in situ from existing mesenchyme.

Angiogenesis is vessels develop from sprouting off **pre**-existing arteries.

Knowledge Level 8, System: Cardiovascular

Robert O'Connor University College Dublin

## Potter syndrome: features

Hi Yield [ID 1658]

### POTTER:

Pulmonary hypoplasia

Oligohydromnios

Twisted skin (wrinkly skin)

Twisted face (Potter facies)

Extremities defects

Renal agenesis (bilateral)

Knowledge Level 6, System: Kidney/Urine

Dr. Atif Farooq Khawaja Rawalpindi Medical College, Islamabad, Gujranwala, Pakistan

## Cranial and spinal neural crest: major derivatives

Hi Yield [ID 508]

### GAMES:

Glial cells (of peripheral ganglia)

Arachnoid (and pia)

Melanocytes

Enteric ganglia

Schwann cells

Knowledge Level 3, System: Nervous

Ron Norman AECC

## Neuroectoderm derivatives

[ID 1800]

Neuroectoderm gives rise to:

Neurons

Neuroglia

Neurohypophysis

piNeurol (pineal) gland

Knowledge Level 6, System: Nervous

Payam Mehranpour

## Fetal alcohol syndrome (FAS): features

Hi Yield [ID 1686]

### FAS:

Facial hypoplasia/ Forebrain malformation

Attention defecit disorder/ Altered joints

Short stature/ Septal defects/ Small I.Q

Knowledge Level 5, System: Other/Miscellaneous

Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan/Gujranwala

## Mesoderm components

Hi Yield [ID 606]

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**MESODERM:**

**M**esothelium (peritoneal, pleural, pericardial)/ **M**uscle (striated, smooth, cardiac)

**E**mbryologic

**S**pleen/ **S**oft tissue/ **S**erous linings/ **S**arcoma/ **S**omite

**O**sseous tissue/ **O**uter layer of suprarenal gland (cortex)/ **O**varies

**D**ura/ **D**ucts of genitalia

**E**ndothelium

**R**enal

**M**icroglia/ **M**esenchyme/ **M**ale gonad

Knowledge Level 5, System: Other/Miscellaneous

Rinku Uberoi UNIBE

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**Teratogenesis: when it occurs**

Hi Yield [ID 861]

**T**eratogenesis is most likely during organogenesis--between the:

**T**hird and

**E**ighth weeks of gestation.

Knowledge Level 3, System: Other/Miscellaneous

Rinku Uberoi

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**Vitelline duct: closure time**

[ID 1075]

**V**itelline duct normally closes around week **VI** of intrauterine life.

Knowledge Level 6, System: Other/Miscellaneous

Anonymous Contributor

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**Weeks 2, 3, 4 of development: an event for each**

Hi Yield [ID 173]

Week **Two**: **B**ilaminar germ disc.

Week **Three**: **T**rilaminar germ disc.

Week **Four**: **F**our limbs appear.

Knowledge Level 2, System: Other/Miscellaneous

Robert O'Connor University College Dublin

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**Lung development phases**

[ID 175]

"**E**very **P**remature **C**hild **T**akes **A**ir":

**E**mbryonic period

**P**seudoglandular period

**C**analicular period

**T**erminal sac period

**A**lveolar period

Knowledge Level 8, System: Pulmonary

Robert O'Connor University College Dublin

---

**Placenta-crossing substances**

[ID 498]

"**W**ANT **M**y **H**ot **D**og":

**W**astes

**A**ntibodies

**N**utrients

**T**eratogens

**M**icroorganisms

**H**ormones/ **H**IV

**D**rugs

Knowledge Level 4, System: Reproductive

Anonymous Contributor

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**Woffian duct (mesonephric duct) derivatives.**

Hi Yield [ID 1266]

**G**ardener's **S**EED:

Female:

**G**artner's duct, cyst

Male:

Seminal vesicles

**E**pididymis

**E**jaculatory duct

**D**uctus deferens

Knowledge Level 4, System: Reproductive

Anonymous Contributor

## EMERGENCY MEDICINE

### Activated charcoal: contraindications

[ID 1752]

#### CHEMICAL CamP:

Cyanide

Hydrocarbons

Ethanol

Metals

Iron

Caustics

Airway unprotected

Lithium

CAMphor

Potassium

Knowledge Level 8, System: Alimentary

Vince Yamashiroya

### Ipecac: contraindications

[ID 1753]

4 C's:

Comatose

Convulsing

Corrosive

hydroCarbon

Knowledge Level 6, System: Alimentary

Vince Yamashiroya

### Acute LVF management

Hi Yield [ID 525]

#### LMNOP:

Lasex (frusemide)

Morphine (diamorphine)

Nitrates

Oxygen (sit patient up)

Pulmonary ventilation (if doing badly)

Knowledge Level 2, System: Cardiovascular

Graeme Little University College London

### Asystole: treatment

Hi Yield [ID 2491]

"Have some asystole "TEA":

Transcutaneous pacing

Epi

Atropine

Knowledge Level 7, System: Cardiovascular

Brenda L. Snyder, RN, CEN, PHRN George Washington University Hospital, Washington, D.C.

### Atrial fibrillation: causes of new onset

Hi Yield [ID 1732]

#### THE ATRIAL FIBS:

Thyroid

Hypothermia

Embolism (P.E.)

Alcohol

Trauma (cardiac contusion)

Recent surgery (post CABG)

Ischemia

Atrial enlargement

Lone or idiopathic

Fever, anemia, high-output states

Infarct

Bad valves (mitral stenosis)

Stimulants (cocaine, theo, amphet, caffeine)

Knowledge Level 9, System: Cardiovascular

Sam LaCapra, M.D., F.A.C.E.P. Emergency Physician

### Chest pain treatment, for nurses

[ID 2710]



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"**MOVE** your patient!":

**Monitor:** put patient on cardiac monitor

**Oxygen:** put patient on O2

**Venous:** gain large bore venous access

**EKG:** 12 lead EKG

Knowledge Level 1, System: Cardiovascular

R. Stilts, S.N. Senior Nursing Student

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**Endotracheal tube deliverable drugs**

[ID 1405]

**O NAVEL:**

**Oxygen**

**Naloxone**

**Atropine**

**Ventolin (albuterol)**

**Epinephrine**

**Lidocaine**

If you can't get IV access established, and have necessity to administer resuscitative meds, remember you have the airway and can give the above drugs.

Drug delivery is enhanced if diluted with 10cc NS and rapid introduced for aerosolization.

Alternatively, bare bone version is **ALE**, as above.

Knowledge Level 7, System: Cardiovascular

Robert Lueken and Marc Eastern Virginia Medical School

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**JVP: raised JVP differential**

Hi Yield [ID 2795]

**PQRST** (EKG waves):

**Pericardial effusion**

**Quantity** of fluid raised (fluid over load)

**Right heart failure**

**Superior vena caval obstruction**

**Tricuspid stenosis/ Tricuspid regurgitation/ Tamponade (cardiac)**

Knowledge Level 5, System: Cardiovascular

Dr. Mohsin Maqbool Bahawal-Victoria Hospital, Bahawalpur

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**JVP: raised JVP: extra-cardiac causes**

[ID 2919]

**FAT PEA:**

**Fever**

**Anaemia**

**Thyrototoxicosis**

**Pregnancy**

**Exercise**

**A-V fistula**

These are in addition to all the cardiac ones (pericardial effusion, RHF, tricuspid stenosis, SVC obstruction, etc).

Knowledge Level 3, System: Cardiovascular

Rajeev Peravali Year 3 Medical student, Birmingham University, UK

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**Malaria: complications of falciparum malaria**

[ID 1900]

**CHAPLIN:**

**Cerebral malaria/ Coma**

**Hypoglycemia**

**Anaemia**

**Pulmonary edema**

**Lactic acidosis**

**Infections**

**Necrosis of renal tubules (ATN)**

Knowledge Level 7, System: Cardiovascular

Dr. Harsh Sharma BJMC, Pune, India

---

**MI: immediate treatment**

Hi Yield [ID 1944]

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**DOGASH:**

Diamorphine

Oxygen

GTN spray

Asprin 300mg

Streptokinase

Heparin

Knowledge Level 2, System: Cardiovascular

Ken Hodson Medical Student, University of Bristol

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**Pain history checklist**

Hi Yield [ID 2016]

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**OLDER SAAB:**

Onset

Location

Description (what does it feel like)

Exacerbating factors

Radiation

Severity

Associated symptoms

Alleviating factors

Before (ever experience this before)

Knowledge Level 6, System: Cardiovascular

Lissa Bird, NREMT-P

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**PEA/Asystole (ACLS): etiology**

Hi Yield [ID 2505]

---

**ITCHPAD:**

Infarction

Tension pneumothorax

Cardiac tamponade

Hypovolemia/ Hypothermia/ Hypo-, Hyperkalemia/ Hypomagnesemia/ Hypoxemia

Pulmonary embolism

Acidosis

Drug overdose

Knowledge Level 4, System: Cardiovascular

Carl Roberts A.S.EMS, CCEMT-P, CFP US Army Special Forces

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**Pulseless Electrical Activity (PEA): checklist**

[ID 2282]

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**PEA:**

Pulses check

Epinephrine

Atropine

Knowledge Level 5, System: Cardiovascular

Anonymous Contributor

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**Shock: general features**

[ID 3205]

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**CHORD ITEM:**

Cold, clammy skin

Hypotension

Oliguria

Rapid, shallow breathing

Drowsiness, confusion

Irritability

Tachycardia

Elevated or reduced central venous pressure

Multi-organ damage

Knowledge Level 4, System: Cardiovascular

Seyi Kayode College of Health Sciences, Obafemi Awolowo University, Ile-ife, Osun State, Nigeria

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**Shock: signs and symptoms**

[ID 391]

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**TV SPARC CUBE:**

Thirst

Vomiting

Sweating

Pulse weak

Anxious

Respirations shallow/rapid

Cool

Cyanotic

Unconscious

BP low

Eyes blank

Knowledge Level 3, System: Cardiovascular

Anonymous Contributor

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**Subarachnoid hemorrhage (SAH) causes**

[ID 542]

**BATS:**

Berry aneurysm

Arteriovenous malformation/ Adult polycystic kidney disease

Trauma (eg being struck with baseball **bat**)

Stroke

Knowledge Level 3, System: Cardiovascular

Cusano and Mamta SGUSOM

---

**Syncope causes, by system**

Hi Yield [ID 1719]

**HEAD HEART VESSELS:**

CNS causes include HEAD:

Hypoxia/ Hypoglycemia

Epilepsy

Anxiety

Dysfunctional brain stem (basivertebral TIA)

Cardiac causes are HEART:

Heart attack

Embolism (PE)

Aortic obstruction (IHSS, AS or myxoma)

Rhythm disturbance, ventricular

Tachycardia

Vascular causes are VESSELS:

Vasovagal

Ectopic (reminds one of hypovolemia)

Situational

Subclavian steal

ENT (glossopharyngeal neuralgia)

Low systemic vascular resistance (Addison's, diabetic vascular neuropathy)

Sensitive carotid sinus

Knowledge Level 6, System: Cardiovascular

Bill Young MD University of Kentucky Dept of Emergency Medicine

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**Ventricular fibrillation: treatment**

Hi Yield [ID 598]

"Shock, Shock, Shock, Everybody Shock, Little Shock, Big Shock, Momma Shock, Poppa Shock":

Shock= Defibrillate

Everybody= Epinephine

Little= Lidocaine

Big= Bretylium

Momma= MgSO<sub>4</sub>

Poppa= Pocainamide

Knowledge Level 1, System: Cardiovascular

Anonymous Contributor

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**V-fib/pulseless v-tach (new ACLS as of 2001)**

Hi Yield [ID 2490]

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**"EVAL My Pumper":**

Epinephrine

Vasopressin

Amiodarone (class IIb--better for heart failure)

Lidocaine (indeterminate - better for young, healthy or persistent)

MgSO<sub>4</sub> (IIb for hypomagnesemic state or torsades)

Procainamide (IIb for intermittent/recurrent VF/VT)

Knowledge Level 7, System: Cardiovascular

Brenda L. Snyder, RN, CEN, PHRN George Washington University Hospital, Washington, D.C.

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**Vfib/Vtach drugs used according to ACLS**

[ID 306]

**"Every Little Boy Must Pray":**

Epinephrine

Lidocaine

Bretylium

Magsulfate

Procainamide

Knowledge Level 2, System: Cardiovascular

Midnight Medic Paramedic in Texas

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**Diabetic ketoacidosis management**

Hi Yield [ID 470]

**F\*~~c~~KING:**

Fluids (crystalloids)

Urea (check it)

Creatinine (check it)/ Catheterize

K<sup>+</sup> (potassium)

Insulin (5u/hour. Note: sliding scale no longer recommended in the UK)

Nasogastric tube (if patient comatose)

Glucose (once serum levels drop to 12)

Knowledge Level 4, System: Endocrine

Graeme Little University College London

---

**Coma causes checklist**

[ID 349]

**AEIOU TIPS:**

Acidosis/ Alcohol

Epilepsy

Infection

Overdosed

Uremia

Trauma to head

Insulin: too little or or too much

Psychosis episode

Stroke occurred

Knowledge Level 2, System: Nervous

Midnight Medic Paramedic in Texas

---

**Coma: differential**

[ID 3086]

**UNCONSCIOUS:**

Units of insulin

Narcotics

Convulsions

Oxygen

Nonorganic

Stroke

Cocktail

ICP

Organism

Urea

Shock

Knowledge Level 2, System: Nervous

Tom Hiser Clear Lake Emergency Medical Corps

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**ICU confusion causes**

[ID 1351]

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**ICU CONFUSION:**

ICU psychosis

Cardiac output low [hypotension, post cardiac arrest]

Uncontrolled temperature [hypo/hyperthermia]

Convulsion [post ictal]

Oxygen [hypoxia, hypercarbia]

Nociception [pain]

Full bladder

Uremia

Sugar [hypo/hyperglycemia]

Infection

Opiates

Natremia [hypo/hyper]

Knowledge Level 8, System: Nervous

Dr. Sonali Vadi

---

**Meningococcal meningitis: complications**

Hi Yield [ID 1735]

**SAD REP:**

Sepsis/ Shock/ Subdural effusion

Ataxia/ Abscess (brain)

DIC/ Deafness

Retardation

Epilepsy

Paralysis

Knowledge Level 5, System: Nervous

Richard Thompson Queens University, Belfast, NI

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**Miosis: causes of pin-point pupils**

Hi Yield [ID 1734]

**CPR ON SLIME:**

Clonidine

Phenothiazines

Resting (deep sleep)

Opiates

Narcotics

Stroke (pontine hemorrhage)

Lomotil (diphenoxylate)

Insecticides

Mushrooms/ Muscarinic (inocybe, clitocybe)

Eye drops

Knowledge Level 7, System: Nervous

Sam LaCapra, M.D., F.A.C.E.P. Emergency Physician

---

**Neurological focal deficits**

[ID 1733]

10 S's:

Sugar (hypo, hyper)

Stroke

Seizure (Todd's paralysis)

Subdural hematoma

Subarachnoid hemorrhage

Space occupying lesion (tumor, avm, aneurysm, abscess)

Spinal cord syndromes

Somatoform (conversion reaction)

Sclerosis (MS)

Some migraines

Knowledge Level 9, System: Nervous

Sam LaCapra, M.D., F.A.C.E.P. Emergency Physician

---

**Organophosphates poisoning symptoms**

Hi Yield [ID 1325]

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**MILES:**

**Miosis**

**Increased urinary frequency**

**Lacrimation**

**Enuresis**

**Salivation**

Knowledge Level 4, System: Nervous

Anonymous Contributor

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**Organophosphates poisoning: symptoms**

Hi Yield [ID 1790]

**DUMBBELS:**

**Diarrhea**

**Urination**

**Miosis**

**Bradycardia**

**Bronchospasm**

**Emesis**

**Lacrimation**

**Salivation**

Knowledge Level 5, System: Nervous

Martin Herman Le Bonheur Children's Medical Center

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**Seizures: differential**

[ID 3221]

**SICK DRIFTER:**

**Substrates (sugar, oxygen)**

**Isoniazid overdose**

**Cations (Na, Ca, Mg)**

**Kids (ecclampsia)**

**Drugs (CRAP: Cocaine, Rum (alcohol), Amphetamines, PCP)**

**Rum (alcohol withdrawal)**

**Illnesses (chronic seizure disorder or other chronic disorder)**

**Fever (meningitis, encephalitis, abscess)**

**Trauma (epidural, subdural, intraparenchymal hemorrhage)**

**Extra: toxicologic (TAIL: Theo, ASA, Isoniazid, Lithium) and 3 Anti's: (Antihistamine overdose, Antidepressant overdose, Anticonvulsants (too high dilantin, tegretol) or benzo withdrawal.**

**Rat poison (organophosphates poisoning)**

Knowledge Level 1, System: Nervous

Joseph Rogers, MD Duke University

---

**Unconsciousness: differential**

Hi Yield [ID 2607]

**FISH SHAPED:**

**Fainted**

**Illness/ Infantile febrile convulsions**

**Shock**

**Head injuries**

**Stroke (CVE)**

**Heart problems**

**Asphxia**

**Poisons**

**Epilepsy**

**Diabetes**

Knowledge Level 1, System: Nervous

B Sylvester Surrey Ambulance Service (UK)

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**Coma and significantly reduced conscious state causes: causes**

Hi Yield [ID 1874]

**COMA:**

**CO<sub>2</sub> and CO excess**

**Overdose: TCAs, Benzos, EtOH, insulin, paracetamol, etc.**

**Metabolic: BSL, Na<sup>+</sup>, K<sup>+</sup>, Mg<sup>2+</sup>, urea, ammonia, etc.**

**Apoplexy: stroke, SAH, extradural, subdural, Ca, meningitis, encephalitis, cerebral abscess, etc.**

Knowledge Level 4, System: Other/Miscellaneous

Steve Gust HMO, Gove District Hospital, NT Australia

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**Coma: conditions to exclude as cause**

[ID 157]

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**MIDAS:**

Meningitis

Intoxication

Diabetes

Air (respiratory failure)

Subdural/ Subarachnoid hemorrhage

Knowledge Level 3, System: Other/Miscellaneous

Anonymous Contributor

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**Malignant hyperthermia treatment**

[ID 221]

"Some **H**ot **D**ude **B**etter **G**ive **I**ced **F**luids **F**ast!" (Hot dude = hypothermia):

Stop triggering agents

Hyperventilate/ Hundred percent oxygen

Dantrolene (2.5mg/kg)

Bicarbonate

Glucose and insulin

IV Fluids and cooling blanket

Fluid output monitoring/ Furosemide/ Fast heart [tachycardia]

Knowledge Level 3, System: Other/Miscellaneous

Anonymous Contributor

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**Resuscitation: basic steps**

[ID 204]

**ABCDE:**

Airway

Breathing

Circulation

Drugs

Environment

Knowledge Level 1, System: Other/Miscellaneous

Mohamed Azim, MD Pediatric Surgeon, Alexandria University, Egypt

---

**RLQ pain: differential**

Hi Yield [ID 933]

**APPENDICITIS:**

Appendicitis/ Abscess

PID/ Period

Pancreatitis

Ectopic/ Endometriosis

Neoplasia

Diverticulitis

Intussusception

Crohn's Disease/ Cyst (ovarian)

IBD

Torsion (ovary)

Irritable Bowel Syndrome

Stones

Knowledge Level 1, System: Other/Miscellaneous

Anonymous Contributor

---

**Shock: types**

[ID 390]

**RN CHAMPS:**

Respiratory

Neurogenic

Cardiogenic

Hemorrhagic

Anaphylactic

Metabolic

Psychogenic

Septic

Alternatively: "**MR. C.H. SNAP**", or "**NH CRAMPS**".

Knowledge Level 3, System: Other/Miscellaneous

Anonymous Contributor

---

**Trauma: motor vehicle accident considerations**

[ID 2489]

---

**I AM SCARED:**

Impact (head-on, rear-end, t-bone, rollover, rotational etc.)

Auto vs. pedestrian, bike, motorcycle (start @ speed >10mph)

Medical history (cardiac, coagulation, liver, immuno, obese, prego)

Speed (>50 mph?)

Compartment intrusion (>12 inches?)

Age (<5 or >55 y.o.?)

Restraints (lap & shoulder, either, airbag, infant or child seat?)

Ejection/ Extrication (eject=25x greater death, extr>20min)

Death (at scene, same vehicle, other)

Knowledge Level 6, System: Other/Miscellaneous

Brenda L. Snyder, RN, CEN, PHRN George Washington University Hospital, Washington, D.C.

---

**ARDS: diagnostic criteria**

[ID 2906]

**ARDS:**

Acute onset

Ratio (PaO<sub>2</sub>/FiO<sub>2</sub>) less than 200

Diffuse infiltration

Swan-Ganz Wedge pressure less than 19 mmHg

Knowledge Level 6, System: Pulmonary

Fahed Al-Daour

---

**ARDS: full differential**

[ID 2907]

**CARDS? HOPE ITS NOT ARDS:**

CNS disorders

Aspiration (gastric)

Radiation

Drugs (heroin, morphine, barbiturates, etc)

Smoke, toxic gas inhalation

Hypotension, shock

Oxygen toxicity

Pancreatitis

Emboli

Infection, sepsis

Transfusion reaction

Surgery (esp. cardiac)

Near drowning

Obstetrical emergencies (eg eclampsia, HELLP)

Thermal injuries/ burns

Altitude sickness

Renal failure

DIC

SLE

Knowledge Level 7, System: Pulmonary

Fahed Al-Daour

---

**Asthma: management of acute severe**

Hi Yield [ID 472]

**"O S#!T":**

Oxygen (high dose: >60%)

Salbutamol (5mg via oxygen-driven nebuliser)

Hydrocortisone (or prednisolone)

Ipratropium bromide (if life threatening)

Theophylline (or preferably aminophylline-if life threatening)

Knowledge Level 3, System: Pulmonary

Graeme Little and Gajan Rajeswaran University College London and Imperial College School Of Medicine, London

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**Decompression sickness**

[ID 1273]



Boyle's law: volume of gas is inversely proportionate to its pressure.

Therefore, **BOYLE**:

Breathe (as you ascend)

Or

Your

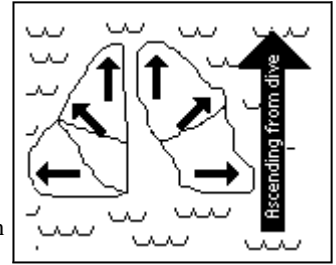
Lung

Explodes

Breathe as you ascend after scuba diving, since the pressure decreases on surfacing, so the gas volume in lungs increases.

Knowledge Level 8, System: Pulmonary

Mohamed Azim, MD Assistant lecturer, Pediatric surgery, Alexandria University, Egypt



### Dyspnea: differential

Hi Yield [ID 3220]

3A's: Three Airways: **A**irway obstruction, **A**naphylaxis, **A**sthma

3P's: Three Pulmonary's: **P**neumothorax, **P**E, **P**ulmonary edema

3C's: Three Cardiacs: **C**ardiogenic pulmonary edema, **C**ardiac ischemia, **C**ardiac tamponade

3M's: Three Metabolics: (**DOC**) **D**KA, **O**rganophosphates, **C**arbon monoxide poisoning

Knowledge Level 1, System: Pulmonary

Joseph Rogers, MD Duke University

### Endotracheal tube: troubleshooting

[ID 2734]

**DOPEY:**

**D**isplaced: esophagus, right mainstem, back of throat, etc

**O**bstucted: secretions, blood, mucus plug, kink, etc

**P**neumothorax

**E**quipment: malfunctions, O<sub>2</sub>, ETT, BVM, ventilator, monitor

**You:** your approach, technique: missing something?

Knowledge Level 5, System: Pulmonary

Brenda L. Snyder, RN, CEN, PHRN George Washington University Hospital, Washington, D.C.

### Pneumothorax: causes

[ID 3079]

**SIT**, 3 A's, 3 C's:

Spontaneous (often tall thin men)

Iatrogenic

Trauma

Asthma

Alveolitis

AIDS

COPD

Carcinoma

Cystic fibrosis

Knowledge Level 4, System: Pulmonary

Jamal Khan Birmingham University Medical Student

### Fall: potential causes

[ID 459]

**CLADE SPADE:**

Cardiovascular/ Cerebrovascular

Locomotor (skeletal, muscular, neurological)

Ageing (increased body sway, decreased reaction time)

Drugs (esp. antihypertensives, antipsychotics)

Environmental

Sensory deficits (eg. visual problems)

Psychological/ Psychiatric (depression)

Acute illness

Dementia

Epilepsy

Knowledge Level 4, System: Skeletal

Harris-Davies-Tamblyn Adelaide Medical School

### Fall: potential causes

[ID 619]

---

**I'VE FALLEN:**

Illness

Vestibular

Environmental

Feet/ Footwear

Alcohol and drugs

Low blood pressure

Low O2 states

Ears/ Eyes

Neuropathy

Knowledge Level 2, System: Skeletal

Muhammad Asif Iqbal Resident, SLU, MO

---

**ENT**

---

**Oralpharangeal cancers: aetiology**

Hi Yield [ID 210]

6 S's:

Smoking

Spicy food

Syphilis

Spirits [booze]

Sore tooth

Sepsis

Also bezel nuts.

Knowledge Level 3, System: Alimentary

Daniel CW Henning The Queen's University of Belfast, UK

---

**Nasopharyngeal carcinoma: classic symptoms**

Hi Yield [ID 2818]

**NOSE:**

Neck mass

Obstructed nasal passage

Serous otitis media externa

Epistaxis or discharge

Knowledge Level 3, System: Pulmonary

Anonymous Contributor

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**EPIDEMIOLOGY / BIOSTATISTICS**

---

**Alcohol withdrawal effects**

Hi Yield [ID 402]

"**S#IT**":

Shakes/ Seizures/ Sweats/ Stomach pains (n/v)

Hallucinoses (auditory)

Increased vitals/ Insomnia

Tremens (delirium tremens-the lethal part)

Knowledge Level 3, System: Alimentary

HBV Morehouse School of Medicine

---

**Suicide risk factors**

Hi Yield [ID 151]

**SAD PERSONS:**

Sex: male

Age: young, elderly

Depression

Previous suicide attempts

Ethanol and other drugs

Reality testing/ Rational thought (loss of)

Social support lacking

Organized suicide plan

No spouse

Sickness/ Stated future intent

Knowledge Level 4, System: Nervous

Anonymous Contributor

---

**Suicide risk factors in order of risk**

[ID 1415]

---

**SOARS:**

Top 6 risk factors in order of highest to lowest risk:  
Serious previous attempt  
Older than 45  
Alcohol  
Rage history  
Sex (male)  
Knowledge Level 4, System: Nervous  
Robert O'Connor University College Dublin

---

**Accuracy of test: sensitivity vs. specificity**

Hi Yield [ID 344]

sensitivity of a test: related to the rate of false Negatives.  
specificity of a test: related to the rate of false Positives.  
Alternatively written:  
sensitive: No Non-Negatives.  
specific: Puny Pseudo-Positives.  
Knowledge Level 2, System: Other/Miscellaneous  
Fred Reid Undergrad at St-Andrews, UK

---

**Audit process**

[ID 591]

"As She Opened, Colin Inserted Excitedly":  
Aim  
Setting standards  
Observe practice  
Compare with standards  
Implement change  
Evaluate  
Knowledge Level 8, System: Other/Miscellaneous  
Andrew Booshan

---

**Error: type I (alpha) vs. type II (beta)**

Hi Yield [ID 2026]

Type I (Alpha) Error:  
"There Is An Effect" where in reality there is none.  
Knowledge Level 1, System: Other/Miscellaneous  
Robert O'Connor University College Dublin

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**Hill criteria for causality**

[ID 925]

" 'Clowns Pursuing Epidemiology' Commonly Behind The Silly Samples":  
Consistency  
Plausibility  
Experimentation  
Biological gradient  
Coherence  
Temporality  
Strength of association  
Specificity  
Knowledge Level 6, System: Other/Miscellaneous  
TR Columbia PandS

---

**Incidence vs. prevalence**

Hi Yield [ID 1411]

Incidence: Initiate Infection In Interval.  
Prevalence: Population's Percentage Positive.  
Knowledge Level 1, System: Other/Miscellaneous  
Robert O'Connor University College Dublin

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**Informed consent: requirements, exceptions**

Hi Yield [ID 858]

"Sign this **DOC** before we can start":

**D**iscussion

**O**btain agreement

**C**oercion-free

Exceptions to informed consent are **WIPE**:

**W**aiver

**I**ncompetent

**P**rivilege (therapeutic privilege)

**E**mergency

Knowledge Level 1, System: Other/Miscellaneous

Robert O'Connor University College Dublin

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**Pi: value to 31 decimal places**

[ID 159]

"How I want a drink, alcoholic of course, after the heavy chapters involving quantum mechanics. One is, yes, adequate even enough to produce some fun and pleasure for an instant, miserably brief":

The number of letters in each subsequent word of these two sentences give the value of pi to 3.141592653589793238462643383279

Alternatively: If only want first 6 decimal places, use the sentence "How I wish I could calculate Pi! "

Knowledge Level 8, System: Other/Miscellaneous

Anonymous Contributor

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**Poisson distribution formula**

[ID 188]

**MNEMONIC: M** to the Nth power times **E** to the Minus nth **O**ver **N factorial**

Formula is:  $((m^n) * (e^{-n})) / n!$

Note: the factorial (!) at the end is an inverted lowercase letter i.

Knowledge Level 7, System: Other/Miscellaneous

Anonymous Contributor

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**Prevention: primary vs. secondary vs. tertiary**

Hi Yield [ID 1409]

**Primary: P**redisposing factors decreased.

**Secondary: S**everity decreased.

**Tertiary: T**herapy, **T**raining.

Knowledge Level 1, System: Other/Miscellaneous

Robert O'Connor University College Dublin

---

**Recall bias**

Hi Yield [ID 1354]

**RE**call bias is a problem with

**RE**trospective studies and is based on ability to

**RE**member.

Knowledge Level 4, System: Other/Miscellaneous

Rinku Uberoi

---

**Reliability**

Hi Yield [ID 2213]

**R**andom **E**rror

**RE**duces

**RE**liability (**RE**producibility)

Knowledge Level 4, System: Other/Miscellaneous

Anonymous Contributor

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**Cigarette smoke: major carcinogens**

[ID 1922]

**PANT:**

**P**olynuclear aromatic hydrocarbons

**A**romatic amines

**N**itrosamines

**T**ar

Nicotine and Carbon monoxide are Non-Carcinogenic.

Knowledge Level 4, System: Pulmonary

Dr. Harsh Sharma BJMC, Pune, India

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**GASTROENTEROLOGY**

---

**Bilirubin: common causes for increased levels**

[ID 602]

---

"**HOT Liver**":

**H**emolysis

**O**bstruction

**T**umor

**L**iver disease

Knowledge Level 4, System: Alimentary

Sung H. Kim

---

**Celiac sprue gluten sensitive enteropathy: gluten-containing grains**

Hi Yield [ID 2295]

**BROW**:

**B**arley

**R**ye

**O**ats

**W**heat

Flattened intestinal villi of celiac sprue are smooth, like an **eyebrow**.

Knowledge Level 4, System: Alimentary

Jack A. Pasquale, MD St. George's University, School of Medicine

---

**Charcot's triad (gallstones)**

Hi Yield [ID 695]

"Charcot's **Triad** is **3 C's**":

**C**olor change (jaundice)

**C**olic (biliary) pain, aka RUQ pain

**C**hills and fever

Knowledge Level 3, System: Alimentary

Rinku Uberoi UNIBE

---

**Charcot's triad (gallstones)**

Hi Yield [ID 835]

"**Charge a FEE**":

**Charcot's** triad is:

**F**ever

**E**pigastric & RUQ pain

**E**mesis & nausea

Knowledge Level 2, System: Alimentary

Anonymous Contributor

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**Cholangitis features**

Hi Yield [ID 696]

**CHOLANGITIS**:

Charcot's triad/ Conjugated bilirubin increase

Hepatic abscesses/ Hepatic (intra/extra) bile ducts/ **HLA B8, DR3**

**O**bstruction

**L**eukocytosis

**A**lkaline phosphatase increase

**N**eoplasms

**G**allstones

**I**nflammatory bowel disease (ulcerative colitis)

**T**ransaminase increase

**I**nfection

**S**clerosing

Knowledge Level 3, System: Alimentary

Rinku S. Uberoi UNIBE

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**Cirrhosis: causes of hepatic cirrhosis**

[ID 1643]

**HEPATIC**:

**H**emochromatosis (primary)

**E**nzyme deficiency (alpha-1-anti-trypsin)

**P**ost hepatic (infection + drug induced)

**A**lcoholic

**T**yrosinosis

**I**ndian childhood (galactosemia)

**C**ardiac/ **C**holestatic (biliary)/ **C**ancer/ **C**opper (Wilson's)

Knowledge Level 2, System: Alimentary

Dr. Chetan Wasekar

---

**Cirrhosis: differential: common and rarer**

[ID 3071]

---

Common causes are **ABC**:

**A**lcohol

**B** (Hepatitis)

**C** (Hepatitis)

Rarer are also **ABC**:

**A**utoimmune

**B**iliary cirrhosis

**C**opper (Wilson's)

Knowledge Level 3, System: Alimentary

Jamal Khan Birmingham University Medical Student

---

### Constipation: causes

[ID 3063]

**DOPED**:

**D**rugs (eg opiates)

**O**bstruction (eg IBD, cancer)

**P**ain

**E**ndocrine (eg hypothyroid)

**D**epression

Knowledge Level 2, System: Alimentary

Jamal Khan Birmingham University Medical Student

---

### Crohn's disease: morphology, symptoms

Hi Yield [ID 1270]

**CHRISTMAS**:

**C**obblestones

**H**igh temperature

**R**educed lumen

**I**ntestinal fistulae

**S**kip lesions

**T**ransmural (all layers, may ulcerate)

**M**alabsorption

**A**bdominal pain

**S**ubmucosal fibrosis

Knowledge Level 2, System: Alimentary

Samuel Atom Baek-Kim

---

### Digestive disorders: pH level

[ID 316]

With **vomiting** both the pH and food come **up**.

With **diarrhea** both the pH and food go **down**.

Knowledge Level 3, System: Alimentary

Joel Topf Indiana University

---

### Dry mouth: differential

[ID 2728]

**"DRI"**:

2 of each:

**D**rugs/ **D**ehydration

**R**enal failure/ **R**adiotherapy

**I**mmunological (Sjogren's)/ **I**ntense emotions

Knowledge Level 5, System: Alimentary

Anil Pandit Manipal College of Medical Sciences, Pokhara, Nepal

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### Dysphagia: causes

[ID 3070]

**MOON**:

**M**outh lesions

**O**bstruction

**O**esophageal stricture

**N**eurological (eg stroke, Guillain-Barre, achalasia)

Knowledge Level 2, System: Alimentary

Jamal Khan Birmingham University Medical Student

---

### Dysphagia: differential

[ID 2722]

---

**DISPHAGIA:**

Disease of mouth and tonsils/ Diffuse oesophageal spasm/ Diabetes mellitus

Intrinsic lesion

Scleroderma

Pharyngeal disorders/ Palsy-bulbar-MND

Achalasia

Heart: eft atrium enlargement

Goitre/ myesthenia Gravis/ mediastinal Glands

Infections

American trypanosomiasis (chagas disease)

Knowledge Level 4, System: Alimentary

Anil Pandit, Manipal College of Medical Sciences, Pokhara, Nepalmanipal

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**GIT symptoms**

[ID 1111]

**BAD ANAL S#!T:**

Bleeding

Abdominal pain

Dysphagia

Abdominal bloating

Nausea & vomiting

Anorexia/ Appetite changes

Lethargy

S#!ts (diarrhea)

Heartburn

Increased bilirubin (jaundice)

Temperature (fever)

Knowledge Level 1, System: Alimentary

The Cashman University of Queensland, Australia

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**H. Pylori treatment regimen (rough guidelines)**

Hi Yield [ID 425]

"Please Make Tummy Better":

Proton pump inhibitor

Metronidazole

Tetracycline

Bismuth

Alternatively: **TOMB:**

Tetracycline

Omeprazole

Metronidazole

Bismuth

Knowledge Level 2, System: Alimentary

Steven Holsenback and Leena Alexander COMP and Texas, USA

---

**Hepatic encephalopathy: precipitating factors**

[ID 1645]

**HEPATICS:**

Hemorrhage in GIT/ Hyperkalemia

Excess protein in diet

Paracentesis

Acidosis/ Anemia

Trauma

Infection

Colon surgery

Sedatives

Knowledge Level 4, System: Alimentary

Dr. Chetan Wasekar

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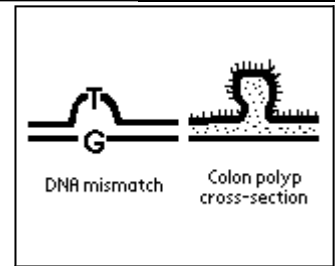
**Hereditary Nonpolyposis Colorectal Cancer (HNPCC) cause is DNA mismatch repair**

[ID 253]

DNA mismatch causes a bubble in the strand where the two nucleotides don't match.  
This looks like the ensuing polyps that arise in the colon.

See diagram.

Knowledge Level 7, System: Alimentary  
Anonymous Contributor



#### IBD: extraintestinal manifestations

[ID 284]

##### A PIE SAC:

Aphthous ulcers  
Pyoderma gangrenosum  
Iritis  
Erythema nodosum  
Sclerosing cholangitis  
Arthritis

Clubbing of fingertips

Knowledge Level 5, System: Alimentary  
Anonymous Contributor

#### IBD: surgery indications

[ID 209]

##### "I CHOP":

Infection  
Carcinoma  
Haemorrhage  
Obstruction  
Perforation

"Chop" convenient since surgery chops them open.

Knowledge Level 3, System: Alimentary  
Anonymous Contributor

#### Liver failure (chronic): signs found on the arms

Hi Yield [ID 2304]

##### CLAPS:

Clubbing  
Leukonychia  
Asterixis  
Palmar erythema

Scratch marks

Knowledge Level 1, System: Alimentary  
Jason

#### Pancreatitis (acute): causes

Hi Yield [ID 143]

##### GET SMASHED:

Gallstones  
Ethanol  
Trauma  
Steroids  
Mumps  
Autoimmune (PAN)  
Scorpion stings  
Hyperlipidemia/ Hypercalcemia  
ERCP

Drugs (including azathioprine and diuretics)

Note: 'Get Smashed' is slang in some countries for drinking, and ethanol is an important pancreatitis cause.

Knowledge Level 3, System: Alimentary  
Chris Perry Edinburgh Medical School

#### Pancreatitis: criteria

Hi Yield [ID 917]



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**PANCREAS:**

PaO<sub>2</sub> below 8

Age >55

Neutrophils: WCC >15

Calcium below 2

Renal: Urea >16

Enzymes: LDH >600; AST >200

Albumin below 32

Sugar: Glucose >10 (unless diabetic patient)

Knowledge Level 4, System: Alimentary

Daniel Henning 4th yr Medical Student, Belfast, UK

---

**Pancreatitis: Ranson criteria for pancreatitis at admission**

Hi Yield [ID 1055]

**LEGAL:**

Leukocytes > 16,000

Enzyme AST > 250

Glucose > 200

Age > 55

LDH > 350

Knowledge Level 2, System: Alimentary

Pedro Tulio

---

**Pancreatitis: Ranson criteria for pancreatitis: at admission**

Hi Yield [ID 999]

"GA LAW" (GA is abbreviation for the U.S. state of Georgia):

Glucose >200

AST >250

LDH >350

Age >55 y.o.

WBC >16000

Knowledge Level 2, System: Alimentary

Anonymous Contributor

---

**Pancreatitis: Ranson criteria for pancreatitis: initial 48 hours**

[ID 1000]

"C & HOBBS" (Calvin and Hobbes):

Calcium < 8

Hct drop > 10%

Oxygen < 60 mm

BUN > 5

Base deficit > 4

Sequestration of fluid > 6L

Knowledge Level 2, System: Alimentary

Anonymous Contributor

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**Splenomegaly: causes**

[ID 3066]

**CHINA:**

Congestion/ Cellular infiltration

Haematological (eg haemolytic anaemia, Sickle cell)

Infection/ Infarction (eg malaria, GF, CMV)

Neoplasia (eg CML, lymphoma, other myeloproliferative)

Autoimmune

Knowledge Level 3, System: Alimentary

Jamal Khan Birmingham University Medical Student

---

**Ulcerative colitis: complications**

[ID 620]

"PAST Colitis":

Pyoderma gangrenosum

Ankylosing spondylitis

Sclerosing pericholangitis

Toxic megacolon

Colon carcinoma

Knowledge Level 4, System: Alimentary

Ritu Garg

---

**Ulcerative colitis: definition of a severe attack**

[ID 2719]

---

**A STATE:**

Anemia less than 10g/dl

Stool frequency greater than 6 stools/day with blood

Temperature greater than 37.5

Albumin less than 30g/L

Tachycardia greater than 90bpm

ESR greater than 30mm/hr

Knowledge Level 6, System: Alimentary

Anil Pandit Manipal College of Medical Sciences, Pokhara, Nepal

---

**Vomiting: extra GI differential**

Hi Yield [ID 2720]

**VOMITING:**

Vestibular disturbance/ Vagal (reflex pain)

Opiates

Migraine/ Metabolic (DKA, gastroparesis, hypercalcemia)

Infections

Toxicity (cytotoxic, digitalis toxicity)

Increased ICP, Ingested alcohol

Neurogenic, psychogenic

Gestation

Knowledge Level 3, System: Alimentary

Anil Pandit, Manipal College of Medical Sciences, Pokhara, Nepal

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**Whipple's disease: clinical manifestations**

[ID 2147]

**SHELDA:**

Serositis

Hyperpigmentation of skin

Eating less (weight loss)

Lymphadenopathy

Diarrhea

Arthritis

Knowledge Level 6, System: Alimentary

Pedro Tulio Universidade Federal do Rio de Janeiro, Brazil

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**Haemochromatosis complications**

Hi Yield [ID 888]

"Haemochromatosis Can Cause Deposits Anywhere":

Hypogonadism

Cancer (hepatocellular)

Cirrhosis

Cardiomyopathy

Diabetes mellitus

Arthropathy

Knowledge Level 6, System: Cardiovascular

Logan Mitchell Dunedin Medical School, New Zealand

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**Diabetic ketoacidosis: precipitating factors**

Hi Yield [ID 2023]

5 I's:

Infection

Ischaemia (cardiac, mesenteric)

Infarction

Ignorance (poor control)

Intoxication (alcohol)

Knowledge Level 4, System: Endocrine

James Thomas

---

**Liver failure: decompensating chronic liver failure differential**

[ID 2742]

---

## HEPATICUS:

Haemorrhage

Electrolyte disturbance

Protein load/ Paracetamol

Alcohol binge

Trauma

Infection

Constipation

Uraemia

Sedatives/ Shunt/ Surgery

Knowledge Level 5, System: Integumental

Jude McSharry University College Hospital Galway

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## Splenomegaly: causes

[ID 2852]

## CHIMP:

Cysts

Haematological ( eg CML, myelofibrosis)

Infective (eg viral (IM), bacterial)

Metabolic/ Misc (eg amyloid, Gauchers)

Portal hypertension

Knowledge Level 1, System: Lymphoid

Mel

## GENETICS

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## Achondroplasia dwarfism: inheritance pattern

[ID 426]

Achondroplasia Dwarfism is Autosomal Dominant.

Knowledge Level 6, System: Endocrine

Robert O'Connor University College Dublin

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## APKD: genetics

[ID 959]

ADult Polycystic Kidney Disease is

Autosomal

Dominant

Also, "Polycystic kidney" has **16** letters and is due to a defect on chromosome **16**.

Knowledge Level 5, System: Kidney/Urine

Anonymous Contributor

---

## Bartter syndrome: inheritance

[ID 1310]

BARtter syndrome is autosomal recessive (**AR**).

Knowledge Level 8, System: Kidney/Urine

Anonymous Contributor

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## DiGeorge/ Velocardiofacial syndrome: features

Hi Yield [ID 1041]

## CATCH 22:

Cardiac abnormalities

Abnormal facies

Thymic aplasia

Cleft palate

Hypocalcemia

22q11 deletion

Knowledge Level 7, System: Lymphoid

Anonymous Contributor

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## Tumor suppressor vs. proto-oncogene mutations: recessive vs. dominant

[ID 252]

"**Recess Suppress**":

Tumor **suppressor** mutations are **recessive**.

Proto-oncogenes are opposite (dominant).

Knowledge Level 3, System: Lymphoid

Anonymous Contributor

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## Tay Sach's features

Hi Yield [ID 829]

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**SACHS:**

Spot in macula

Ashkenazic Jews

CNS degeneration

Hex A deficiency

Storage disease

Extra details with **TAY**:

Testing recommended

Autosomal recessive/ Amaurosis

Young death (<4 yrs)

Knowledge Level 2, System: Nervous

Robert O'Connor University College Dublin

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**Blots: function of Southern vs. Northern vs. Western**

Hi Yield [ID 269]

"**SNOW DROP**":

Match up the 1st word letter with 2nd word letter:

Southern=**DNA**

Northern=**RNA**

Western=**Protein**

The O's in snow drop are zeros, since there is no Eastern blot.

Knowledge Level 1, System: Other/Miscellaneous

Anonymous Contributor

---

**Cell cycle stages**

Hi Yield [ID 129]

"**Go Sally Go! Make Children!**":

**G**1 phase (Growth phase 1)

**S** phase (DNA Synthesis)

**G**2 phase (Growth phase 2)

**M** phase (Mitosis)

**C** phase (Cytokinesis)

Knowledge Level 1, System: Other/Miscellaneous

Anonymous Contributor

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**Chromosome 15 diseases**

Hi Yield [ID 1287]

Chromosome 15 has its own **MAP**:

**M**arfan syndrome

**A**ngelman syndrome

**P**raeder-Willi syndrome

Knowledge Level 3, System: Other/Miscellaneous

Christopher Jordan UAG

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**Codons: nonsense mutation**

Hi Yield [ID 2061]

"**Stop** talking **nonsense!**":

**Nonsense** mutation causes premature **stop**.

Knowledge Level 1, System: Other/Miscellaneous

Robert O'Connor University College Dublin

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**Cri-du-chat syndrome: chromosomal deletion causing it is 5p(-)**

Hi Yield [ID 408]

What's another name for a **cat** that's **five** letters long and starts with a **P**? (Answer: pussy).

Why is the cat **crying**? **Missing** its **P**.

Knowledge Level 3, System: Other/Miscellaneous

Anonymous Contributor

---

**DNA: Z vs. B form: which is inactive**

Hi Yield [ID 2250]

**ZZZZ** is sleeping (inactive).

B form is therefore active DNA.

Knowledge Level 2, System: Other/Miscellaneous

Robert O'Connor University College Dublin

---

**Down syndrome features: complete**

Hi Yield [ID 865]

---

"My **CHILD HAS PROBLEM!**":

Congenital heart disease/ **C**ataracts

**H**ypotonia/ **H**ypothyroidism

**I**ncure 5th finger/ **I**ncreased gap between 1st and 2nd toe

**L**eukemia risk x2/ **L**ung problem

**D**uodenal atresia/ **D**elayed development

**H**irshsprung's disease/ **H**earing loss

**A**lzheimer's disease/ **A**lantoaxial instability

**S**quint/ **S**hort neck

**P**rotruding tongue/ **P**alm crease

**R**ound face/ **R**olling eye (nystagmus)

**O**cciput flat/ **O**blique eye fissure

**B**rushfield spot/ **B**rachycephaly

**L**ow nasal bridge/ **L**anguage problem

**E**picanthic fold/ **E**ar folded

**M**ental retardation/ **M**yoclonus

Knowledge Level 9, System: Other/Miscellaneous

Lau Yue Young Geoffrey Medical Student '03, Hong Kong University

---

### Down syndrome pathology

Hi Yield [ID 803]

**DOWN:**

Decreased alpha-fetoprotein and unconjugated estriol (maternal)

**O**ne extra chromosome twenty-one

**W**omen of advanced age

Nondisjunction during maternal meiosis

Knowledge Level 4, System: Other/Miscellaneous

Rinku S. Uberoi UNIBE

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### Exon vs. intron function

[ID 31]

**Exons** **E**xpressed.

**InTrons** **I**n **T**rash.

Knowledge Level 1, System: Other/Miscellaneous

Anonymous Contributor

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### Hardy-Weinberg equilibrium: causes for deviations from it

[ID 147]

"**Maggie May Does Not Smoke**":

**M**utations

**M**igration

**D**rift

**N**on-random mating

**S**election

Knowledge Level 8, System: Other/Miscellaneous

Anonymous Contributor

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### Hurler syndrome features

Hi Yield [ID 820]

**HURLER'S:**

**H**eptosplenomegaly

**U**gly facies

**R**ecessive (AR inheritance)

**L**-iduronidase deficiency (alpha)

**E**yes clouded

**R**etarded

**S**hort/ **S**tubby fingers

Knowledge Level 3, System: Other/Miscellaneous

Robert O'Connor University College Dublin

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### Imprinting diseases: Prader-Willi and Angelman

Hi Yield [ID 699]

"**Pray** to an **Angel**":

**Prader-Willi** and **Angelman** are the 2 classic imprinting diseases.

Which disease results, depends on whether 15q deletion is maternal or paternal. Keep them straight by:

Paternal is **Prader-Willi**.

See diagram for cardinal symptom of each disease.

Knowledge Level 3, System: Other/Miscellaneous

Robert O'Connor University College Dublin



Hi Yield [ID 642]

### Marfan syndrome features

**MARFAN'S:**

**M**itral valve prolapse

**A**ortic Aneurysm

**R**etinal detachment

**F**ibrillin

**A**rachnodactyly

**N**egative Nitroprusside test (differentiates from homocystinuria)

**S**ubluxated lens

Knowledge Level 2, System: Other/Miscellaneous

Rinku Uberoi and Wabbas Mahmud UNIBE and Punjab Medical College Faisalabad, Pakistan

### Nucleotides: class having the single ring

Hi Yield [ID 32]

"Pyrimadines are **CUT** from purines"

Pyrimidines are:

Cytosine

Uracil

Thiamine

They are **cut** from purines so the pyrimadines must be smaller (one ring).

Knowledge Level 1, System: Other/Miscellaneous

Anonymous Contributor

### Nucleotides: double vs. triple bonded basepairs

Hi Yield [ID 2060]

"**TU** bonds" (two bonds):

**T**-A and **U**-A have **Two** bonds.

**G**-C therefore has the three bonds.

Knowledge Level 2, System: Other/Miscellaneous

Robert O'Connor University College Dublin

### Nucleotides: purines

Hi Yield [ID 2365]

"**AGUA PURa**":

Adenine and **GU**Anine are **PUR**ines.

"Agua pura" is spanish for "pure water".

Knowledge Level 1, System: Other/Miscellaneous

Patricia Sanchez INTEC University, Santo Domingo, Dominican Republic

### Nucleotides: purines vs. pyrimidines

[ID 1228]

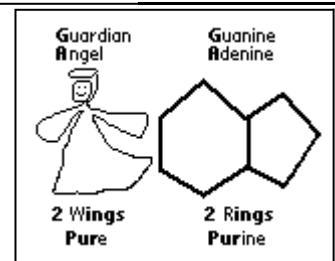
"Guardian Angels are **Pure**, with two **Wings**":

**G** and **A** are **Pur**ines, with two **Rings**.

See diagram.

Knowledge Level 1, System: Other/Miscellaneous

V. Coleman University of Washington SOM, Seattle



### Nucleotides: which are purines

Hi Yield [ID 415]

"**Pure Silver**":

Chemical formula of **Pure** silver is **Ag**.

Therefore, **Pur**ines are Adenine and Guanine.

Knowledge Level 1, System: Other/Miscellaneous

Jason Mounts Medical College of Georgia

### Pedigree symbols: gender and affected

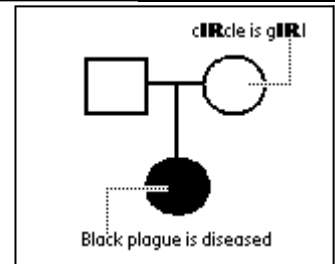
[ID 113]

Gender: The c**IR**cle is a g**IR**l [so boys are squares].

Affected: **Black plague** was a **disease**, so **black**-filled symbol means an **affected/diseased** person [so non-filled-in is unaffected].

Knowledge Level 1, System: Other/Miscellaneous

Robert O'Connor University College Dublin



Hi Yield [ID 320]

### Pyrimidines nucleotides

"**CUT the PY**" (cut the pie):

Cytosine

Uracil

Thiamine

are the **PY**rimidines

Knowledge Level 1, System: Other/Miscellaneous

Ken Evans Saskatchewan Health, Acute and Emergency Services

## HISTOLOGY

### Taste buds: vallate vs. fungiform distribution

[ID 281]

Cross sectional shape of the top of the bud tells their distribution.

Vallate: has a shallow '**V**' at the top, so has a '**V**' distribution at the back of the tongue.

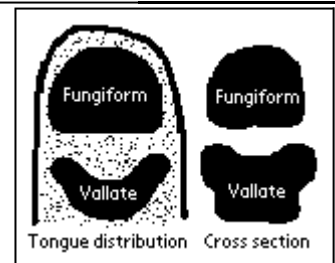
Fungiform: top is **round** so it is towards the **round** end of the tongue.

See diagram.

Note vallate is also sometimes called circumvallate.

Knowledge Level 6, System: Alimentary

Robert O'Connor University College Dublin



[ID 1264]

### Erythropoiesis stages

"**Powerful Businesses Pollute Our Reeling Environment**":

Proerythroblast

Basophilic erythroblast

Polychromatic erythroblast

Orthochromatophilic erythroblast

Reticulocyte

Erythrocyte

Knowledge Level 3, System: Cardiovascular

Samuel Atom Haek-Kim

### Vascular endothelium: simplified cross-section

Hi Yield [ID 2165]

**LIMA**:

Lumen

Intima

Media

Adventitia

Knowledge Level 1, System: Cardiovascular

Anonymous Contributor

### Adrenal cortex layers [for Florida Gator fans]

[ID 490]

"**Gator Football Rocks!**":

From outside inwards:

Glomerulosa

Fasciculata

Reticularis

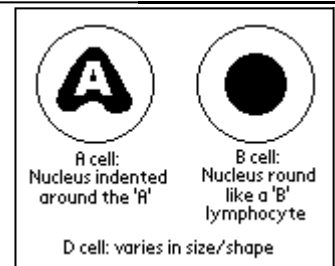
Knowledge Level 1, System: Endocrine

Anonymous Contributor

### Pancreatic exocrine cells: nuclei

[ID 282]

**A** cells are indented around the capital **A**.  
**B** cells have a round nucleus like a **B** lymphocyte.  
 See diagram.  
**D** cells have **D**ifferent shapes and sizes.  
 Knowledge Level 4, System: Endocrine  
 Anonymous Contributor



#### Pituitary: anterior pituitary products: acidophilic vs basophilic

[ID 1165]

Acidophilic:  
**GPA:**  
 Growth hormone  
 Prolactin  
 Acidophilic  
 Basophilic:  
**B-FLAT**  
 Basophilic  
 FSH  
 LH  
 ACTH  
 TSH  
 Knowledge Level 5, System: Endocrine  
 Anonymous Contributor

#### Epidermis layers

[ID 441]

"Come, **L**et's **G**et **S**un **B**urned":  
 From superficial to deep:  
 Corneum  
 Lucidum  
 Granulosum  
 Spinosum  
 Basale [Germinativum]  
 Alternatively: "Can **L**ori **G**et **S**ome **G**as?"  
 Alternatively: "Can **L**ittle **G**irls **S**peak **G**erman?"  
 Alternatively: "Can **L**arry **G**et **S**ome **B**eer?"  
 Knowledge Level 1, System: Integumental  
 Marcus Lee and Jon Markley and Twinkle and Lea Riche and Anonymous Contributor IMU and Medical student and Nursing Student

#### Epidermis layers

[ID 665]

"**B**ad **S**kin **G**ets **L**ittle **C**alluses":  
 From deep to superficial:  
 Basale  
 Spinosum  
 Granulosum  
 Lucidum  
 Corneum  
 Knowledge Level 1, System: Integumental  
 Anonymous Contributor

#### Epidermis layers

[ID 795]

"**B**ull **S**#it **G**randma **L**ikes **C**\*ck!":  
 In order from deep to superficial:  
 Basale  
 Spinosum  
 Granulosum  
 Lucidum  
 Corneum  
 Knowledge Level 1, System: Integumental  
 Anonymous Contributor

#### Epidermis layers [for Star Trek fans]

[ID 294]



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"**Brent Spiner Gained Lieutenant Commander**":

From deep to superficial:

**Basale**

**Spinosum**

**Granulosum**

**Lucidum**

**Corneum**

Knowledge Level 1, System: Integumental

Anonymous Contributor

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**Hair: 4 layers of germinal matrix product**

[ID 1062]

"**Mary Can't C\*ck Suck**":

From centre to periphery:

**Medulla**

**Cortex**

**Cuticle**

**Sheaths**

Knowledge Level 2, System: Integumental

Anonymous Contributor

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**Basophil morphology**

[ID 77]

**Basophil** has **Big Blue Balls** (granules).

Knowledge Level 3, System: Lymphoid

Anonymous Contributor

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**Basophil vs. eosinophils: effect for allergic persons**

[ID 2619]

**Basophils** are "**Bad-o-phils**" because they contribute to our allergic reactions.

**Eosinophils** are "**Easy-on-me-phils**" because they counteract our allergic reactions.

Knowledge Level 4, System: Lymphoid

Andrew Hammer

---

**Leukocytes: granulated and agranulated**

[ID 762]

"**BEN Loves Money**":

Granulocytes:

**Basophil**

**Eosinophil**

**Neutrophil**

Agranulocytes:

**Lymphocytes**

**Monocytes**

Alternatively: **Granpa BEN**..." to keep the granulated group straight.

Knowledge Level 2, System: Lymphoid

Priya and Abe UNIBE

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**Mast cell primary granule contents**

[ID 910]

"**Master, His Hepes Causes Choking & Gagging!**":

**Mast** = **Mast** cell

**His** = **Histamine**

**He**= **Heparin**

**C** = **Chymase**

**Ch** = **Chemotactic** factor for eosinophils

**Gag** = **GAGase**

Knowledge Level 5, System: Lymphoid

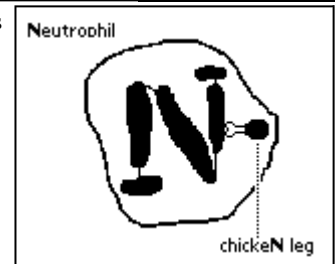
Ms Sushi UCLA Medicine

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**Neutrophil's 2 distinctive physical features**

[ID 119]

1: There's up to **5 lobes** of the nucleus joined by thin appendages. Tie this to it being a neutrophil nucleus by arranging the **5 lobes** into a **capital N for Neutrophil**.  
 2: the **chicken** leg (Barr Body) sticking out. Say it out loud: **chick-N**. The chick-**N** leg is for Neutrophil.  
 Knowledge Level 2, System: Lymphoid  
 Robert O'Connor University College Dublin



### White blood cell relative concentrations

[ID 385]

"Never Let Monkeys Eat Bananas":

From greatest to least:

Neutrophils (65%)

Lymphocytes (25%)

Monocytes (6%)

Eosinophils (3%)

Basophils (1%)

Alternatively: "Nine Little Monkeys Eating Bananas".

Alternatively: "Noone Likes My Educational Background".

Alternatively: "Never Let Mamma Eat Beans".

Can remember that Eosinophils is 3%, by the mirror image of E is 3.

Knowledge Level 1, System: Lymphoid

Anonymous Contributor and Dr. Atif Farooq and Anonymous Contributor University of Sydney, Australia and Rawalpindi Medical College, Islamabad, Pakistan and Nurse

### Muscle cells: cardiac vs. skeletal's nuclei location/number

[ID 308]

Nuclei location mirrors where the muscle is located in human body.

Heart muscle is in the **middle** of body, so heart muscle has nucleus in **middle**.

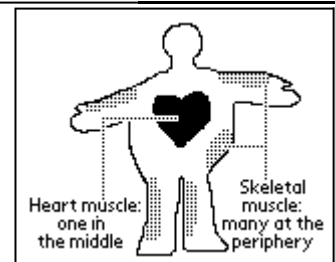
Skeletal muscles are at **periphery** of body, so nuclei are at **periphery**.

Also, you have 1 heart, so usually only 1 nucleus per heart muscle cell, but have many skeletal muscles, so have many nuclei per long fibre.

See diagram.

Knowledge Level 1, System: Muscle

Robert O'Connor University College Dublin



### Muscle fiber: types

[ID 1822]

Type 1:

"1 slow fat red ox":

-slow twitch

-lipid accumulation

-red fibers

-oxidative

Type 2:

"2 fast skinny white breasts":

-fast twitch

-low lipid

-white fibers, like chicken breasts

Knowledge Level 3, System: Muscle

Ocean University of Texas Medical Branch

### Muscle sarcomere bands

[ID 379]

"Zee Intelligent Animal Has Muscle":

From the Z disk, working inward, remembering symmetry:

**Z I A H M H A I Z**.

Alternatively: "Zoe Is A Horny Momma".

Knowledge Level 1, System: Muscle

Jeremy Smith and Josh Kunken GSU Undergrad and University of California, Berkeley

### Muscle sarcomere: A vs. I as light or dark

[ID 50]

There is only one vowel in "dark" and one vowel in "light".  
These one vowels match up to their one letter names:  
D**A**rk band is the **A** band.  
L**I**ght band is the **I** band.  
Knowledge Level 2, System: Muscle  
Robert O'Connor University College Dublin

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**Muscle sarcomere: H line vs. Z disc location**

[ID 107]

**HAZI** (Hazy):  
**H** line is in **A**-band.  
**Z** disc is in the **I** band.  
Knowledge Level 1, System: Muscle  
Sujay Patel University College Dublin

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**Cochlea chambers: ones with perilymph vs. endolymph**

[ID 51]

Per**I**- ones also end with **T**: vestibul**I** and tympan**I**.  
Therefore, perilymph is in scala vestibuli and scala tympani, and the endolymph is in the scala media.  
Knowledge Level 6, System: Nervous  
Robert O'Connor University College Dublin

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**Organ of corti: location**

[ID 3246]

The organ of **C**Orti  
is inside the **C**Ochlea.  
Knowledge Level 3, System: Nervous  
Rinku Uberoi Willsey Institute

---

**Schwann cell only myelinates 1 axon**

Hi Yield [ID 1130]

Sch**W**ANN = sounds like **ONE**.  
A single **Schwann** cell only myelinates **one** PNS axon.  
Knowledge Level 1, System: Nervous  
Lior Greenberg Technion Faculty of Medicine, Haifa, Israel

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**Collagen: location of types**

[ID 3159]

Type One: b**ONE**  
Type Two: Car**T**wolage  
Type Four: "**Four** on the **Floor**" [automotive transmission term] basement membrane (the "floor") is mostly Type IV collagen  
Knowledge Level 1, System: Other/Miscellaneous

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**Extracellular matrix components**

[ID 2983]

"**HELP** Form Collagen":  
**H**yaluronic acid  
**E**lastin  
**L**aminin  
**P**roteoglycan  
**F**ibronectin  
**C**ollagen  
Knowledge Level 4, System: Other/Miscellaneous  
Kelvin University of Hong Kong

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**Epiphyseal plate: zones**

[ID 3263]

"**R**eal **P**eople **H**ave **C**areer **O**pportunities":  
**R**esting zone  
**P**roliferative zone  
**H**ypertrophic zone  
**C**alcified cartilage zone  
**O**ssification zone  
Knowledge Level 2, System: Skeletal  
Gonzalo Baylor College of Medicine

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**IMMUNOLOGY**

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**Chrug-Strauss syndrome: symptoms and signs**

Hi Yield [ID 3054]

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**PAVE:**

**P-ANCA**

Asthma

Vasculitis

Eosinophilia

Knowledge Level 3, System: Cardiovascular

Marcus Fidel UNM School of Medicine

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**Graves disease: etiology**

[ID 2319]

In Graves disease, the thyroid-stimulating immunoglobulins are of the IgG class.

Knowledge Level 5, System: Endocrine

Anonymous Contributor

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**Lupus signs and symptoms**

Hi Yield [ID 321]

**SOAP BRAIN:**

Serositis [pleuritis, pericarditis]

Oral ulcers

Arthritis

Photosensitivity

Blood [all are low - anemia, leukopenia, thrombocytopenia]

Renal [protein]

ANA

Immunologic [DS DNA, etc.]

Neurologic [psych, seizures]

Knowledge Level 4, System: Integumental

Ken Evans Saskatchewan Health, Acute and Emergency Services

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**Acute inflammation features**

[ID 249]

**SLIPR:**

Swelling

Loss of function

Increased heat

Pain

Redness

"What a **cute** pair of **slippers**" can be used to tie acute inflammation to SLIPR.

Knowledge Level 1, System: Lymphoid

Robert O'Connor University College Dublin

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**Celiac sprue features**

Hi Yield [ID 811]

**CELIAC:**

Cell-mediated autoimmune disease

European descent

Lymphocytes in Lamina propria/ Lymphoma risk

Intolerance of gluten (wheat)

Atrophy of villi in small intestine/ Abnormal D-xylose test

Childhood presentation

Atrophied villi cause less absorption, so diarrhea, weight loss, less energy.

Knowledge Level 3, System: Lymphoid

Robert O'Connor University College Dublin

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**Complement cascade initiating items: alternative vs. classic**

Hi Yield [ID 783]

Classic: Combined Complexes.

Alternative: Activators Alone, or IgA.

Complexes are made of Ab and Ag combined together.

Examples of activators: endotoxin, microbial surface.

Knowledge Level 2, System: Lymphoid

Robert O'Connor University College Dublin

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**Complement: function of C3a versus C3b**

Hi Yield [ID 485]

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**C3a:** Activates **A**cute [inflammation].  
**C3b:** Bonds **B**acteria [to macrophages--easier digestion].  
If wish to know more than just C3:  
**C3a, C4a, C5a** activate acute.  
**C3b, C4b** bind bacteria.  
Knowledge Level 2, System: Lymphoid  
Robert O'Connor and Marcus Fidel University College Dublin and UNM

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**Dendritic cell: function**

[ID 2590]

**DENDRITIC CELL:**  
Disguised in host tissue (but still have same function!)  
ECF ingestion  
Nothing left to chance (ensures an immune response)  
Derived from bone marrow  
Regulates the immune response  
Induces an immune response (makes it unique among antigen presenting cells)  
Transfers information from the ECF into the cell  
Immune tolerance (increases it)  
Co-ordinates the adaptive and innate immune systems  
Captures and processes antigen  
Expresses lymphocyte costimulatory molecules  
Long processes extend from cell (stellate shaped)  
Lives in lymphoid tissue  
Secretes cytokine to initiate immune response  
Knowledge Level 3, System: Lymphoid  
Dave Colbert Faculty of Medicine, University of Western Australia

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**DiGeorge Syndrome: features**

Hi Yield [ID 2773]

The disease of T's:  
Third and 4th pharyngeal pouch absent.  
Twenty-Two chromosome  
T-cells absent  
Tetany: hypocalcemia  
Knowledge Level 2, System: Lymphoid  
Anonymous Contributor

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**Goodpasture's Syndrome components**

Hi Yield [ID 467]

GoodPasture is **G**lomerulonephritis and **P**neumonitis.  
From autoantibodies attacking **G**lomerular and **P**ulmonary basement membranes.  
Knowledge Level 3, System: Lymphoid  
Robert O'Connor University College Dublin

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**Histamine: features**

[ID 1453]

**HISTAMINE:**  
**HCL** production  
Inflammation  
Strong vasodilator  
Therapeutic value none  
Allergy  
Mast cells  
Neurotransmitter/ Narrow airways  
IgE  
Knowledge Level 4, System: Lymphoid  
Dr. Atif Farooq Rawalpindi Medical College, Pakistan, Gujranwala

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**HLA-B27 associated diseases**

[ID 1338]

**PAIR:**  
**P**soriasis  
**A**nkylating spondylitis  
**I**nflammatory bowel disease  
**R**eiter's syndrome  
Knowledge Level 6, System: Lymphoid  
Atif Farooq Khawaja Rawalpindi Medical College, Horizon Medical Institute, Pakistan

## HLA-DR genetic predisposition immune disease examples

[ID 629]

### HLA-DR:

Hashimoto's disease

Leukemia/ Lupus

Autoimmune adrenalitis/ Anemia (pernicious)

Diabetes insipidous

Rheumatoid arthritis

Knowledge Level 8, System: Lymphoid

Robert O'Connor and Dr. Chetan Wiskar

## Hypersensitivity reactions: Gell and Goombs nomenclature

Hi Yield [ID 104]

### ACID

From I to IV:

Anaphylactic type: type I

Cytotoxic type: type II

Immune complex disease: type III

Delayed hypersensitivity (cell mediated): type IV

Knowledge Level 1, System: Lymphoid

Anonymous Contributor

## Hypersensitivity: type IV example

[ID 838]

Poison **IV**y causes type **IV** hypersensitivity.

Knowledge Level 4, System: Lymphoid

Anonymous Contributor

## Immunoglobulin (Ig) types: the important ones worth remembering, in order of appearance

Hi Yield [ID 106]

**MAGDE**laine (a girl's name):

**IgM**

**IgA**

**IgG**

**IgD**

**IgE**

Magdelaine tells you the order they usually appear: **M** first, then **A** or **G**.

Alternatively: **IgM** is **IM**mediate.

Knowledge Level 1, System: Lymphoid

Magdelaine Deeby and Anonymous Contributor University College Dublin and University of Aberdeen

## Immunoglobulins, and order B cells present them

Hi Yield [ID 2131]

**MADGE** (character from the old dishwashing liquid commercial):

**IgM**

**IgA**

**IgD**

**IgG**

**IgE**

Order of presentation by B cells (which is made first, IgD or IgM?) B cells present **IgM** primarily, and then **IgD**.

Just remember why all of us are going through this pain...to become M.D's. For a B cell to be competent, it must get its **MD**.

Finally, by the same rule, B cells must first release **M** then **G** immunoglobulin on primary exposure.

Knowledge Level 1, System: Lymphoid

Tevis Anthony Verrett Creighton University School of Medicine

## Immunoglobulins: which crosses the placenta

[ID 870]

**IgG** crosses the placenta during **G**estation.

Knowledge Level 2, System: Lymphoid

Anonymous Contributor

## Interferon gamma: action on macrophages

Hi Yield [ID 877]

"**Th1nk BIG Mac Attack**":

**Th1** and **NK** cells **B**uild **I**nterferon **G**amma.

Causes **M**acrophages to have an augmented **A**ttack [by better lysosome function and increasing reactive oxygen metabolites, nitric oxide and defensins].

Knowledge Level 4, System: Lymphoid

Lior Greenberg Technion Faculty of Medicine, Haifa, Israel

## MHC I vs. II: T cell interaction

Hi Yield [ID 105]

The "**=8**" equation:

**2x4=8**, and **1x8=8**.

MHC **II** goes with CD**4**.

MHC **I** goes with CD**8**.

Knowledge Level 1, System: Lymphoid

Anonymous Contributor

### MHC I vs. MHC II properties

Hi Yield [ID 625]

"**Immunity helps to exterminate fun for bacteria**"

See attached chart.

Knowledge Level 3, System: Lymphoid

Robert O'Connor University College Dublin

Cells with MHC class	Immune cells	All nucleated cells
T-cell MHC interaction	<b>Helper</b> T-cells	Cytotoxic T-cells
MHC name	<b>Two</b> (II)	One (I)
Exposed protein	<b>External</b> origin	Internal origin
1 <sup>st</sup> MHC use	<b>Fungi</b>	Viruses
CD type interaction	<b>CD4+</b>	CD8+
2 <sup>nd</sup> MHC use	<b>Bacteria</b>	Cancer cells

### MHC: loci creating class I vs. II

[ID 2089]

Class **1** has **1** letter:

HLA **I** is HLA-**A**, HLA-**B**, HLA-**C**.

Class **2** has **2** letters:

HLA **II** is HLA-**DP**, HLA-**DQ**, HLA-**DR**.

Knowledge Level 6, System: Lymphoid

Anonymous Contributor

### Passive vs. active immunity

[ID 961]

"Pay for **Passive**, **Active** Ages":

**Passive:** Pay for a shot of antibodies for fast results following exposure to Rabies, etc.

**Active:** Slow onset ("**aging**") and memory.

Knowledge Level 1, System: Lymphoid

Lior Greenberg Technion Faculty of Medicine, Haifa, Israel

### Sjogren syndrome: morphology

Hi Yield [ID 796]

"**Jog** through the **MAPLES**":

Sjogren is:

**M**outh dry

**A**rthritis

**P**arotid enlarged

**L**ymphoma

**E**yes dry

**Sicca** (primary) or **S**econdary

See diagram.

Knowledge Level 2, System: Lymphoid

Robert O'Connor University College Dublin



### T and B cells: types

Hi Yield [ID 1982]

When bacteria enter body, T-cell says to B: "**Help Me Catch Some!**" B-cell replies: "**My Pleasure!**":

T-cell types:

**H**elper

**M**emory

**C**ytotoxic

**S**uppressor

B-cell types:

**M**emory cell

**P**lasma cell

Knowledge Level 1, System: Lymphoid

Dr. Harsh Sharma BJMC, Pune, India

## INTERNAL MEDICINE / FAMILY PRACTICE

### Abdominal pain: medical causes

[ID 1803]

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"**ABDOMENAL PANE**" [abdominal pain]:

Acute rheumatic fever

**B**lood [purpura, a/c hemolytic crisis]

**D**KA

c**O**llagen vascular disease

**M**igraine [abdominal migraine]

**E**pilepsy [abdominal epilepsy]

**N**ephron [uremia]

Abdominal angina

**L**ead

**P**orphyrria

**A**rsenic

**N**SAID's

**E**nteric fever

Knowledge Level 8, System: Alimentary

Dr. Sonali Vadi

---

**Haemobilia: features**

[ID 1806]

**MOB:**

**M**elaena

**O**bstructive jaundice

**B**iliary colic

Knowledge Level 3, System: Alimentary

Dr. Harsh Sharma

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**Ileus: causes**

Hi Yield [ID 1997]

**MD SPUGERS:**

**M**esenteric ischemia

**D**rugs (see below)

**S**urgical (post-op)

**P**eritonitis/ **P**ancreatitis (sentinel loop)

Unresolved mechanical obstruction (eg mass, intussusception, blockage)

**G**ram negative sepsis

**E**lectrolyte imbalance (eg hypokalemia)

**R**etroperitoneal bleed or hematoma

**S**pinal or pelvic fracture

Drugs are Aluminum hydroxide, Ba++, Ca carbonate, opiates, TCA, verapamil.

Knowledge Level 6, System: Alimentary

Hugo M. Rodriguez, MD University of Virginia Roanoke-Salem Program

---

**ACEI: contraindications**

Hi Yield [ID 2565]

**PARK:**

**P**regnancy

**A**llergy

**R**enal artery stenosis

**K** increase (hyperkalemia)

Knowledge Level 4, System: Cardiovascular

Anthony Chan

---

**ADP: role in platelet aggregation**

[ID 1016]

**ADP** = Aggregation from the **D**ense bodies of **P**latelets.

Knowledge Level 5, System: Cardiovascular

Lior Greenberg Technion Faculty of Medicine, Haifa, Israel

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**Anemia: non-megaloblastic causes of macrocytic anemia**

Hi Yield [ID 2511]



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**HAND LAMP:**

Hypothyroidism

Aplastic anaemia

Neonates

Drugs

Liver disease

Alcohol

Myelodysplasia

Pregnancy

Knowledge Level 3, System: Cardiovascular

Philip Robinson Wellington School of Medicine, Otago University

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**Anion gap metabolic acidosis: causes**

Hi Yield [ID 1203]

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**A MUDPILE CAT:**

Alcohol

Methanol

Uremia

Diabetic ketoacidosis

Paraldehyde

Iron/ Isoniazid

Lactic acidosis

Ethylene glycol

Carbamazepine

Aspirin

Toluene

Knowledge Level 5, System: Cardiovascular

Mohamed Azim MD Pediatric Surgeon, Alexandria University, Egypt

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**Haematology: key numbers**

[ID 140]

3 and 4 are key in in haematology:

1.34 cm<sup>3</sup> of oxygen is carried by a gram of hemoglobin.

There's 3.4mg of iron in each gram of hemoglobin.

There's an average of 3.4 lobes per neutrophil.

There's 34mg bilirubin from each gram of hemoglobin.

Knowledge Level 5, System: Cardiovascular

Anonymous Contributor

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**Haemoptysis: causes**

[ID 2904]

---

**CAVITATES:**

CHF

Airway disease, bronchiectasis

Vasculitis/ Vascular malformations

Infection (eg TB)

Trauma

Anticoagulation

Tumour

Embolism

Stomach

Knowledge Level 6, System: Cardiovascular

Fahed Al-Daour

---

**HbA2: concentration in normal blood**

[ID 1331]

HbA2:

Concentration of HbA2 is 2% in normal adult blood.

Knowledge Level 1, System: Cardiovascular

Dr. Atif Farooq Khawaja Rawalpindi Medical College , Horizon Medical Institute. Pakistan

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**Macrocytic anemia: causes**

Hi Yield [ID 1859]

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**ABCDEF:**

Alcohol + liver disease

**B**12 deficiency

Compensatory reticulocytosis (blood loss and hemolysis)

**D**rug (cytotoxic and AZT)/ **D**ysplasia (marrow problems)

**E**ndocrine (hypothyroidism)

**F**olate deficiency/ **F**etus (pregnancy)

Knowledge Level 2, System: Cardiovascular

Anthony Chan

---

**Metabolic acidosis: causes**

Hi Yield [ID 1660]

**USED CAR:**

Ureteroenterostomy

Saline hydration

Endocrinopathies (hyperparathyroid, hyperthyroid, Addison's)

**D**iarrhea/ **D**KA/ **D**rugs

Carbonic anhydrase inhibitors

**A**mmonium chloride

**R**enal tubular acidosis

Alternatively: **USED CARP**, to include **P**arenteral nutrition/ **P**ancreatic fistula.

Knowledge Level 4, System: Cardiovascular

J.J.H. and Vince Yamashiroya Good Samaritan Hospital and Not Specified

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**Metabolic acidosis: causes**

Hi Yield [ID 1873]

**KUSSMAL:**

**K**etoacidosis

**U**raemia

**S**epsis

**S**alicylates

**M**ethanol

**A**lcohol

**L**actic acidosis

Knowledge Level 6, System: Cardiovascular

Steve Gust Gove District Hospital, NT Australia

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**Non-gap acidosis: causes**

Hi Yield [ID 1797]

**HARD UP:**

**H**yperalimentation

Acetazolamide (carbonic anhydrase inhibitors)

**R**TA

**D**iarrhea

Ureterosigmoidostomy

**P**ancreatic fistula

Knowledge Level 5, System: Cardiovascular

James Reeves Emory University School of Medicine

---

**NSAIDs: contraindications**

Hi Yield [ID 2564]

**NSAID:**

Nursing and pregnancy

Serious bleeding

Allergy/ **A**sthma/ **A**ngioedema

**I**mpaired renal function

**D**rug (anticoagulant)

Knowledge Level 2, System: Cardiovascular

Anthony Chan

---

**Pancytopenia differential**

Hi Yield [ID 2648]

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"All Of My Blood Has Taken Some Poison":

Aplastic anaemias

Overwhelming sepsis

Megaloblastic anaemias

Bone marrow infiltration

Hypersplenism

TB

SLE

Paroxysmal nocturnal haemoglobinuria

Knowledge Level 5, System: Cardiovascular

Dr. Trisan W. Graham

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**Raynaud's disease: causes**

Hi Yield [ID 1917]

**BAD CT:**

Blood disorders (eg polycythaemia)

Arterial (eg atherosclerosis, Buerger's)

Drugs (eg beta-blockers)

Connective tissue disorders (rheumatoid arthritis, SLE)

Traumatic (eg vibration injury)

Knowledge Level 3, System: Cardiovascular

Gajan Rajeswaran Final Year Medical Student, Imperial College School Of Medicine, London

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**Sickle cell disease complications**

[ID 747]

**SICKLE:**

Strokes/ Swelling of hands and feet/ Spleen problems

Infections/ Infarctions

Crises (painful, sequestration, aplastic)/ Cholelithiasis/ Chest syndrome/ Chronic hemolysis/ Cardiac problems

Kidney disease

Liver disease/ Lung problems

Erection (priapism)/ Eye problems (retinopathy)

Knowledge Level 5, System: Cardiovascular

Rinku Uberoi UNIBE

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**Toxicity/ sepsis: signs**

[ID 1858]

6 T's:

Tachycardia

Tachypnea

Tremors

Toxic look

Tiredness

Temperature (fever)

Knowledge Level 4, System: Cardiovascular

Malik Tariq Rahim King Edward Medical College, Lahore, Pakistan

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**Ulcers: types**

Hi Yield [ID 2039]

**VAN:**

Venous/ Vasculitic

Arterial

Neuropathic

Knowledge Level 1, System: Cardiovascular

Anonymous Contributor University of Sydney, Australia

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**Acromegaly symptoms**

Hi Yield [ID 2555]

**ABCDEF:**

Arthralgia/ Arthritis

Blood pressure raised

Carpal tunnel syndrome

Diabetes

Enlarged organs

Field defect

Knowledge Level 1, System: Endocrine

Anonymous Contributor

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**Gynecomastia: common causes**

[ID 1039]

---

**GYNECOMASTIA:**

Genetic Gender disorder (Klinefelter)

Young boy (pubertal)\*

Neonate\*

Estrogen

Cirrhosis/ Cimetidine/ Ca Channel blockers

Old age\*

Marijuana

Alcoholism

Spironolactone

Tumors (Testicular & adrenal)

Isoniazid/ Inhibition of testosterone

Antineoplastics (Alkylating Agents)/ Antifungal(ketoconazole)

\* Asterisk indicates physiologic cause.

Knowledge Level 5, System: Endocrine

Rinku S. Uberoi UNIBE

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**Hypercalcemia causes**

Hi Yield [ID 1568]

**MD PIMPS ME:**

Malignancy

Diuretics (thiazide the main culprit)

Parathyroid (hyperparathyroidism)

Immobilization/ Idiopathic

Megadoses of vitamins A,D

Paget's disease

Sarcoidosis

Milk alkali syndrome

Endocrine (Addison's disease, thyrotoxicosis)

Knowledge Level 2, System: Endocrine

Anonymous Contributor

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**Hypercalcemia: causes**

Hi Yield [ID 1614]

**GRIM FED:**

Granulomas (sarcoid, TB),

Renal failure

Immobility (esp. long term)

Malignancy

Familial (eg familial hypocalciuric hypercalcemia)

Endocrine (see below for subtypes)

Drugs (esp. thiazide diuretics, lithium)

Endocrine causes are **PATH**:

Phaeochromocytoma

Addison's disease

Thyrotoxicosis

Hyperparathyroidism

Knowledge Level 4, System: Endocrine

Steve London, England

---

**Hypercalcemia: differential**

Hi Yield [ID 1651]

**VITAMIN TRAPS:**

Vitamin A and D intoxication

Immobilization

Thyrotoxicosis

Addison's disease/ Acidosis

Milk-alkali syndrome

Inflammatory disorders

Neoplastic disease

Thiazides, other drugs

Rhabdomyolysis

AIDS

Paget's disease/ Parenteral nutrition/ Parathyroid disease

Sarcoidosis

Knowledge Level 2, System: Endocrine

Anonymous Contributor

**Thyroid storm: initial management**

[ID 1730]

**PCP'S:**

PTU - 1 gm po

Corticosteroids

Propranolol

SSKI

Knowledge Level 6, System: Endocrine

Hugo M. Rodriguez, MD University of Virginia Roanoke-Salem Program

**Pressure Sore: Norton Score**

[ID 2566]

**MAGIC:**

Mobility

ADL

General condition

Incontinence

Conscious level

Knowledge Level 4, System: Integumental

Anthony Chan

**Pruritus without rash: DDx**

Hi Yield [ID 2255]

**ITCHING DX:**

Infections (scabies, toxocariasis, etc)

Thyroidal and other endocrinopathies (eg diabetes mellitus)

Cancer

Hematologic diseases (eg iron deficiency)/ Hepatopathies/ HIV

Idiopathic

Neurotic

Gravid (pruritus of pregnancy)

Drugs

eXcretory dysfunctions (eg uremia)

Knowledge Level 4, System: Integumental

Anonymous Contributor

**Rashes: time of appearance after fever onset**

Hi Yield [ID 1128]

"Really Sick Children Must Take No Exercise":

Number of days after fever onset that a rash will appear:

1 Day: Rubella

2 Days: Scarlet fever/ Smallpox

3 Days: Chickenpox

4 Days: Measles (and see the Koplik spots one day prior to rash)

5 Days: Typhus &amp; rickettsia (this is variable)

6 Days: Nothing

7 Days: Enteric fever (salmonella)

Knowledge Level 4, System: Integumental

Anonymous Contributor Rivka Zieff Hospital Dept. of Pediatrics, Tzfat, Israel

**Alkalosis: metabolic changes in alkalosis**

Hi Yield [ID 2642]

"Al-K-loss, Al-Ca-loss":

There is loss of K<sup>+</sup> (hypokalemia) and Ca<sup>++</sup> (hypocalcemia) in state of alkalosis.

Knowledge Level 2, System: Kidney/Urine

Ibrahim Mansoor King Edward Medical College

**Allopurinol: indications**

[ID 1893]

**STORE:**

Stones (history of renal stones)

Tophaceous gout (chronic)

Over-producers of urate

Renal disease

Elderly

Bonus: Probenecid indications are basically the opposite of STORE (no renal stone history, etc.).

Knowledge Level 7, System: Kidney/Urine

Hugo M. Rodriguez, MD University of Virginia Roanoke-Salem Program

**Dialysis indications**

Hi Yield [ID 2242]

---

**HAVE PEE:**

**H**yperkalemia (refractory)

**A**cidosis (refractory)

**V**olume overload

**E**levated BUN (> 36 mM)

**P**ericarditis

**E**ncephalopathy

**E**dema (pulmonary)

Knowledge Level 1, System: Kidney/Urine

Tim Welke and Darren Yuen University of Toronto Medical School

---

**Renal failure (acute): management**

Hi Yield [ID 1778]

Manage **AEIOU**:

**A**nemia/ **A**cidosis

**E**lectrolyte and fluids

**I**nfections

**O**ther measures (eg nutrition, nausea, vomiting)

**U**remia

Knowledge Level 2, System: Kidney/Urine

Malik Tariq Rahim King Edward Medical College, Lahore, Pakistan

---

**SIADH: causes**

Hi Yield [ID 1963]

**SIADH:**

**S**urgery

**I**ntracranial: infection, head injury, CVA

**A**lveolar: Ca, pus

**D**rugs: opiates, antiepileptics, cytotoxics, anti-psychotics

**H**ormonal: hypothyroid, low corticosteroid level

Knowledge Level 5, System: Kidney/Urine

Steve Gust Gove District Hospital, NT, Australia

---

**SIADH: diagnostic sign**

Hi Yield [ID 1703]

Syndrome of **INAP**propriate Anti-Diuretic Hormone:

**I**ncreased

**Na** (sodium)

**PP** (urine)

SIADH is characterized by increased urinary sodium.

Knowledge Level 5, System: Kidney/Urine

Rinku Uberoi New York Hospital

---

**SIADH: major signs and symptoms**

Hi Yield [ID 1810]

**SIADH:**

**S**pasms

**I**sn't any pitting edema (key DDx)

**A**norexia

**D**isorientation (and other psychoses)

**H**yponatremia

Knowledge Level 5, System: Kidney/Urine

Dr. Harsh Sharma BJMC

---

**Eosinophilia: differential**

Hi Yield [ID 1680]

**NAACP:**

**N**eoplasm

**A**llergy/ **A**sthma

**A**ddison's disease

**C**ollagen vascular diseases

**P**arasites

Knowledge Level 5, System: Lymphoid

Anonymous Contributor

---

**Polycythemia Rubra Vera (PRV): common symptoms**

Hi Yield [ID 1118]

---

**PRV:**

**Plethora/ Pruritis**

**Ring**ing in ears

**Visual** blurriness

Knowledge Level 4, System: Lymphoid

Rinku S. Uberoi UNIBE

---

**SLE: factors that make SLE active**

Hi Yield [ID 2247]

**UV PRISM:**

**UV** (sunshine)

**Pregnancy**

**Reduced** drug (eg steroid)

**Infection**

**Stress**

**More** drug

Knowledge Level 2, System: Lymphoid

Anonymous Contributor

---

**Splenomegaly: causes**

Hi Yield [ID 1935]

**CHICAGO:**

**Cancer**

**Hem**, onc

**Infection**

**Congestion** (portal hypertension)

**Autoimmune** (RA, SLE)

**Glycogen** storage disorders

**Other** (amyloidosis)

Knowledge Level 4, System: Lymphoid

Gerard Dang Chicago Medical School

---

**Splenomegaly: causes**

[ID 3047]

**HICCUPS:**

**Haematological**

**Infective** : Kala azar, malaria, enteric fever

**Congestive**: CCF, constrictive pericarditis, IVC thrombosis, Hepatic vein thrombosis, portal vein thrombosis and splenic vein thrombosis

**Collagen** diseases: SLE, Felty's syndrome

**Unknown** etiology: tropical splenomegaly

**Primary** malignancies (secondaries are rare)

**Storage** diseases: Gaucher's disease, Niemann Pick

Knowledge Level 2, System: Lymphoid

Saurav Pokharel MBBS Student, Final year

---

**Horner's syndrome: components**

[ID 2395]

**SAMPLE:**

**Sympathetic** chain injury

**Anhidrosis**

**Miosis**

**Ptosis**

**Loss** of ciliospinal reflex

**Enophthalmos**

Knowledge Level 5, System: Nervous

Harsh Sharma BJMC, Pune, India

---

**Lead poisoning (chronic): features**

[ID 1923]

**ABCDEFGHI:**

**Anaemia/ Anorexia/ Arthralgia/ Abortion/ Atrophy** of optic nerve

**Basophilic** stippling of RBC (punctate basophilia)/ **Burtonian** line on gums

**Colic/ Constipation/ Coprophyrin** excess in urine/ **Cerebral**oedema

**Drop** (wrist, foot)

**Encephalopathy/ Emaciation**

**Foul** smell of breath/ **Failure** of kidneys/ **Fanconi** syndrome

**Gonadal** dysfunction/ **Gout**-like picture

**High** BP/ **Headache/ Hallucination/ Hyperaesthesia**

**Impotence/ Insomnia/ Irritability**

---

**Lethargy, malaise causes**

[ID 1109]

**FATIGUED:**

Fat/ Food (poor diet)

Anemia

Tumor

Infection (HIV, endocarditis)

General joint or liver disease

Uremia

Endocrine (Addison's, myxedema)

Diabetes/ Depression/ Drugs

Knowledge Level 3, System: Nervous

The Cashman University of Queensland, Australia

---

**Thickened nerves: causes**

[ID 1808]

**HANDS:**

Hansen's (leprosy)

Amyloidosis

Neurofibromatosis

Diabetes mellitus

Sarcoidosis

Knowledge Level 7, System: Nervous

Dr. Harsh Sharma

---

**Back pain causes**

Hi Yield [ID 237]

**DISK MASS** (since near vertebral disc):

Degeneration (DJD, osteoporosis, spondylosis)

Infection (UTI, PID, Pott's disease, osteomyelitis, prostatitis)/ Injury, fracture or compression fracture

Spondylitis (ankylosing spondyloarthropathies such as rheumatoid arthritis, Reiters, SLE)

Kidney (stones, infarction, infection)

Multiple myeloma/ Metastasis (from cancers of breast, kidney, lung, prostate, thyroid)

Abdominal pain (referred to the back)/ Aneurysm

Skin (herpes zoster)/ Strain/ Scoliosis and lordosis

Slipped disk/ Spondylolisthesis

Knowledge Level 3, System: Other/Miscellaneous

Anonymous Contributor

---

**Behcet's syndrome: diagnostic criteria**

[ID 1863]

**PROSE:**

Pathergy test (i/d saline injection)

Recurrent genital ulceration

Oral ulceration (recurrent)

Skin lesions

Eye lesions

Oral ulceration is central criteria, plus any 2 others.

Knowledge Level 7, System: Other/Miscellaneous

Dr. Harsh Sharma BJMC, Pune, India

---

**Ducket John's: major criteria**

[ID 1339]

**ACNES:**

Arthritis

Carditis

Nodule (subcutaneous)

Erythema marginatum

Sydenham chorea

Knowledge Level 3, System: Other/Miscellaneous

Atif Farooq Khawaja Rawalpindi Medical College, Horizon Medical Institute, Pakistan

---

**Fall: differential**

[ID 2791]



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**I SAVED PANGS:**

Illness  
Syncope  
Accident  
Vision  
Epilepsy (or other fit)  
Drugs  
Psychiatric (eg dementia)  
Anaemia  
Neurological (Parkinsons, cerebellar, neuropathy)  
Glucose (hypoglycemia)  
Stroke  
Knowledge Level 5, System: Other/Miscellaneous  
Steve

---

**ICU management: A to Z**

[ID 1563]

**A:** Asepsis/ Airway  
**B:** Bed sore/ encourage Breathing/ Blood pressure  
**C:** Circulation/ encourage Coughing/ Consciousness  
**D:** Drains  
**E:** ECG  
**F:** Fluid status  
**G:** GI losses/ Gag reflex  
**H:** Head positioning/ Height  
**I:** Insensible losses  
**J:** Jugular venous pulse  
**K:** Kindness  
**L:** Limb care/ Label  
**M:** Mouth care  
**N:** Nociception/ Nutrition  
**O:** Oxygenation/ Orient the patient  
**P:** Pulse/ Peristalsis/ Physiotherapy  
**Q:** Quiet surroundings  
**R:** Respiratory rate/ Restraint  
**S:** Stress ulcer/ Suctioning  
**T:** Temperature  
**U:** Urine  
**V:** Ventilator  
**W:** Wounds/ Weight  
**X:** Xerosis  
**Y:** whY  
**Z:** Zestful care of the patient  
Knowledge Level 9, System: Other/Miscellaneous  
Dr. Sonali Vadi

---

**Left iliac fossa: causes of pain**

[ID 1584]

**SUPER CLOT:**

Sigmoid diverticulitis  
Uteric colic  
PID  
Ectopic pregnancy  
Rectus sheath haematoma  
Colorectal carcinoma  
Left sided lower love pneumonia  
Ovarian cyst (rupture, torture)  
Threatened abortion/ Testicular torsion  
Knowledge Level 3, System: Other/Miscellaneous  
Sushant Varma Medical student, University of Sheffield, UK

---

**Sports injuries: course of action**

[ID 235]

---

**RICE:**

**Rest**

**Ice**

**Compression**

**Elevation**

RICE especially for fractures, sprains, muscle strains, contusions

Alternatively: I=Immobilization, C=Cold compresses.

Knowledge Level 1, System: Other/Miscellaneous

Mohamed Azim Assistant lecturer of Pediatric Surgery, Alexandria University, Egypt

---

**Acute stridor: differential**

Hi Yield [ID 1650]

**ABCDEFGH:**

With fever:

**Abscess**

**Bacterial tracheitis**

**Croup**

**Diphtheria**

**Epiglottitis**

Without fever:

**Foreign body**

**Gas (Toxic Gas)**

**Hypersensitivity**

Knowledge Level 2, System: Pulmonary

Anthony Chan Chinese University of Hong Kong

---

**Bronchiectasis: causes**

Hi Yield [ID 2624]

**A SICK AIRWAY:**

Airway lesion, chronic obstruction

Sequestration

Infection, inflammation

Cystic fibrosis

Kartagners syndrome

Allergic bronchopulmonary aspergilliosis

Immunodeficiencies (hypogammaglobinaemia, myeloma, lymphoma)

Reflux, inhalation injury

William Campbell syndrome (and other congenitals)

Aspiration

Yellow nail syndrome/ Young syndrome

Knowledge Level 3, System: Pulmonary

Mr. LW Mason 4th Year Medical Student

---

**Bronchiectasis: differential**

Hi Yield [ID 548]

**BRONCHIECTASIS:**

Bronchial cyst

Repeated gastric acid aspiration

Or due to foreign bodies

Necrotizing pneumonia

Chemical corrosive substances

Hypogammaglobulinemia

Immotile cilia syndrome

Eosinophilia (pulmonary)

Cystic fibrosis

Tuberculosis (primary)

Atopic bronchial asthma

Streptococcal pneumonia

In Young's syndrome

Staphylococcal pneumonia

Knowledge Level 4, System: Pulmonary

Benson Moses Benjamin JSS Medical College Mysore India

---

**Caplan syndrome: characteristics**

[ID 2479]

---

**CAPlan:**

Coal worker pneumoconiosis

Arthritis

Pulmonary nodule

Knowledge Level 6, System: Pulmonary

Anonymous Contributor

---

**Chronic cough: full differential**

[ID 2901]

---

**GASPS AND COUGH:**

GORD

Asthma

Smoking, chronic bronchitis

Post-infection

Sinusitis, post-nasal drip

ACE inhibitor

Neoplasm

Diverticulum

Congestive heart failure

Outer ear

Upper airway obstruction

GI-airway fistula

Hypersensitivity

Knowledge Level 7, System: Pulmonary

Fahed Al-Daour

---

**Clubbing: respiratory causes**

[ID 1589]

---

**ABCDEF:**

Abcess (lung)

Bronchiectasis (including CF)

Cancer (lung)

Decreased oxygen (hypoxia)

Empyema

Fibrosing alveolitis

Knowledge Level 3, System: Pulmonary

Anonymous Contributor

---

**Dyspnea: causes**

[ID 2903]

---

**SHE PANTS:**

Stress, anxiety

Heart disease

Emboli

Pulmonary disease

Anaemia

Neuromuscular disease

Trachea obstruction

Sleep disorder

Knowledge Level 1, System: Pulmonary

Fahed Al-Daour

---

**Hemoptysis: causes**

[ID 1802]

---

**HEMOPTYSIS:**

Haemorrhagic diathesis

Edema [LVF due to mitral stenosis]

Malignancy

Others [eg: vasculitis]

Pulmonary vascular abnormalities

Trauma

Your treatment [anticoagulants]

SLE

Infarction in lungs

Septic

Knowledge Level 9, System: Pulmonary

Dr. Sonali Vadi

---

**Pleural effusion: investigations**

[ID 2812]

**PLEURA:**

Pleural fluid (thoracentesis)

Lung, pleural biopsy

ESR

Ultrasound

Radiogram

Analysis of blood

Knowledge Level 2, System: Pulmonary

Huiquan Zhao Children Hospital, Cincinnati

---

**Pulmonary edema: treatment**

Hi Yield [ID 1678]

**LMNOP:**

Lasix

Morphine

Nitrates (NTG)

Oxygen

Position (upright vs. flat)

Knowledge Level 3, System: Pulmonary

Jeff Gilfor, M.D.

---

**Pulmonary edema: treatments**

[ID 1597]

**MAD DOG:**

Morphine

Aminophylline

Digitalis

Diuretics

Oxygen

GGases in blood (ABG's)

Knowledge Level 4, System: Pulmonary

Anonymous Contributor

---

**Pulmonary fibrosis: causes**

Hi Yield [ID 2045]

**SCAR:**

Upper lobe:

Silicosis/ Sarcoidosis

Coal worker pneumonconiosis

Ankylosing spondylitis

Radiation

Lower lobe:

Systemic sclerosis

Cytogenic fibrosing alveolitis

Asbetosis

Rheumatoid arthritis

Knowledge Level 4, System: Pulmonary

Anthony Chan

---

**Respiratory disease: hand signs**

[ID 1585]

**CASH:**

Clubbing

Asterixis

Small muscle wasting

**HPOA**

Knowledge Level 5, System: Pulmonary

Sushant Varma Medical student, University of Sheffield, UK

---

**Wheezing: causes**

Hi Yield [ID 2905]

---

**ASTHMA:**

Asthma

Small airways disease

Tracheal obstruction

Heart failure

Mastocytosis or carcinoid

Anaphylaxis or allergy

Knowledge Level 3, System: Pulmonary

Anonymous Contributor

---

**Back trouble causes**

[ID 165]

**O, VERSALIUS** (Versalius was the name of a famous physician):

Osteomyelitis

Vertebral fracture

Extraspinal tumour

Spondylolisthesis

Ankylosing spondylitis

Lumbar disk increase

Intraspinal tumor

Unhappiness

Stress

Knowledge Level 5, System: Skeletal

Anonymous Contributor

---

**INTERVIEWING / PHYSICAL EXAM**

---

**Abdomen assessment**

[ID 1543]

To assess abdomen, palpate all 4 quadrants for **DR. GERM**:

**Distension**: liver problems, bowel obstruction

**Rigidity** (board like): bleeding

**Guarding**: muscular tension when touched

**Eviseration/ Ecchymosis**

**Rebound tenderness**: infection

**Masses**

Knowledge Level 2, System: Alimentary

Lyssa Lenske Mount Saint Mary's College BSN Program

---

**Alcohol abuse screening questions**

[ID 139]

**CAGE**:

1. Ever felt it necessary to Cut down on drinking?

2. Has anyone ever said they felt Annoyed by your drinking?

3. Ever felt Guilty about drinking?

4. Ever felt a need to have a morning drink as an Eye opener?

Knowledge Level 3, System: Alimentary

Anonymous Contributor

---

**Vomiting: non-GIT differential**

[ID 323]

**ABCDEFGHI**:

Acute renal failure

Brain [increased ICP]

Cardiac [inferior MI]

**DKA**

Ears [labyrinthitis]

Foreign substances [Tylenol, theo, etc.]

**Glaucoma**

**Hyperemesis gravidarum**

Infection [pyelonephritis, meningitis]

Knowledge Level 3, System: Alimentary

Ken Evans Saskatchewan Health, Acute and Emergency Services

---

**Branham sign: definition**

[ID 2278]

**BR**Anham sign:

**BR**Adycardia after compression or excision of a large AV fistula.

Knowledge Level 8, System: Cardiovascular

Anonymous Contributor

---

**Heart auscultation sites: ribs**

[ID 3236]

**Apt. M 225A:**

Aortic valve

Pulmonary valve

Tricuspid valve

Mitral valve

In order they correspond with the following landmarks:

2nd intercostal space (right)

2nd intercostal space (left)

5th intercostal space (left)

Apex (still the 5th intercostal space)

Knowledge Level 1, System: Cardiovascular

John Medical school

---

**Heart valve auscultation sites**

Hi Yield [ID 543]

"All Patients Take Meds":

Reading from top left:

Aortic

Pulmonary

Tricuspid

Mitral

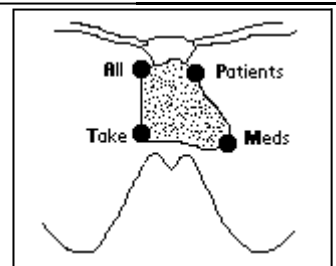
See diagram.

Alternatively: **All Prostitutes Take Money.**

Alternatively: **APe To Man.**

Knowledge Level 1, System: Cardiovascular

Anonymous Contributor and Raarsi and Dana M. Not specified and University of Birmingham Medical School and MCC Michigan



---

**Heart valve auscultation sites**

Hi Yield [ID 1784]

"All People Try Marijuana":

Aortic

Pulmonic

Tricuspid

Mitral

Knowledge Level 1, System: Cardiovascular

Leah Harris Tufts University School of Medicine

---

**Eyes: abbreviations for the eyes**

[ID 405]

You look **OU**t with **Both** eyes.

Take the **Right** dose so you won't **OD** [overdose].

The only one that is **Left** is **OS**.

Both eyes=OU, Right eye=OD, Left eye=OS.

Knowledge Level 7, System: Nervous

Deborah Belty, RN, MS Tulsa Community College

---

**Glasgow coma scale: components and numbers**

Hi Yield [ID 2288]

Scale types is 3 **V**s:

Visual response

Verbal response

Vibratory (motor) response

Scale scores are 4,5,6:

Scale of **4**: see so much **more**

Scale of **5**: talking **jive**

Scale of **6**: feels the **pricks** (if testing motor by pain withdrawal)

Knowledge Level 1, System: Nervous

Rinku Uberoi and Robert O'Connor

---

**Mental state examination: stages in order**

[ID 2150]

---

"Assessed Mental State To Be Positively Clinically Unremarkable":

Appearance and behaviour [observe state, clothing...]

Mood [recent spirit]

Speech [rate, form, content]

Thinking [thoughts, perceptions]

Behavioural abnormalities

Perception abnormalities

Cognition [time, place, age...]

Understanding of condition [ideas, expectations, concerns]

Knowledge Level 5, System: Nervous

Hafizur Rahman MRI-Manchester Med School

---

**Pain history checklist**

[ID 339]

**OPQRSTU:**

Onset of pain (time, duration)

Palliative factors for pain

Quality of pain (throbbing, stabbing, dull, etc.)

Region of body affected

Severity of pain (usually scale of 1-10)

Timing of pain (after exercise, in evening, etc.)

U: How does it affect 'U' in your daily life?

May wish to expand to **OPPQRRSTTUVW**, with the extra letters representing:

Provocative factors

Radiation (how does pain spread)

Treatments tried

Deja Vu: Has this happened before?

Worry: What do you think or fear that it is?

Knowledge Level 1, System: Nervous

Midnight Medic and Robert Lueken and Michael Waddell Paramedic in Texas and Eastern Virginia Medical School and University of Wisconsin Medical School

---

**Pain history checklist**

[ID 457]

"On Days Feeling Low Character, Run A Seven Pace Race":

Onset

Duration

Frequency

Location

Character

Radiation

Severity

Precipitating factors

Relieving factors

Knowledge Level 1, System: Nervous

Carrie Davis, RNC, MSN, WHNP Obici Health System

---

**Pain history checklist**

[ID 497]

**ASK LAST:**

Aggravating/ Alleviating

Severity

Karacter

Location

Associated symptoms

Setting

Timing

Knowledge Level 1, System: Nervous

Miguel Gonzalez Chicago Medical School

---

**Pain history checklist**

[ID 501]

---

**SOCRATES:**

Site

Onset

Character

Radiation

Alleviating factors/ Associated symptoms

Timing (duration, frequency)

Exacerbating factors

Severity

Alternatively, **S**igns and **S**ymptoms with the 'S'.

Knowledge Level 1, System: Nervous

Piyush and Shirish Toshniwal and Jonathan Round and Neil Mckeen Cambridge and Smt. NHL Medical College, Ahmedabad and RFUCMS

---

**Pain history checklist**

[ID 843]

**LOST WAR:**

Location

Onset

Severity

Time

Worsening factors

Alleviating factors

Radiation

Knowledge Level 1, System: Nervous

Jane Day Nottingham Medical School

---

**Pain history checklist**

[ID 966]

**CHLORIDE:**

**C**haracter (stabbing, throbbing, etc.)

Location

Onset

Radiation

Intensity

Duration

Exacerbating and alleviating factors

Knowledge Level 1, System: Nervous

Anonymous Contributor Student

---

**Pain history checklist**

[ID 1527]

**MR. C T FARADS:**

Main site

Radiation

Character

Timing

Frequency

Associated factors

Relieving factors

Aggravating factors

Duration

Severity

Knowledge Level 1, System: Nervous

Anonymous Contributor

---

**Pain history checklist**

[ID 1781]

**CLITORIS:**

Character

Location

Intensity

Timing

Onset

Radiating

Irritating and relieving factors

Symptoms associated

Knowledge Level 1, System: Nervous

Nick Rukin Birmingham Medical School, UK



**Pain history checklist**

[ID 2008]

**COLDER BARS:**

Character

Onset

Location

Duration

Exacerbating factors

Radiation

Before (ever happened before)

Associated symptoms

Relieving factors

Severity

Knowledge Level 1, System: Nervous

Marcus Chia University of Sydney Medical Program

**Pain history checklist**

[ID 2083]

**SO CRAP:**

Site

Onset

Character

Radiates to

Associated symptoms/ Alleviating and exacerbating factors

Periodicity

Knowledge Level 1, System: Nervous

Polly Weston Bristol University Med School

**Abdominal swelling causes**

[ID 194]

9 F's:

Fat

Feces

Fluid

Flatus

Fetus

Full-sized tumors

Full bladder

Fibroids

False pregnancy

Knowledge Level 1, System: Other/Miscellaneous

Richard Thompson and Alex Queens University, Belfast, NI and Not Specified

**Clinical examination: initial inspection of patient from end of bed**

[ID 3076]

**ABC:**

Appearance (SOB, pain, etc)

Behaviour

Connections (drips, inhalers, etc connected to patient)

Knowledge Level 2, System: Other/Miscellaneous

Jamal Khan Birmingham University Medical Student

**Differential diagnosis**

[ID 1141]

**CIMETIDINE:**

Congenital

Infection/ Inflammatory

Metabolic

Endocrine

Trauma

Iatrogenic

Degenerative

Idiopathic

Neoplastic

Everything else

Knowledge Level 1, System: Other/Miscellaneous

Chng Chiaw Ling NUS, Singapore

**Differential diagnosis checklist**

[ID 342]

---

**"A VITAMIN C"**

**A** and **C** stand for **A**cquired and **C**ongenital

VITAMIN stands for:

Vascular

Inflammatory (**I**nfectious and non-**I**nfectious)

Trauma/ **T**oxins

Autoimmune

Metabolic

Idiopathic

Neoplastic

Example usage: List causes of decreased vision: Central retinal artery occlusion, Retinitis pigmentosa, Perforation to globe, Chronic Gentamycin use, Rheumatoid arthritis, Diabetes, Idiopathic, Any eye tumor, Myopia.

Knowledge Level 1, System: Other/Miscellaneous

Nizaar Lilla University Of Cape Town Medical School

---

**Differential diagnosis checklist**

[ID 664]

**"I VINDICATE AID":**

Idiopathic

Vascular

Infectious

Neoplastic

Degenerative

Inflammatory

Congenital

Autoimmune

Traumatic

Endocrinal and metabolic

Allergic

Iatrogenic

Drugs

Knowledge Level 1, System: Other/Miscellaneous

Michael A. Chaplin SUNY-HSCB Downstate College of Medicine

---

**Differential diagnosis checklist**

[ID 1840]

**DIRECTION:**

Drugs

Infection

Rheumatologic

Endocrine

Cardiovascular

Trauma

Inflammatory

Other

Neoplasm

Knowledge Level 1, System: Other/Miscellaneous

Michael Waddell University of Wisconsin Medical School

---

**Family history (FH)**

[ID 1830]

**BALD CHASM:**

Blood pressure (high)

Arthritis

Lung disease

Diabetes

Cancer

Heart disease

Alcoholism

Stroke

Mental health disorders (depression, etc.)

Knowledge Level 2, System: Other/Miscellaneous

Michael Waddell University of Wisconsin Medical School

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**Four point physical assessment of a disease**

[ID 593]

---

"**Tm A People Person**":

**Inspection**

**Auscultation**

**Percussion**

**Palpation**

Knowledge Level 1, System: Other/Miscellaneous

Anonymous Contributor

---

**Health related behavior (HRB) topics: history taking**

[ID 1890]

"Healthy **SEEDS**":

**Substances** (alcohol, tobacco, IV drugs?)

**Environment** (hazards at home or work? feel safe?)

**Exercise** (what do you do? how often do you do it?)

**Diet** (any special diet?)

**Sex** (active with m/f/both? >1 partner? safe sex? STD history? difficulty with arousal or orgasm? history of abuse?)

I find this order works well: patients most expect to be asked about alcohol and they least want to talk about their STD history, but taking a solid HRB history first reassures them that it's all part of good medical care.

Knowledge Level 4, System: Other/Miscellaneous

Patrick Lee UCSF Medical School

---

**History taking -past medical history**

[ID 2825]

**ABCDEFGHI:**

**Asthma**

**Blood pressure** (say: 'blood pressure problems')

**CVA** (say: 'stroke')

**Diabetes mellitus** (say: 'diabetes')

**Epilepsy**

**Fever, rheumatic**

**Gastrointestinal** (jaundice)

**Heart attack**

**Infection** (TB)

Knowledge Level 1, System: Other/Miscellaneous

Dave Gale Sheffield University Medical School

---

**History, HCFA components for E+M coding**

[ID 2110]

**Q LSD MCAT:**

**Quality**

**Location**

**Severity**

**Duration**

**Modifying factors**

**Context**

**Associated signs and symptoms**

**Timing**

Knowledge Level 1, System: Other/Miscellaneous

Robert P Lemmon III, MD Village Family Medicine

---

**History: quick EMS medical history checklist**

[ID 338]

**SAMPLE:**

**Signs/ Symptoms**

**Allergies**

**Medications**

**Pertinent history**

**Last oral intake**

**Events preceding this incident**

Knowledge Level 1, System: Other/Miscellaneous

Midnight Medic Paramedic in Texas

---

**Medical history: disease checklist**

[ID 407]

---

**MJ THREADS:**

Myocardial infarction

Jaundice

Tuberculosis

Hypertension

Rheumatic fever/ Rheumatoid arthritis

Epilepsy

Asthma

Diabetes

Strokes

Aside: "History" album was by Michael Jackson (MJ).

Knowledge Level 1, System: Other/Miscellaneous

Soumendra Datta University College London Medical School

---

**Past medical history (PMH)**

[ID 1828]

**VAMP THIS:**

Vices (tobacco, alcohol, other drugs, sexual risks)

Allergies

Medications

Preexisting medical conditions

Trauma

Hospitalizations

Immunizations

Surgeries

Knowledge Level 3, System: Other/Miscellaneous

Michael Waddell University of Wisconsin Medical School

---

**Pathologic classification**

[ID 1881]

**NIT DIT FIT:**

Neoplastic

Infectious

Traumatic

Degenerative/ Drugs

Immune

Toxic

Vascular

Inflammatory

Totally obscure

Knowledge Level 1, System: Other/Miscellaneous

Darren Markland University of Alberta

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**Patient examination organization**

[ID 203]

**SOAP:**

Subjective: what the patient says.

Objective: what the examiner observes.

Assessment: what the examiner thinks is going on.

Plan: what they intend to do about it.

Knowledge Level 1, System: Other/Miscellaneous

Richard Rathe, MD University of Florida

---

**Patient profile (PP)**

[ID 1829]

**LADDERS:**

Living situation/ Lifestyle

Anxiety

Depression

Daily activities (describe a typical day)

Environmental risks/ Exposure

Relationships

Support system/ Stress

Knowledge Level 2, System: Other/Miscellaneous

Michael Waddell University of Wisconsin Medical School

---

**Patient's model of illness (illness history)**

[ID 3016]

---

**"DC REF Fears Similar Decision At ER":**

**Definition**

**Cause**

**Reasoning**

**Effect**

**Future**

**Fears** and concerns

**Similar** experiences

**Decision**-making

**Attempts** at treatment

**Expectations** of treatment

**Results**

Knowledge Level 8, System: Other/Miscellaneous

Michael Huang School of Medicine, University of Melbourne, Australia

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**Physical exam for 'lumps and bumps'**

[ID 615]

"6 Students and 3 Teachers go for **CAMPFIRE**":

**Site, Size, Shape, Surface, Skin, Scar**

**Tenderness, Temperature, Transillumination**

**Consistency**

**Attachment**

**Mobility**

**Pulsation**

**Fluctuation**

**Irreducibility**

**Regional lymph nodes**

**Edge**

Knowledge Level 5, System: Other/Miscellaneous

Lau Yue Young Geoffrey

---

**Physical examination - correct order**

[ID 2813]

"**I Palpate People's Abdomens**":

**Inspection**

**Palpation**

**Percussion**

**Auscultation**

Knowledge Level 1, System: Other/Miscellaneous

Jim McHugh St George's, London

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**Pyrexia of Unknown Origin: history taking**

[ID 1885]

**SIT ON FRAD:**

**Sexual history**

**Immunisation status**

**Travel history**

**Occupational history**

**Nutrition** (consumption of dairy products, etc.)

**Family history**

**Recreational habits**

**Animal contacts** (including ticks and other vectors)

**Drug history**

Knowledge Level 8, System: Other/Miscellaneous

Dr. Sonali Vadi

---

**Short statue causes**

[ID 866]

**RETARD HEIGHT:**

**Rickets**

**Endocrine** (cretinism, hypopituitarism, Cushing's)

**Turner syndrome**

**Achondroplasia**

**Respiratory**(suppurative lung disease)

**Down syndrome**

**Hereditary**

**Environmental** (postirradiation, postinfectious)

**IUGR**

GI (malabsorption)  
Heart (congenital heart disease)  
Tilted backbone (scoliosis)  
Knowledge Level 9, System: Other/Miscellaneous  
Lau Yue Young Geoffrey Medical Student '03, Hong Kong University

---

**Sign vs. symptom**

[ID 396]

s**I**gn: something **I** can detect even if patient is unconscious.  
s**Y**mp**t**om is something only h**Y**M knows about.  
Knowledge Level 1, System: Other/Miscellaneous  
Anonymous Contributor

---

**Sign vs. symptom**

[ID 1246]

Remember Ace of Base's song that goes like this:  
"**I Saw the Sign**, and it opened up my eyes".  
The physician sees the signs.  
Knowledge Level 1, System: Other/Miscellaneous  
Lee

---

**Surgical sieve**

[ID 650]

**VANISHED:**  
Vascular  
Accident & trauma  
Neoplastic  
Inflammatory  
Septic  
Haematologic/ Hereditary  
Endocrinological  
Degenerative  
Knowledge Level 1, System: Other/Miscellaneous  
Anonymous Contributor University of Otago Medical School, New Zealand

---

**Surgical sieve for diagnostic categories**

[ID 2116]

**INVESTIGATIONS:**  
Iatrogenic  
Neoplastic  
Vascular  
Endocrine  
Structural/ Mechanical  
Traumatic  
Inflammatory  
Genetic/ Congenital  
Autoimmune  
Toxic  
Infective  
Old age/ Degenerative  
Nutritional  
Spontaneous/ Idiopathic  
Knowledge Level 1, System: Other/Miscellaneous  
Neil Curran Medical Student, Otago University New Zealand

---

**Symptom attributes**

[ID 509]

"**FAST LQQ'S**":  
Factors that make it better/worse  
Associated manifestations  
Setting  
Timing  
Location  
Quality  
Quantity  
Severity  
Knowledge Level 1, System: Other/Miscellaneous  
Ron Norman AECC

## Symptom sieve

[ID 819]

"**TIN CAN BED DIP POG**":

Trauma

Infection

Neoplasm

Cardiac

Autoimmune

Neurological

Blood/ Bone

Endocrine

Disintegration/ Degeneration

Drugs

Iatrogenic/ Idiopathic

Psychological

Paediatric

Obstetric

Gynaecological

Knowledge Level 1, System: Other/Miscellaneous

Anonymous Contributor

## Systems review: systems checklist

[ID 2683]

**I PUNCH EAR:**

Integumental

Pulmonary

Urogenital

Nervous

Cardiovascular

Hematolymphoid

Endocrine

Alimentary

Reproductive

Knowledge Level 1, System: Other/Miscellaneous

Beth Ann Young and Robert O'Connor Kent State Univeristy, Nursing Student and University College Dublin

## Ascultation: crackles (rales)

[ID 898]

"**PEBbles**":

Pneumonia

Edema of lung

Bronchitis

Knowledge Level 2, System: Pulmonary

Samuel Atom Baek-Kim

## Consolidations: sound

[ID 1801]

Consolidations

Conduct

Consonants

Clearly

Knowledge Level 5, System: Pulmonary

Elden Rand BAMC, San Antonio, TX

## Breast history checklist

[ID 1919]

**LMNOP:**

Lump

Mammary changes

Nipple changes

Other symptoms

Patient risk factors

Knowledge Level 1, System: Reproductive

Gajan Rajeswaran Final Year Medical Student, Imperial College School Of Medicine, London

## MICROBIOLOGY

### Clostridium difficile: disease caused

Hi Yield [ID 47]

---

"**D**ifficult to be in a **C**loset with someone having **explosive foul smelling diarrhea**, because it would smell and there would be **no air** in there.

**Clostridium Difficile** causes **explosive foul smelling diarrhea** and is an anaerobe (**no air**).

Knowledge Level 2, System: Alimentary

Robert O'Connor University College Dublin

---

**E. coli: diseases caused in presence of virulence factors**

Hi Yield [ID 887]

**DUNG:**

**Diarrhea**

**UTI**

**Neonatal meningitis**

**Gram negative sepsis**

Dung, since contract E. coli from **dung**-contaminated water.

Knowledge Level 2, System: Alimentary

Robert O'Connor University College Dublin

---

**E. coli: major subtypes, key point of each**

Hi Yield [ID 2184]

"**HIT** by E. coli outbreak":

Enterohemorrhagic:

**HUS** from **Hamburgers**

Enteroinvasive:

**Immune-mediated Inflammation**

Enterotoxigenic:

**Traveller's diarrhea**

Knowledge Level 1, System: Alimentary

Robert O'Connor University College Dublin

---

**Entamoeba histolytica: disease caused, action**

Hi Yield [ID 46]

Entamoeba causes **Amoebic dysentery**.

Action: histo (cell) lytic (burst), so it bursts cells.

Knowledge Level 2, System: Alimentary

Robert O'Connor University College Dublin

---

**Food poisoning: bugs inducing**

Hi Yield [ID 2695]

"**Eating Contaminated Stuff Causes Very Big Smelly Vomit**":

**E. coli O157-H7** [undercooked meat, esp. hamburgers]

**Clostridium botulinum** [canned foods]

**Salmonella** [poultry, meat, eggs]

**Vibrio parahaemolyticus** [seafood]

**Bacillus cereus** [reheated rice]

**Staphylococcus aureus** [meats, mayo, custard]

**Clostridium perfringens** [reheated meat]

**Vibrio vulnificus** [seafood]

Knowledge Level 1, System: Alimentary

Joel Camilo Universidad Iberoamericana (UNIBE), Santo Domingo, Dominican Republic

---

**Hepatitis: oral-fecal transmitted types**

Hi Yield [ID 1015]

"**A\$\$ Eaters**":

Types **A** and **E** by oral-fecal route.

Knowledge Level 4, System: Alimentary

Anonymous Contributor

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**Nematodes: ones spreading by egg ingestion**

[ID 2674]

"**ATE eggs**":

**Ascaris Lumbricoides**

**Trichuris trichiura**

**Enterobius vermicularis**

spread by ingestion of eggs (vs skin invasion or insect bite)

Knowledge Level 6, System: Alimentary

Leena Alexander Texas, USA

---

**Vibrio: motility**

[ID 839]



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"**Vibrio Vibrates**":

Vibrio is a genus of actively motile bacteria.

Knowledge Level 5, System: Alimentary

Anonymous Contributor

---

**Endocarditis: causes of culture negative endocarditis**

[ID 1952]

"**With Negative Tests, Investigators Should Focus Attention Somewhere Meaningful**":

**Wrong diagnosis**

**Noninfectious endocarditis**

**Timing** (cultures drawn at end of chronic course)

**obligate Intracellular organisms**

**Slow growing fastidious organisms**

**Fungal infection**

**Antibiotic used previously**

**Subacute right-sided endocarditis**

**Mural endocarditis**

Knowledge Level 7, System: Cardiovascular

David Lucey University College Dublin

---

**Endocarditis: indications for surgery**

[ID 1953]

**PUS RIVER:**

**Prosthetic valve endocarditis** (most cases)

**Uncontrolled infection**

**Supporative local complications with conduction abnormalities**

**Resection of mycotic aneurysm**

**Ineffective antimicrobial therapy** (eg Vs fungi)

**Valvular damage** (significant)

**Embolization** (repeated systemic)

**Refractory congestive heart failure**

Knowledge Level 5, System: Cardiovascular

David Lucey University College Dublin

---

**Endocarditis: lab results suggesting it**

[ID 1951]

"**High Tech Lab Results Point At Endocarditis**":

**Hematuria**

**Thrombocytopenia**

**Leukocytosis, -penia**

**Red blood cell casta**

**Proteinuria**

**Anemia**

**Elevated ESR**

Knowledge Level 5, System: Cardiovascular

David Lucey University College Dublin

---

**Pseudomonas aeruginosa: features**

[ID 1999]

**AERUGINOSA:**

**Aerobic**

**Exotoxin A**

**Rod/ Resistance**

**UTIs, burns, injuries**

**Green-blue dressings**

**Iron-containing lesions**

**Negative gram**

**Odor of grapes**

**Slime capsule sometimes** (in CF pt)

**Adherin pili**

Knowledge Level 1, System: Integumental

Joyce Egbe

---

**Acute post-streptococcal glomerulonephritis: classic presentation**

[ID 856]

"Sore **throat**, Face **bloat**, Pi\$\$ **coke**":

Sore **throat**: 1 week ago

Face **bloat**: facial edema

Pi\$\$ **coke**: coke-coloured urine

Alternatively, short version: "**Throat, bloat and coke**".

Knowledge Level 4, System: Kidney/Urine

Robert O'Connor University College Dublin

### Kidney transplant virus

[ID 623]

"Borrowed **Kidney**":

**BK** virus is associated with kidney transplants.

Knowledge Level 6, System: Kidney/Urine

Anonymous Contributor

### Proteus: disease caused

Hi Yield [ID 377]

Firstly, "**PRO**Teus hates **PRO**Tons":

So what does it do to fight the protons? It has a urease that raises the pH.

Urea is in urine, so Proteus causes UTIs.

Knowledge Level 3, System: Kidney/Urine

James Meltzer MSII, Albert Einstein College of Medicine

### Pseudomonas details

Hi Yield [ID 363]

See diagram of patient.

Patient: bug commonly infects nosocomial.

Oxygen tank: oxidase positive.

IV bag: has glucose and lactose, so its OK to give because its a nonlactose fermenter.

Why giving oxygen? Because it commonly caused pneumonia.

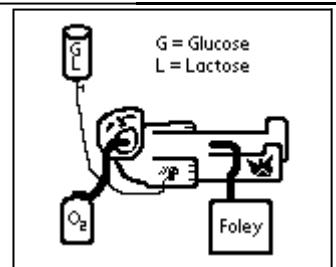
IV in the arm: supposed to signify sepsis.

The foley: UTI.

Burn on his foot: can infect burns.

Knowledge Level 2, System: Kidney/Urine

Anonymous Contributor



### UTI-causing microorganisms

Hi Yield [ID 1956]

**KEEPS:**

**K**lebsiella

**E**nterococcus faecalis/ **E**nterobacter cloacae

**E**. coli

**P**seudomonas aeruginosa/ **P**roteus mirabilis

**S**taphylococcus saprophyticus/ **S**erratia marcescens

Knowledge Level 2, System: Kidney/Urine

Kok Fai Kong University of Auckland

### AIDS pathogens (T-cell suppression) worth knowing

Hi Yield [ID 2261]

"The Major Pathogens Concerning Complete T-Cell Collapse":

**T**oxoplasma gondii

**M.** avium intracellulare

**P**neumocystis carinii

**C**andida albicans

**C**ryptococcus neoformans

**T**uberculosis

**CMV**

**C**ryptosporidium parvum

Knowledge Level 4, System: Lymphoid

Robert Brown UTHSCSA MS2

### Capsulated microbes

Hi Yield [ID 3213]

---

"Some Nasty Killers Have Some Capsule Protection":

**S**treptococcus pneumoniae

**N**eisseria meningitidis

**K**lebsiella pneumoniae

**H**aemophilus influenzae

**S**almonella typhi

**C**ryptococcus neoformans

**P**seudomonas aeruginosa

Knowledge Level 2, System: Lymphoid

Dr. Bijita Banerjee and Sabry Kamel University of Calcutta, West-Bengal, India and Not Specified

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#### Endotoxin features

[ID 638]

**ENDOTOXIN:**

Endothelial cells/ **E**dema

Negative (gram- bacteria)

**DIC/ D**eath

**O**uter membrane

**TNF**

**O**-antigen

**X**-tremely heat stable

**IL**-1

Nitric oxide/ Neutrophil chemotaxis

Knowledge Level 3, System: Lymphoid

Rinku Uberoi UNIBE

---

#### HIV infection: high-risk groups

[ID 1245]

**HIV:**

**H**omosexuals/ **H**emophiliacs

**IV** drug abusers

Knowledge Level 1, System: Lymphoid

Anonymous Contributor

---

#### IgA protease-producing bacteria

[ID 1337]

"Nice Strip of Ham":

**N**eisseria

**S**treptococcus pneumonia

**H**aemophilus influenza

Knowledge Level 7, System: Lymphoid

Marc Miller Sackler School of Medicine

---

#### Vaccines: types

[ID 2251]

**STARK:**

Subunit

Toxoid

Attenuated [live]

**R**ecombinant

**K**illed [inactivated]

Knowledge Level 1, System: Lymphoid

Anonymous Contributor

---

#### Tetanus: treatment for infection

[ID 2311]

**SAD RAT:**

Sedation

Antitoxin

**D**ebridement

**R**elaxant

**A**ntibiotic

**T**racheostomy

Knowledge Level 6, System: Muscle

Felix Fandiñola West Visayas State University, Philippines

---

#### Meningitis: risk factors

[ID 1954]

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"Can Induce Severe Attacks Of Head PAINS":

Cancer

Immunocompromised state

Sinusitis

Age extremes

Otitis

Head trauma

Parameningeal infection

Alcoholism

Infections (systemic, esp. respiratory)

Neurosurgical procedures

Splenectomy

Knowledge Level 2, System: Nervous

David Lucey University College Dublin

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### Toxoplasma gondii: clinical features

Hi Yield [ID 1031]

Cat reservoir: a cat.

Bug name is Gondii: cat has a Gandhi head.

Cat fecal origin: cat is in the litter box.

Causes brain infection, diagnosed by CAT scan: a "CAT" scan of Gandhi's brain.

Toxic to eyes: Gandhi has cat eyes.

Lymph nodes enlarged: large nodes around neck.

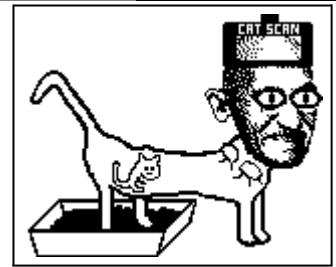
Affects fetus: small kitten in womb.

AIDS patient commonly: cat is very skinny, like an AIDS patient.

See diagram.

Knowledge Level 3, System: Nervous

Robert O'Connor University College Dublin



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### Toxoplasma gondii: manifestations

Hi Yield [ID 2053]

"My Cat Eats Mice":

Mononucleosis-like illness

Chorioretinitis/ Congenital infection

Encephalitis

Myocarditis

Knowledge Level 3, System: Nervous

Anonymous Contributor

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### Trypanosoma brucei: disease caused

Hi Yield [ID 2120]

"I went on a TRYP to AFRICA":

TRYPanosoma brucei causes AFRICAn sleeping sickness.

Knowledge Level 2, System: Nervous

Anonymous Contributor

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### Capsulated bacteria

Hi Yield [ID 2593]

"Some Bacteria Have An Effective Paste Surrounding Membrane Yielding Pseudo Fort, Bypassing Killing":

Strep pneumonia

Bacteroides

H. influenza

Anthrax (B. anthracis)

E. coli

Pasteurella

Salmonella

Menigitidis (N. Menigitidis)

Yersinia pestis

Pseudomonas

Francisella

Brucella

Klebsiella

Knowledge Level 3, System: Other/Miscellaneous

Michel Nawfal

---

### Chlamydia: elementary vs. initial body location

[ID 2100]

---

Elementary: Extracellular

Initial: Intracellular

Knowledge Level 2, System: Other/Miscellaneous

Anonymous Contributor

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**Common cold: viral causes**

Hi Yield [ID 1731]

"Common cold (acute infectious rhinitis, coryza) is **PRIMA**rily caused by":

Paramyxoviruses

Rhinoviruses

Influenza viruses

Myxoviruses

Adenoviruses

Knowledge Level 3, System: Other/Miscellaneous

Anonymous Contributor

---

**DNA viruses: morphology rule of thumb**

Hi Yield [ID 1608]

**DNA:**

Double-stranded

Nuclear replication

'Anhedral symmetry

Rule breakers: pox (cytoplasmic), parvo (single-stranded).

Knowledge Level 1, System: Other/Miscellaneous

Robert O'Connor University College Dublin

---

**Gram positive stain**

Hi Yield [ID 1668]

Gram Positives

Stain Purple (violet-blue)

because of their thick Peptidoglycan layer

Knowledge Level 1, System: Other/Miscellaneous

JuP University of Washington

---

**Gram staining: mechanism**

[ID 1160]

"Murein gets the red out" [Allusion to an old eye-wash slogan]:

Peptidoglycan (aka murein) remains purple during Gram staining. The Gram negatives, devoid of murein, are red.

Thus, murein prevents redness and are purple (positive).

Knowledge Level 4, System: Other/Miscellaneous

Caoimhín P. Connell Industrial Hygienist

---

**Gram+: bacterial cell wall**

Hi Yield [ID 840]

Gram+ has:

+thick peptidoglycan layer.

+teichoic acid in wall.

Knowledge Level 1, System: Other/Miscellaneous

Gilvano Amorim Oliveira Universidade de Santo Amaro- São Paulo Brasil.

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**Hemophilus: culture requirements**

Hi Yield [ID 1591]

Read Hemophilus as "HemoFive":

Needs **Heme** with Factors **Five** and Ten.

Knowledge Level 3, System: Other/Miscellaneous

Dr. Atif Farooq Rawalpindi Medical College, Pakistan, Gujranwal

---

**Listeria: motility**

[ID 845]

Istanbul sounds like **Listambul** = list + tumble.

**Listeria** has **tumbling** motility.

Knowledge Level 5, System: Other/Miscellaneous

Lior Greenberg Technion Faculty of Medicine, Haifa, Israel

---

**Neisseria: fermentation of N. gonorrhoeae vs. N. meningitidis**

Hi Yield [ID 1905]

Gonorrhoeae: Glucose fermenter only.

MeninGitis: Maltose and Glucose fermenter.

Maltose fermentation is a useful property to know, since it's the classic test to distinguish the Neisseria types.

Knowledge Level 2, System: Other/Miscellaneous

Anonymous Contributor

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**Obligate anaerobes: members worth knowing**

Hi Yield [ID 2199]

**ABC:****Actinomyces****Bacteroides****Clostridium**

Knowledge Level 1, System: Other/Miscellaneous

Sung Hoon Kim El Paso, TX

---

**Picornavirus: features**

Hi Yield [ID 1849]

**PICORNA**virus:**Positive** sense**ICO**sahedral**RNA** virus

Knowledge Level 2, System: Other/Miscellaneous

Dr. Khawaja Atif Farooq Rawalpindi Medical College, Pakistan, Gujranwala

---

**RNA enveloped viruses**

Hi Yield [ID 2177]

**FORT ABC, Puerto Rico:****Flavivirus/ Filo****Orthomyxo****Retro****Toga****Arena****Bunya****Corona****Paramyxo****Rhabdo**

Knowledge Level 1, System: Other/Miscellaneous

Sung Hoon Kim El Paso, TX

---

**RNA viruses: negative stranded**

Hi Yield [ID 1940]

**"Orthodox Rhabbi's Party Around Fine Bunnies":****Orthomyxo****Rhabdo****Paramyxo****Arena****Filo****Bunya**

Knowledge Level 1, System: Other/Miscellaneous

Rodolfo Chirinos Universidad Central del Caribe, PR

---

**RNA viruses: positive stranded**

Hi Yield [ID 1941]

**"Pico Called Flavio To Return Renzo's Corona":****Picorna****Calici****Flavi****Toga****Retro****Reo****Corona**

Knowledge Level 1, System: Other/Miscellaneous

Rodolfo Chirinos Universidad Central del Caribe, PR

---

**Staphylococci: novobiocin test to distinguish coagulase negative staphylococci**

[ID 848]

Staph **epidermidis** stays away from the novobiocin disc like an **epidemic**.

Therefore, epidermidis is sensitive to novobiocin.

Staph **saprophyticus**, much friendlier, comes up to the disc and says, **"sap?"** [short for "whassup?", ie "what's up"].

Therefore, saprophyticus is novobiocin resistant.

Knowledge Level 5, System: Other/Miscellaneous

Lior Greenberg Technion Faculty of Medicine, Haifa, Israel

---

**Staphylococcus aureus: diseases caused**

Hi Yield [ID 1072]

---

**SOFT PAINS:**

Skin infections

**O**steomyelitis

Food poisoning

Toxic shock syndrome

**P**neumonia

Acute endocarditis

**I**nfective arthritis

**N**ecrotizing fasciitis

**S**epsis

Knowledge Level 7, System: Other/Miscellaneous

Marc Miller Sackler School of Medicine

---

**Streptococci: classification by hemolytic ability**

[ID 857]

**Gamma:** Garbage (no hemolytic activity).

**Alpha:** Almost (almost lyse, but incomplete).

**Beta:** Best (complete lysis).

Knowledge Level 1, System: Other/Miscellaneous

Robert O'Connor University College Dublin

---

**Streptococcus pyogenes: diseases caused**

Hi Yield [ID 1816]

**NIPPLES:**

Necrotising fasciitis and myositis

**I**mpetigo

**P**haryngitis

**P**neumonia

**L**ymphangitis

**E**rysipelas and cellulitis

Scarlet fever/ Streptococcal TSS

Knowledge Level 2, System: Other/Miscellaneous

Dr. Harsh Sharma

---

**Streptococcus pyogenes: virulence factors**

[ID 1640]

**SMASHED:**

**S**treptolysins

**M** protein

**A**nti-C5a peptidase

**S**treptokinase

**H**yaluronidase

**E**xotoxin

**D**NAses

Knowledge Level 4, System: Other/Miscellaneous

Anonymous Contributor

---

**Streptococcus pyogenes: antibody**

[ID 891]

**SPAM:**

Streptococcus Pyogenes: Antibody to **M** protein.

Knowledge Level 1, System: Other/Miscellaneous

Anonymous Contributor

---

**Typhus: Epidemic Typhus: etiologic agent, vector**

[ID 2750]

**e**Pidemic typhus:

Etiological agent: Rickettsia **P**rowazekii.

Vector: **P**ediculus corporis (human body louse).

This is in contrast to Endemic typhus.

Knowledge Level 1, System: Other/Miscellaneous

Joel Camilo Universidad Iberoamericana (UNIBE), Santo Domingo, Dominican Republic

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**Urease positive organisms**

[ID 2235]

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**PUNCH:**

**Proteus** (leads to alkaline urine)

**Ureaplasma** (renal calculi)

**Nocardia**

**Cryptococcus** (the fungus)

**Helicobacter pylori**

Knowledge Level 8, System: Other/Miscellaneous

Dr. Enrique Cifuentes Universidad Autonoma de Guadalajara

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**Influenza infection: clinical manifestations**

Hi Yield [ID 1955]

"**Having Flu Symptoms Can Make Moaning Children A Nightmare**":

**Headache**

**Fever**

**Sore throat**

**Chills**

**Myalgias**

**Malaise**

**Cough**

**Anorexia**

**Nasal congestion**

Knowledge Level 2, System: Pulmonary

David Lucey University College Dublin

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**Klebsiella details**

Hi Yield [ID 362]

You tell the patient: "**Get UPS** you **fat alcoholic**":

**UTI**

**Pneumonia**

**Sepsis**

**Fat capsule**

Get up=**nonmotile** since no flagella.

**Alcoholic**=commonly seen in **alcoholic** and nosocomial patients.

Knowledge Level 3, System: Pulmonary

Anonymous Contributor

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**Mycobacterium tuberculosis: culture identification**

Hi Yield [ID 668]

"**Rough, Tough, Buff**":

**Rough**: colony isn't smooth but rough like breadcrumbs.

**Tough**: colony stuck to plate well, and tough to remove.

**Buff**: buff is a color, a cream/coffee shade.

Knowledge Level 1, System: Pulmonary

Anonymous Contributor

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**Pneumonia: acute pneumonia infiltrates from different causes**

[ID 145]

"**Pyrogenic**=PMN, **Miscellaneous**=**Mononuclear**":

Acute pneumonia caused by **Pyrogenic** bacteria: **PMN** infiltrate.

Acute pneumonia caused by **Miscellaneous** microbes: **Mononuclear** infiltrate.

Knowledge Level 6, System: Pulmonary

Anonymous Contributor

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**Streptococci: Quellung reaction: positive sign, Strep type confirmed**

Hi Yield [ID 859]

"**Quell-lung**":

**Quell**: Capsules **swell** [+ve test].

**Lung**: **S. pneumonia** [type confirmed].

You get **pneumonia** in your **lung**.

Knowledge Level 3, System: Pulmonary

Robert O'Connor University College Dublin

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**Gardnerella and Vaginalis vaginal infection diagnosis**

[ID 586]



"Take a **whiff** and get a **clue** for fishy bacteria":  
Smells like fish (whiff test); clue cells seen under microscope.  
**Gardnerella**= Gram negative.  
**Vaginalis**= Variable.  
Knowledge Level 3, System: Reproductive  
Rinku S Uberoi UNIBE

### Placenta-crossing organisms/ antenatal Infections

[ID 2471]

**STARCH:**  
**S**yphilis  
**T**oxoplasmosis  
**A**IDS (HIV)  
**R**ubella  
**CMV**  
**H**erpes/ **H**epatitis  
Knowledge Level 1, System: Reproductive  
Anonymous Contributor

### Teratogens: placenta-crossing organisms

Hi Yield [ID 2182]

**ToRCHeS:**  
**T**oxoplasma  
**R**ubella  
**CMV**  
**H**erpes simplex, **H**erpes zoster (varicella), **H**epatitis B,C,E  
**S**yphilis  
Alternatively: **TORCHES**: with **O**thers (parvo, listeria), add **HIV** to H's, **E**nteroviruses.  
Knowledge Level 1, System: Reproductive  
Andrew J. Vasil UMD School of Medicine, Duluth, MN

### Trichomaniasis: features

Hi Yield [ID 2631]

5 F's:  
**F**lagella  
**F**rothy discharge  
**F**ishy odor (sometimes)  
**F**ornication (STD)  
**F**lagyl (metronidazole) Rx  
Knowledge Level 4, System: Reproductive  
Rinku Uberoi

## NEUROLOGY

### Battle sign

[ID 1244]

**BattlE:**  
**B**ehind **E**ar  
Knowledge Level 4, System: Cardiovascular  
Anonymous Contributor

### Stroke risk factors

Hi Yield [ID 1064]

**HEADS:**  
**H**ypertension/ **H**yperlipidemia  
**E**lderly  
**A**trial fib  
**D**iabetes mellitus/ **D**rugs (cocaine)  
**S**moking/ **S**ex (male)  
Knowledge Level 3, System: Cardiovascular  
Rinku S. Uberoi UNIBE

### Stroke: basic work up

[ID 3089]

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The 3 P's:

**P**ump

**P**ipes

**P**lasma

Knowledge Level 1, System: Cardiovascular

Anonymous Contributor

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**Stroke: young patient's likely causes**

[ID 1399]

7 C's:

**C**ocaine

**C**onsanguinity [familial such as neurofibromatosis and von Hippel-Lindau]

**C**ancer

**C**ardiogenic embol

**h**yper**C**oagulation

**C**NS infection [eg: HIV conditions]

**C**ongenital arterial lesion

Knowledge Level 2, System: Cardiovascular

Samuel Atom Baek-Kim Tuckahoe, N.Y.

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**Proximal myopathy: differential**

[ID 2744]

**PEACH PODS:**

**P**olymyositis

**E**ndocrine: hyper, hypothyroidism, Cushing's syndrome, acromegaly

**A**lcohol

**C**arcinoma

**H**IV infection

**P**eriodic hypokalemic paralysis

**O**steomalacia

**D**rugs: steroids, statins

**S**arcoidosis

Knowledge Level 6, System: Muscle

Anonymous Contributor

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**Babinski and LMN signs: conditions exhibiting them**

[ID 479]

**"D MASTS":**

**D**iabetes

**M**otor neuron disease

**A**taxia (friedrichs)

**S**ubacute combined degeneration of cord

**T**abo paresis

**S**yringobulbia

Knowledge Level 4, System: Nervous

G.S. Dutt

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**Balint's syndrome**

[ID 2530]

**SOOT:**

**S**imultagnosia

**O**ptic ataxia

**O**cular apraxia

**T**unnel vision

Knowledge Level 7, System: Nervous

Bobby Varkey SCTIMST

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**Benidict's syndrome: site affected**

[ID 3088]

**Benidict's** test for sugar gives **red** precipitate.

Similarly, **Benidict's** syndrome affects **red** nucleus.

Knowledge Level 4, System: Nervous

Ram Mohan Svrr Tirupathi AP India

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**Chorea: common causes**

[ID 2179]

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**St. VITUS'S DANCE:**

Sydenhams

Vascular

Increased RBC's (polycythemia)

Toxins: CO, Mg, Hg

Uremia

SLE

Senile chorea

Drugs

APLA syndrome

Neurodegenerative conditions: HD, neuroacanthocytosis, DRPLA

Conception related: pregnancy, OCP's

Endocrine: hyperthyroidism, hypo-, hyperglycemia

Knowledge Level 9, System: Nervous

Bobby Varkey SCTIMST

---

**Congenital myopathy: features**

Hi Yield [ID 2130]

**DREAMS:**

Dominantly inherited, mostly

Reflexes decreased

Enzymes normal

Apathetic floppy baby

Milestones delayed

Skeletal abnormalities

Knowledge Level 7, System: Nervous

Bobby Varkey SCTIMST

---

**Dementia: reversible dementia causes**

Hi Yield [ID 1388]

**DEMENTIA:**

Drugs/ Depression

Elderly

Multi-infarct/ Medication

Environmental

Nutritional

Toxins

Ischemia

Alcohol

Knowledge Level 1, System: Nervous

Mohamed Azim Assistant lecturer of Pediatric Surgery, Alexandria University, Egypt

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**Dementia: some common causes**

Hi Yield [ID 928]

**DEMENTIA:**

Diabetes

Ethanol

Medication

Environmental (eg CO poisoning)

Nutritional

Trauma

Infection

Alzheimer's

Knowledge Level 1, System: Nervous

Anonymous Contributor

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**Dementia: treatable causes**

Hi Yield [ID 2127]

**DEMENTIA:**

Drug toxicity

Emotional (depression, anxiety, OCD, etc.)

Metabolic (electrolytes, liver dz, kidney dz, COPD)

Eyes/ Ears (peripheral sensory restrictions)

Nutrition (vitamin, iron deficiencies/ NPH [Normal Pressure Hydrocephalus])

Tumors/ Trauma (including chronic subdural hematoma)

Infection (meningitis, encephalitis, pneumonia, syphilis)

Arteriosclerosis and other vascular disease

Knowledge Level 3, System: Nervous

Dr. Bill Lynch, originated by Dr. Jerome Yesavage Palo Alto Veterans Affairs Medical Center

## Encephalitis: differential

[ID 1503]

### HE'S LATIN AMERICAN:

Herpesviridae

Enteroviridae (esp. Polio)

Slow viruses (esp. JC, prions)

Syphilis

Legionella/ Lyme disease/ Lymphocytic meningoencephalitis

Aspergillus

Toxoplasmosis

Intracranial pressure

Neisseria meningitidis

Arboviridae

Measles/ Mumps/ Mycobacterium tuberculosis/ Mucor

E. coli

Rabies/ Rubella

Idiopathic

Cryptococcus/ Candida

Abscess

Neoplasm/ Neurocysticercosis

Neurocysticercosis should be assumed with recent Latin American immigrant patient unless proven otherwise.

Knowledge Level 3, System: Nervous

Samuel Atom Baek-Kim Tuckahoe, NY

## Head trauma: rapid neuro exam

[ID 1691]

12 P's:

Psychological (mental) status

Pupils: size, symmetry, reaction

Paired ocular movements

Papilloedema

Pressure (BP, increased ICP)

Pulse and rate

Paralysis, Paresis

Pyramidal signs

Pin prick sensory response

Pee (incontinent)

Patellar reflex (and others)

Ptosis

Reevaluate patient every 8 hrs.

Knowledge Level 3, System: Nervous

Ernest Boiesler, MD and Sung Kim Attending physician, ISSSTE, Juarez, Mexico

## Huntington's: chromosome, involvement

Hi Yield [ID 2096]

### HUNT 4 DATE:

HUNTINGTON's on chromosome 4, with cauDATE nucleus involvement.

Knowledge Level 7, System: Nervous

Syed Medical doctor

## Multiple sclerosis (MS): epidemiology

[ID 1066]

MS is a feminine title (Ms.) and is female predominant.

Knowledge Level 3, System: Nervous

Anonymous Contributor

## Neurofibromatosis: diagnostic criteria (type-1)

Hi Yield [ID 1705]

### CAFE SPOT:

Cafe-au-lait spots

Axillary, inguinal freckling

Fibroma

Eye: lisch nodules

Skeletal (bowing leg, etc)

Pedigree/ Positive family history

Optic Tumor (glioma)

Knowledge Level 3, System: Nervous

Hui-quan Zhao Children's Hospital Cincinnati

## Neurofibromatosis: diagnostic criteria

Hi Yield [ID 1324]

### ROLANDO:

Relative (1st degree)

Osseous fibromas

Lisch nodules in eyes

Axillary freckling

Neurofibromas

Dime size cafe au lait spots

Optic gliomas

Knowledge Level 3, System: Nervous

Balraj Jhawar The University of Western Ontario

## Neuropathy: diagnosis confirmation

[ID 1217]

### Neuropathy:

Nerve conduction velocity

Electromyography

Knowledge Level 6, System: Nervous

Rinku S. Uberoi

## Ocular bobbing vs. dipping

[ID 2074]

"Breakfast is **fast**, Dinner is slow, both go **down**":

Bobbing is **fast**.

Dipping is **slow**.

In both, the initial movement is **down**.

Knowledge Level 2, System: Nervous

Parameswaran Doctor

## Perinaud's syndrome: clinical features

[ID 3087]

### PERINAUD'S:

Pseudo 6th nerve palsy/ Penial region

Eyelid Retraction

Internuclear ophthalmoplegia

Nystagmus

Accommodation reflex present

Upward gaze palsy

Defective convergence/ Decerebrate rigidity

Skew deviation

Knowledge Level 3, System: Nervous

Ram Mohan Svrr Tirupathi AP India

## Peripheral neuropathies: differential

[ID 659]

### DANG THERAPIST:

Diabetes

Amyloid

Nutritional (eg B12 deficiency)

Guillain-Barre

Toxic (eg amiodarone)

Hereditary

Endocrine

Recurring (10% of G-B) Alcohol

Pb (lead)

Idiopathic

Sarcoid

Thyroid

Knowledge Level 3, System: Nervous

Ben Campbell University of Otago Medical School, Dunedin, New Zealand

## Pin-point pupil causes

[ID 364]

Pin-Point Pupils are due to **opioids** and **Pontine Pathology**

Knowledge Level 3, System: Nervous

Anonymous Contributor

## Pupillary dilatation (persistent): causes

[ID 1918]

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**3AM:**

3rd nerve palsy

Anti-muscarinic eye drops (eg to facilitate fundoscopy)

Myotonic pupil (Holmes Adie pupil): most commonly in young women, with absent/delayed reaction to light and convergence, and of no pathological significance.

Knowledge Level 1, System: Nervous

Gajan Rajeswaran Final Year Medical Student, Imperial College School Of Medicine, London

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**Ramsay-Hunt syndrome: cause and common feature**

Hi Yield [ID 1063]

"Ramsay Hunt":

Etiology:

Reactivated

Herpes zoster

Complication:

Reduced

Hearing

Knowledge Level 4, System: Nervous

Rinku S. Uberoi UNIBE

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**Status epilepticus: treatment**

Hi Yield [ID 2271]

"Thank Goodness All Cerebral Bursts Dissipate":

Thiamine

Glucose

Ativan

Cerebyx

Barbiturate

Diprivan

Knowledge Level 2, System: Nervous

J.D. Broughton, MD

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**Vertigo: differential**

Hi Yield [ID 932]

VOMITS:

Vestibulitis

Ototoxic drugs

Meniere's disease

Injury

Tumor

Spin (benign positional vertigo)

Knowledge Level 6, System: Nervous

Dr. J.G. Norris

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**Visual loss: persistent bilateral sudden onset visual loss differential**

[ID 2571]

FLOP:

Functional

Leber's hereditary neuropathy

Occipital infarctions

Pituitary apoplexy

Knowledge Level 9, System: Nervous

Dr. Bobby Varkey SCTIMST

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**Whipple's disease: features [for neurologists]**

[ID 2129]

A WHIPPLES DOOM

Arthralgias

Whipplei (organism)

Hypothalamic involvement

Intestinal involvement/ Intestinal biopsy required

PAS positive macrophages

PCR positivity

Lymphadenopathy

Extrapyramidal involvement

Sepran treat with

Dementia

Ocular abnormalities (vertical gaze palsy)

Oculomasticatory myorhythmia

## NEUROSCIENCES

### Pituitary: which half is the adenohypophysis

[ID 73]

The Anterior pituitary is the Adenohypophysis.  
Knowledge Level 1, System: Endocrine  
Anonymous Contributor

### Alzheimer's disease: common characteristics

[ID 3211]

#### ALZHEIMER'S:

Anterograde amnesia is usually first sign  
Life expectancy increase shows more cases in recent years  
Zapped (loss of) acetylcholinergic neurons  
Hereditary disease  
Entire hippocampus becomes affected  
Identified by neurofibrillary tangles  
Mutation in amyloid genes associated w/ disease  
Entorhinal areas degenerate first  
Retrograde amnesia ultimately develops  
Senile plaques are formed at synapse  
Knowledge Level 4, System: Nervous  
David H. Chafey Ponce School of Medicine

### Argyll-Robertson Pupil features

Hi Yield [ID 110]

Look at the math signs around the two parts of the name: **A-R**.  
The A has no sign in front, which in math means +A (+ Accommodate).  
There is a subtract sign in front of the R (- React).  
Therefore, pupil can accommodate, but can't react.  
Knowledge Level 1, System: Nervous  
Robert O'Connor University College Dublin

### Argyll-Robertson Pupil features

Hi Yield [ID 326]

Argyll Robertson Pupil (ARP)  
Read it from front to back: it is **ARP**, standing for Accommodation Reflex Present.  
Read it from back to front: it is **PRA**, standing for Pupillary Reflex Absent.  
Knowledge Level 1, System: Nervous  
Anonymous Contributor

### Argyll-Robertson Pupil features

Hi Yield [ID 410]

Argyll Robertson Pupil is like a prostitute.  
She/he will **acomodate**, but will **not react**.  
Pupil still accomodates, but doesn't react to light.  
Pupil is a common sign in syphilis, which is often carried by prostitutes.  
Knowledge Level 1, System: Nervous  
Anonymous Contributor

### Auditory pathway: mandatory stops

Hi Yield [ID 2080]

"Come In My Baritone":  
Cochlear nucleus  
Inferior colliculus  
Medial geniculate nucleus  
Brodmann's 41 (cortex)  
Knowledge Level 4, System: Nervous  
Anonymous Contributor Baylor College of Medicine, Houston, TX

### Basal ganglia: D1 vs. D2 connections

[ID 2774]

D1 has 1 connection (Striatum-GPi/SNpr).  
D2 has 2 connections (Striatum-GPe-GPi/SNpr).  
Knowledge Level 7, System: Nervous  
Christina Billcliffe Oxford University Medical School

## Basal ganglia: indirect vs. direct pathway

[ID 67]

The **I**ndirect pathway **I**nhibits.

Direct pathway is hence the excitatory one.

Knowledge Level 1, System: Nervous

Robert O'Connor University College Dublin

## Branchial arches: cranial nerve innervation

Hi Yield [ID 3]

In Sensory/Motor/Both mnemonic 'Some Say Marry Money **B**ut My **B**rother Says **B**ig Boobs Matter More', the **B**'s also give Brancial arch nerves in order:

**B**ut (CN 5): 1st arch

**B**rother (CN7): 2nd arch

**B**ig (CN9): 3rd arch

**B**oobs (CN 10): 4th arch

Knowledge Level 3, System: Nervous

Robert O'Connor University College Dublin

## Broca's vs. Wernick's area: effect of damage to speech center

Hi Yield [ID 84]

"**Broca**": your speech machinery is **B**roken.

Broca is wanting to speak, but articulation doesn't work, and very slow.

"**Wer-nick**": "**were**" and "**nick**" are both words of English language, but together they are nonsensical.

Wernick is having good articulation, but saying words that don't make sense together.

Knowledge Level 1, System: Nervous

Robert O'Connor University College Dublin

## Cerebellar damage signs

Hi Yield [ID 434]

**DASHING**:

**D**ysdiadochokinesia

**A**taxia

**S**peech

**H**ypotonia

**I**ntention tremor

**N**ystagmus

**G**ait

Knowledge Level 3, System: Nervous

Anonymous Contributor

## Cerebellar damage signs

Hi Yield [ID 1878]

**DANISH**:

**D**ysdiadochokinesis

**A**taxia

**N**ystagmus

**I**ntention tremor

**S**lurred speech

**H**ypotonia

Knowledge Level 3, System: Nervous

Grant Wilde and Kristian Mears University of Leicester and University of Nottingham, UK

## Cerebellar damage symptoms

Hi Yield [ID 179]

**VANISHeD**:

**V**ertigo

**A**taxia

**N**ystagmus

**I**ntention tremor

**S**lurred speech

**H**ypotonic reflexes

**D**ysdiadochokinesia.

Knowledge Level 3, System: Nervous

Anonymous Contributor

## Cerebellar deep nuclei

[ID 346]



"**Ladies Demand Exceptional Generosity From Men**":

The 4 nuclei, from lateral to medial:

[**Lateral**]

**Dentate**

**Emboliform**

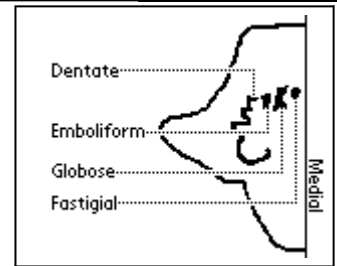
**Globose**

**Fastigial**

[**Medial**]

Knowledge Level 1, System: Nervous

Nick Loman St. Bart's/Royal London



### Cerebellar deep nuclei

[ID 1421]

"**Fat Girls Eat Doritos**":

From medial to lateral:

**Fastigial**

**Globose**

**Emboliform**

**Dentate**

Knowledge Level 1, System: Nervous

### Cerebellar functional areas

Hi Yield [ID 1894]

Anatomical shape/location of cerebellar areas is a key to their function and related tract.

**Vermis** = **Spinocerebellar** = **Axial** equilibrium.

**Vermis**: right down the **axis** of cerebellum, and vertically segmented like a **spinal** column.

**Flocculonodular lobe** = **Vestibulocerebellar** = **Ear**, eye, body coordination.

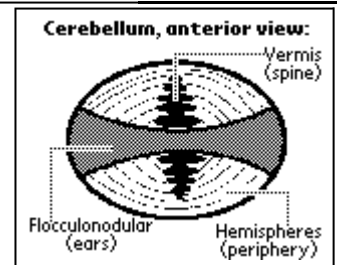
**Flocculonodular lobe**: flares out to the edges, just like **ears**.

**Hemispheres of cerebellum** = **Cerebrocerebellar** = **Peripheral** coordination.

**Hemispheres**: around **periphery** of cerebellum, and tract to **cerebral hemispheres**.

Knowledge Level 3, System: Nervous

Neil Bratney, M1 U. Nebraska Med Ctr



### Cerebellar peduncles: afferent vs efferent

[ID 1435]

**SEMA**:

Superior cerebellar peduncle

Efferent (fibres)

Middle cerebellar peduncle

Afferent (fibres)

Knowledge Level 9, System: Nervous

Durre Dow Medical College, Pakistan

### Chemoreceptor trigger zone

[ID 148]

"**Syringes Help Men On Drugs**":

Serotonin

Histamine

Muscarinic

Opioids

Dopamine

Knowledge Level 7, System: Nervous

Anonymous Contributor

### Coronal section of brain: structures

[ID 445]

"**In Extreme Conditions Eat People's Guts Instead of Their Hearts**":

From insula to midline:

**Insula**

**Extreme** capsule

**Clastrum**

**External** capsule

**Putamen**

**Globis** pallidus

**Internal** capsule

**Thalamus**

**Hypothalamus**

Knowledge Level 4, System: Nervous

**Cranial nerves**

Hi Yield [ID 24]

"On Old Olympus Towering Tops, A Finn And German Viewed Some Hops":

In order from 1 to 12:

Olfactory

Optic

Oculomotor

Trochlear

Trigeminal

Abducens

Facial

Auditory [or Vestibulocochlear]

Glossopharyngeal

Vagus

Accessory [or Spinal root of the accessory]

Hypoglossal

Alternatively: "Oh! Oh! Oh! To Touch And Feel A Girls Vagina, Ah! Heaven!".

Alternatively: "Oh, Oh, Oh, To Touch And Feel Virgin Girls Vaginas And Hymens".

Knowledge Level 1, System: Nervous

Anurag Gupta Dept of Surgery, Royal Adelaide Hospital, Australia

**Cranial nerves**

Hi Yield [ID 406]

"On Occasion, Old Tim Taylor Asks For Very Good Vagina And Head":

From I to XII:

Olfactory

Optic

Oculomotor

Trochlear

Trigeminal

Abducens

Facial

Vestibulocochlear

Glossopharyngeal

Vagus

Accessory

Hypoglossal

Knowledge Level 1, System: Nervous

Daniel Clapton University of Tasmania

**Cranial nerves**

Hi Yield [ID 420]

"Our Officer Ordered To Touch And F#\*k Virgin Girl's Vagina And Hip":

In ascending order:

Olfactory

Optic

Oculomotor

Trochlear

Trigeminal

Abducens

Facial

Vestibulocochlear

Glossopharyngeal

Vagus

Accessory

Hypoglossal

Knowledge Level 1, System: Nervous

Dr. A. Manaf Pediatrician

**Cranial nerves**

Hi Yield [ID 424]

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"One Of Our Trained Teachers Asked For A Good Vagina And Hymen":

Olfactory  
Optic  
Oculomotor  
Trochlear  
Trigeminal  
Abducens  
Facial  
Auditory  
Glossopharyngeal  
Vagus  
Accessory  
Hypoglossal

Alternatively: "...Trained Tutors..."

Knowledge Level 1, System: Nervous

D. Suresh and Dr. M.S. Vishveshwara Freeman Health System and Consultant Oncologist, Bharath Cancer Hospital, Mysore, India

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**Cranial nerves**

Hi Yield [ID 495]

"One Octopus Offered Two Toddlers And Five Virgins Great Valium And Hash":

Olfactory  
Optic  
Oculomotor  
Trochlear  
Trigeminal  
Abducens  
Facial  
Vestibulocochlear  
Glossopharyngeal  
Vagus  
Accessory  
Hypoglossal

Knowledge Level 1, System: Nervous

Whit Fisher Georgetown Med

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**Cranial nerves**

Hi Yield [ID 751]

"Old Opticians Operate To Try Adding Fortune And Getting Vegas Another Hotel!":

In order from 1 to 12:

Olfactory  
Optic  
Oculomotor  
Trochlear  
Trigeminal  
Abducens  
Facial  
Auditory  
Glossopharyngeal  
Vagus  
Accessory  
Hypoglossal

Knowledge Level 1, System: Nervous

Melissa Student in California

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**Cranial nerves [for political Americans]**

Hi Yield [ID 1154]

"Our Oval Office Tomorrow Teeters As Florida Adds George Versus Al's Handcounts":

Olfactory  
Optic  
Oculomotor  
Trochlear  
Trigeminal  
Abducent  
Facial  
Acoustic  
Glossopharyngeal  
Vagus  
Accessory

## Hypoglossal

Knowledge Level 1, System: Nervous

Chris Teng SUNY-HSCB Downstate College of Medicine, [Annual SUNY CN Contest Winner, 2000]

### Cranial nerves [for those under stress]

Hi Yield [ID 386]

"Oh Once One Takes The Anatomy Final A Good Vacation Seems Heavenly":

Olfactory

Optic

Oculomotor

Trochlear

Trigeminal

Abducens

Facial

Auditory

Glossopharyngeal

Vagus

Spinal root of the accessory

Hypoglossal

Knowledge Level 1, System: Nervous

Anonymous Contributor

### Cranial nerves [for those with a vegetable fetish]

Hi Yield [ID 504]

"Oh Oh Oh To Touch And Feel Very Green Vegetables, Ah Heaven!":

Olfactory

Optic

Oculomotor

Trochlear

Trigeminal

Abducens

Facial

Vestibulocochlear

Glossopharyngeal

Vagus

Accessory

Hypoglossal

Knowledge Level 1, System: Nervous

Anonymous Contributor

### Cranial nerves: olfactory and optic numbers

[ID 20]

"You have **two eyes** and **one nose**":

**Optic** nerve is cranial nerve **two**.

**Olfactory** nerve is cranial nerve **one**.

Alternatively, note alphabetical order: o**L**factory, and o**P**tic.

Knowledge Level 1, System: Nervous

Rajael Somaskanthan Medical student, Royal Free and UCL Medical School

### Cranial nerves: sensory, motor or both

Hi Yield [ID 290]

"Some Say Marry Money But My Brother Says Big Brains Matter More":

From I to XII:

Sensory

Sensory

Motor

Motor

Both

Motor

Both

Sensory

Both

Both

Motor

Motor

Alternatives for "Brains": Boobs, Buns, Bras.

Knowledge Level 1, System: Nervous

Michael Nawfal

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**Cranial nerves: sensory, motor or both [1950s style]**

Hi Yield [ID 450]

"Some Say Marilyn Monroe But My Brother Says Bridget Bardot Mmm, Mmm!":

From I to XII:

Sensory

Sensory

Motor

Motor

Both

Motor

Both

Sensory

Both

Both

Motor

Motor

Knowledge Level 1, System: Nervous

Anonymous Contributor

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**CSF circulation: function of choroid vs. arachnoid granules**

[ID 68]

Choroid Creates CSF.

Arachnoid granules Absorb CSF.

Knowledge Level 1, System: Nervous

Jason Galarneau Flinders University, Australia

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**Dorsal= afferent, Ventral= efferent and their functions**

[ID 367]

"My friend DAVE got kicked in the behind and screamed":

Dorsal/Afferent component is the **sensation of pain** coming from the **rear**.

Ventral/Efferent component is the motor **action of screaming** (which is done at **front** of body).

Knowledge Level 1, System: Nervous

Anonymous Contributor

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**Dysphagia vs. dysphasia**

[ID 310]

DysphaSia is for Speech

DysphaGia is for your Gut [swallowing].

Knowledge Level 6, System: Nervous

Anonymous Contributor

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**GABA vs. Glu: the excitatory vs. inhibitory transmitter in brain (eg in basal ganglia)**

[ID 69]

When you **Glue** two things together, you add (+) those things together, therefore **Glu** is the excitatory one (+).

GABA is therefore the negative one.

Knowledge Level 2, System: Nervous

Robert O'Connor University College Dublin

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**Geniculate bodies: medial vs. lateral system**

Hi Yield [ID 307]

**MALE:**

**Medial=Auditory. Lateral=Eye.**

Medial geniculate body is for auditory system, lateral geniculate body is for visual system.

Can expand to **MALES** to remember **Lateral=Eye=Superior** colliculus (thus medial is inferior colliculus by default).

Knowledge Level 1, System: Nervous

Robert O'Connor University College Dublin

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**Geniculate bodies: medial vs. lateral system**

Hi Yield [ID 640]

"**Lateral=Light. Medial=Music.**":

Lateral geniculate body is for visual system.

Medial geniculate is for auditory system.

Knowledge Level 1, System: Nervous

Matt Morgan University of Utah School of Medicine

---

**Geniculate bodies: paired to respective colliculi**

Hi Yield [ID 1436]

## SLIM:

Superior colliculi: **L**ateral geniculate body.

Inferior colliculi: **M**edial geniculate body.

Knowledge Level 1, System: Nervous

Durre Dow Medical College, Pakistan

## Geniculocalcarine tract

[ID 2098]

Lower bank of calcarine sulcus is the **L**ingual gyrus: it receives input from **L**ower retinal quadrants.

Therefore, **C**uneus is the **U**pper bank of calcarine sulcus: it receives input from **U**pper retinal quadrants.

Remember: lower retinal quadrants represent superior visual field quadrants and viceversa.

Knowledge Level 2, System: Nervous

Miruna Segarceanu UMF Carol Davila, Bucharest, Romania

## Hypothalamus: feeding vs. satiety center

Hi Yield [ID 311]

"Stim the **lat**, get **fat**":

Stimulating **l**ateral increases hunger.

"Stim the **ven**, get **thin**":

Stimulating **ventromedial** increases satiety.

Knowledge Level 1, System: Nervous

Ryan Hendren University of Arkansas for Medical Sciences

## Hypothalamus: feeding vs.satiety center

[ID 256]

"**L**ate night **snack**":

**L**ATEral is **snacking** [feeding] center.

Therefore, ventromedial is satiety center.

Knowledge Level 1, System: Nervous

Robert O'Connor University College Dublin

## Hypothalamus: general functions

[ID 444]

"**T**ALE of the hypothalamus":

**T**emperature

**A**ppetite

**L**ibido

**E**motion

Knowledge Level 1, System: Nervous

Anonymous Contributor

## Lower vs. upper motor neuron lesion effects

Hi Yield [ID 85]

1. "**S**TORM, **B**aby"

2. 'In a **L**ower motor neuron lesion, everything goes **D**own:

**S**TORM Baby tells you effects:

**S**trength

**T**one

**O**ther

**R**eflexes

**M**uscle mass

**B**abinski's sign

In Lower all things go down: strength, tone, reflexes, muscle mass, and the big toe down in plantar reflex (Babinski's sign is big toe up: toe up = UMN).

See attached chart.

Knowledge Level 1, System: Nervous

Robert O'Connor University College Dublin

	Upper	Lower
Strength	▼	▼
Tone	▲ [spastic]	▼ [flaccid]
Other	fasciculations fibrillations clonus	
Reflexes	▲	▼
Muscle mass	slight loss only	▼
BABinski's sign	▲ [toe up]	▼ [toe down]

## Meninges: layers in order

Hi Yield [ID 3131]

**P**AD:

**P**iamater

**A**rachnoid

**D**ura

Knowledge Level 1, System: Nervous

Mohammed Azizuddin Ahmed Indian Medical Council

## Olivary nuclei: ear vs. eye roles

Hi Yield [ID 2097]

Superior Olivary nucleus: **SO**und localization.

Inferior olivary nucleus is therefore the one for sight [tactile, proprioception also].

Knowledge Level 3, System: Nervous

Miruna Segarceanu UMF Carol Davila, Bucharest, Romania

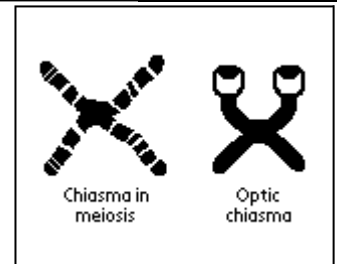
### Optic chiasma: what it looks like if you're a genetics star

[ID 116]

The **optic chiasma** looks the same as a **chiasma in meiosis**, making it easy to spot on the dissected brain.

Knowledge Level 3, System: Nervous

Anonymous Contributor



### Parasympathetic vs. sympathetic function

[ID 137]

Sympathetic nervous system: "**Fight or Flight**".

Parasympathetic nervous system: "**Rest and Digest**".

Knowledge Level 1, System: Nervous

Anonymous Contributor

### Precentral vs. postcentral gyrus: motor vs. sensory

[ID 289]

Just an extension of the rule that anterior = ventral = efferent = motor.

The precentral gyrus is on the anterior side of the brain, so is therefore motor.

Knowledge Level 1, System: Nervous

Robert O'Connor University College Dublin

### Purkinje cells in cerebellum are inhibitory to deep nuclei

[ID 309]

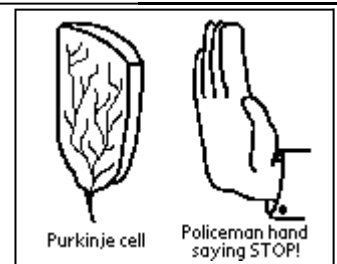
Shape of a purkinje cell in 3 dimensions is same as a policeman's hand saying "Stop".

Therefore, purkinje cells are inhibitory.

See diagram.

Knowledge Level 3, System: Nervous

Robert O'Connor University College Dublin



### Spinal cord: converting ventral/ anterior/ motor/ efferent and dorsal/ posterior/ sensory/ afferent

[ID 115]

A limousine:

The **motor** of limo is **ventral** and **anterior** on the car.

The Aerial is **sensory** and on the **dorsal** and **posterior** of the limo.

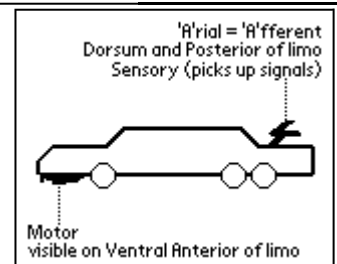
Note 1: 'A' is Afferent, and also, in a limo, the aerial on the top of the trunk has a capital 'A' shape.

Note 2: An aerial is a sensory thing: picks up radio waves.

Note 3: If picked a limo up in your hand, can only see motor on ventral, since dorsal is covered by the hood/bonnet.

Knowledge Level 2, System: Nervous

Robert O'Connor University College Dublin



### Spinal tracts: Gracilis vs. Cuneatus: origin from upper vs. lower limbs

[ID 277]

**Gracilis** is the name of a muscle in the legs, so Fasciculus **Gracilis** is for the lower limbs.

By default, Fasciculus Cuneatus must be for upper limbs.

Knowledge Level 4, System: Nervous

Jason Galarneau Flinders University

### Spinal tracts: simplified geography

Hi Yield [ID 265]

**2 posterior:** cross at the medulla.  
**2 lateral:** ipsilateral (same side).  
**2 anterior:** cross at the spinal level.

See diagram.

Note 1: Descending tracts on left of figure, ascending tracts on right.

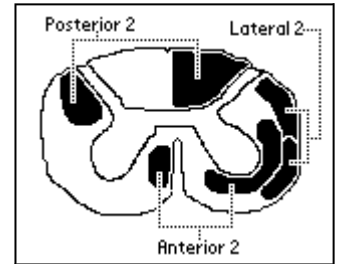
Note 2: For ipsilaterals: one never crosses, one crosses at the level then doubles back farther up. The ipsilateral that crosses at the level (ventral spinocerebellar) is the ipsilateral closest to the 2 anterior ones, which also cross at the level.

Tract names in each group:

Posterior 2: lateral corticospinal, dorsal columns. Lateral 2: dorsal spinocerebellar, ventral spinocerebellar. Anterior 2: ventral corticospinal, spinothalamic.

Knowledge Level 3, System: Nervous

Robert O'Connor University College Dublin



### Temporal lobe: location of high vs. low frequency recognition

[ID 15]

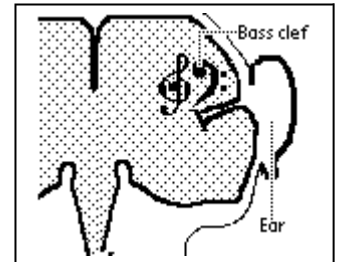
The **bass clef** looks like an **ear**.

Therefore, the **bass clef** [low frequency] is **closer to the ear**, and the treble clef [high frequency] is more medial.

See diagram.

Knowledge Level 8, System: Nervous

Robert O'Connor University College Dublin



### Thirst/water balance control centre: location in hypothalamus

[ID 611]

"You **look up** (supra...optic) at the clouds, to check if it's going to **rain** (water)":

Therefore, water balance is in supraoptic nucleus.

Knowledge Level 6, System: Nervous

Zeiad Fakhouri

### Ventricle apertures: converting the two nomenclature types

[ID 65]

Magendie foramen is the **Medial** aperture.

Luschka foramen is the **Lateral** aperture.

Knowledge Level 4, System: Nervous

Anonymous Contributor

## OBSTETRICS / GYNECOLOGY

### Preeclampsia: classic triad

Hi Yield [ID 1652]

**PRE**eclampsia:

**P**roteinuria

**R**ising blood pressure

**E**dema

Knowledge Level 4, System: Cardiovascular

Anonymous Contributor

### RLQ pain: brief female differential

Hi Yield [ID 2071]

**AEIOU**:

**A**ppendicitis/ **A**bscess

**E**ctopic pregnancy/ **E**ndometriosis

**I**nflammatory disease (pelvic)/ **I**BD

**O**varian cyst (rupture, torsion)

**U**teric colic/ **U**rinary stones

Knowledge Level 1, System: Other/Miscellaneous

Sushant Varma University of Sheffield, UK

### Abdominal pain: causes during pregnancy

Hi Yield [ID 474]



---

**LARA CROFT:**

Labour

Abruption of placenta

Rupture (eg. ectopic/ uterus)

Abortion

Cholestasis

Rectus sheath haematoma

Ovarian tumour

Fibroids

Torsion of uterus

Knowledge Level 5, System: Reproductive

Graeme Little University College London

---

**Alpha-fetoprotein: causes for increased maternal serum AFP during pregnancy**

Hi Yield [ID 849]

"Increased Maternal Serum Alpha Feto Protein":

Intestinal obstruction

Multiple gestation/ Miscalculation of gestational age/ Myeloschisis

Spina bifida cystica

Anencephaly/ Abdominal wall defect

Fetal death

Placental abruption

Knowledge Level 4, System: Reproductive

Rinku Uberoi UNIBE

---

**Alpha-fetoprotein: some major causes for increased maternal serum AFP during pregnancy**

Hi Yield [ID 1818]

**TOLD:**

Testicular tumours

Obituary (fetal death)

Liver: hepatomas

Defects (neural tube defects)

Knowledge Level 3, System: Reproductive

Isae Kilonzo University College Cork, Ireland

---

**APGAR score components**

Hi Yield [ID 2348]

**SHIRT:**

Skin color: blue or pink

Heart rate: below 100 or over 100

Irritability (response to stimulation): none, grimace or cry

Respirations: irregular or good

Tone (muscle): some flexion or active

Knowledge Level 3, System: Reproductive

Kimberly Scott Medical College of Virginia

---

**Asherman syndrome features**

[ID 792]

**ASHERMAN:**

Acquired Anomaly

Secondary to Surgery

Hysterosalpingography confirms diagnosis

Endometrial damage/ Eugonadotropic

Repeated uterine trauma

Missed Menses

Adhesions

Normal estrogen and progesterone

Knowledge Level 8, System: Reproductive

Rinku Uberoi UNIBE

---

**B-agonist tocolytic (C/I or warning)**

Hi Yield [ID 1113]

---

**ABCDE:**

Angina (Heart disease)

BP high

Chorioamnionitis

Diabetes

Excessive bleeding

Knowledge Level 2, System: Reproductive  
Lum

---

**CVS and amniocentesis: when performed**

[ID 847]

"Chorionic" has **9** letters and Chorionic villus sampling performed at **9** weeks gestation.

"AlphaFetoProtein" has **16** letters and it's measured at **16** weeks gestation.

Knowledge Level 3, System: Reproductive

Anonymous Contributor

---

**Delivery: instrumental delivery prerequisites**

Hi Yield [ID 2215]

**AABBCCDDEE:**

Analgesia

Antisepsis

Bowel empty

Bladder empty

Cephalic presentation

Consent

Dilated cervix

Disproportion (no CPD)

Engaged

Episiotomy

Knowledge Level 4, System: Reproductive

Harold Choi Medical student in Singapore

---

**Dysfunctional uterine bleeding (DUB): 3 major causes**

[ID 1908]

**DUB:**

Don't ovulate (anovulation: 90% of cases)

Unusual corpus luteum activity (prolonged or insufficient)

Birth control pills (since increases progesterone-estrogen ratio)

Knowledge Level 3, System: Reproductive

Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan

---

**Early cord clamping: indications**

Hi Yield [ID 2015]

**RAPID CS:**

Rh incompatibility

Asphyxia

Premature delivery

Infections

Diabetic mother

CS (caesarian section) previously, so the funda is RAPID CS

Knowledge Level 4, System: Reproductive

Rajeev and Ashish Doctors, RNTMC, UDP

---

**Fetus: cardinal movements of fetus**

[ID 2691]

"Don't Forget I Enjoy Really Expensive Equipment":

Descent

Flexion

Internal rotation

Extension

Restitution

External rotation

Expulsion

Knowledge Level 1, System: Reproductive

Anonymous Contributor

---

**Forceps: indications for delivery**

Hi Yield [ID 2170]

---

**FORCEPS:**

Foetus alive

Os dilated

Ruptured membrane

Cervix taken up

Engagement of head

Presentation suitable

Sagittal suture in AP diameter of inlet

Knowledge Level 3, System: Reproductive

Anonymous Contributor

---

**Forceps: indications for use**

[ID 786]

**FORCEPS:**

Fully dilated cervix

0 ["Zero"] CPD

Ruptured membranes

Cephalic or at least deliverable presentation/ Contracting uterus

Episiotomy done/ Epidural done

P!ss and S#!t (bladder and bowel empty)

Knowledge Level 3, System: Reproductive

Simon Holliday St. George's Hospital Medical School, UK

---

**Gestation period, oocytes, vaginal pH, menstrual cycle: normal numbers**

[ID 846]

4 is the normal pH of the vagina.

40 weeks is the normal gestation period.

400 oocytes released between menarche and menopause.

400,000 oocytes present at puberty.

28 days in a normal menstrual cycle.

280 days (from last normal menstrual period) in a normal gestation period.

Knowledge Level 5, System: Reproductive

Anonymous Contributor

---

**IUD: side effects**

[ID 3161]

**PAINS:**

Period that is late

Abdominal cramps

Increase in body temperature

Noticeable vaginal discharge

Spotting

Knowledge Level 3, System: Reproductive

Anonymous Contributor

---

**IUGR: causes**

Hi Yield [ID 1975]

**IUGR:**

Inherited: chromosomal and genetic disorders

Uterus: placental insufficiency

General: maternal malnutrition, smoking

Rubella and other congenital infection

Knowledge Level 4, System: Reproductive

Anthony Chan

---

**Labour: preterm labor causes**

Hi Yield [ID 3218]

**DISEASE:**

Dehydration

Infection

Sex

Exercise (strenuous)

Activities

Stress

Environmental factor (job, etc)

Knowledge Level 4, System: Reproductive

Alycia Ernst Banner Health AZ

---

**Multiple pregnancy complications**

Hi Yield [ID 2871]

---

**HI, PAPA:**

**Hydramnios (Poly)**

**IUGR**

**Preterm labour**

**Antepartum haemorrhage**

**Pre-eclampsia**

**Abortion**

Knowledge Level 3, System: Reproductive

Ashley Liew University of Glasgow, UK

---

**Omental caking: likeliest cause**

Hi Yield [ID 2985]

**Omental CAking = Ovarian CA**

"Omental caking" is term for ascities, plus a fixed upper abdominal and pelvic mass. Almost always signifies ovarian cancer.

Knowledge Level 2, System: Reproductive

Anonymous Contributor

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**Oral contraceptive complications: warning signs**

[ID 458]

**ACHES:**

**Abdominal pain**

**Chest pain**

**Headache (severe)**

**Eye (blurred vision)**

**Sharp leg pain**

Knowledge Level 4, System: Reproductive

Carrie Davis, RNC, MSN, WHNP Obici Health System

---

**Oral contraceptives: side effects**

Hi Yield [ID 2018]

**CONTRACEPTIVES:**

**Cholestatic jaundice**

**Oedema (corneal)**

**Nasal congestion**

**Thyroid dysfunction**

**Raised BP**

**Acne/ Alopecia/ Anaemia**

**Cerebrovascular disease**

**Elevated blood sugar**

**Porphyria/ Pigmentation/ Pancreatitis**

**Thromboembolism**

**Intracranial hypertension**

**Vomiting (progesterone only)**

**Erythema nodosum/ Extrapyrimal effects**

**Sensitivity to light**

Knowledge Level 6, System: Reproductive

Dr. Harsh Sharma BJMC, Pune, India

---

**Ovarian cancer: risk factors**

[ID 604]

**"Blue FILM":**

**Breast cancer**

**Family history**

**Infertility**

**Low parity**

**Mumps**

Knowledge Level 4, System: Reproductive

Sung H. Kim

---

**Parity abbreviations (ie: G 3, P 2012)**

[ID 1428]

---

"To Peace And Love":

**T**: of Term pregnancies

**P**: of Premature births

**A**: of Abortions (spontaneous or elective)

**L**: of Live births

Describes the outcomes of the total number of pregnancies (Gravida).

Knowledge Level 1, System: Reproductive

Megan Duffy Medical student, AZCOM

---

**Pelvic Inflammatory Disease (PID): causes, effects**

Hi Yield [ID 2019]

"PID CAN be **EPIC**":

Causes:

Chlamydia trachomatis

Actinomyces

Neisseria gonorrhoeae

Effects:

Ectopic

Pregnancy

Infertility

Chronic pain

Knowledge Level 2, System: Reproductive

Scott Alexander Loma Linda University SOM

---

**Pelvic Inflammatory Disease (PID): complications**

Hi Yield [ID 1112]

**IFACE PID:**

Infertility

Fitz-Hugh-Curtis syndrome

Abscesses

Chronic pelvic pain

Ectopic pregnancy

Peritonitis

Intestinal obstruction

Disseminated: sepsis, endocarditis, arthritis, meningitis

Knowledge Level 2, System: Reproductive

Lum

---

**Postpartum collapse: causes**

[ID 2397]

**HEPARINS:**

Hemorrhage

Eclampsia

Pulmonary embolism

Amniotic fluid embolism

Regional anaesthetic complications

Infarction (MI)

Neurogenic shock

Septic shock

Knowledge Level 6, System: Reproductive

Hossam Elzeiny Trainee, Royal Womens Hospital, Victoria, Australia

---

**Post-partum haemorrhage (PPH): risk factors**

Hi Yield [ID 1197]

**PARTUM:**

Polyhydramnios/ Prolonged labour/ Previous cesarian

APH/ ANTH

Recent bleeding history

Twins

Uterine fibroids

Multiparity

Knowledge Level 3, System: Reproductive

Nathan Sachdev University of New South Wales, Sydney

---

**Post-partum haemorrhage (PPH): causes**

Hi Yield [ID 583]

4 'T's:

Tissue (retained placenta)

Tone (uterine atony)

Trauma (traumatic delivery, episiotomy)

Thrombin (coagulation disorders, DIC)

Knowledge Level 3, System: Reproductive

Nicholas Kelly

---

### Prenatal care questions

[ID 781]

**ABCDE:**

Amniotic fluid leakage?

Bleeding vaginally?

Contractions?

Dysuria?

Edema?

Fetal movement?

Knowledge Level 3, System: Reproductive

Jason Bermak UC Irvine

---

### Secondary amenorrhea: causes

Hi Yield [ID 1196]

**SOAP:**

Stress

OCP

Anorexia

Pregnancy

Knowledge Level 2, System: Reproductive

Nathan Sachdev University of New South Wales, Sydney

---

### Spontaneous abortion: definition

[ID 871]

"Spontaneous abortion" has **less than 20** letters [it's exactly 19 letters].

Spontaneous abortion is defined as delivery or loss of products of conception at **less than 20** weeks gestation.

Knowledge Level 4, System: Reproductive

Rinku Uberoi

---

### Vaginal pH

[ID 837]

Vagina has **4** labia and normal pH of vagina is about **4**.

Knowledge Level 4, System: Reproductive

Anonymous Contributor

---

### Female pelvis: shapes

Hi Yield [ID 1095]

**GAP:**

In order from most to least common:

Gynecoid

Android /Anthropoid

Platypelloid

Knowledge Level 4, System: Skeletal

Anonymous Contributor

---

## OPHTHAMOLOGY / OPTOMETRY

---

### Red eye causes

Hi Yield [ID 1151]

**GO SUCK:**

Glaucoma

Orbital disease

Scleritis

Uveitis

Conjunctivitis

Keratitis

Knowledge Level 2, System: Cardiovascular

Anonymous Contributor

---

### Anopsia: quarantic anopsia: location of lesion

Hi Yield [ID 2601]

Upper: **Top**: Temporal lesions.  
Lower: **Pits**: Parietal lesions.  
Knowledge Level 1, System: Nervous  
Sung Hoon Kim Wonkang Univ Medical school, South Korea

---

**Cataracts: causes**

Hi Yield [ID 1973]

**ABCDE:**

**A**ging  
**B**ang: trauma, other injuries (eg infrared)  
**C**ongenital  
**D**iabetes and other metabolic disturbances (eg steroids)  
**E**ye diseases: glaucoma, uveitis  
Knowledge Level 4, System: Nervous  
Anthony Chan

---

**Cataracts: causes**

Hi Yield [ID 2845]

**CATARA**ct:

**C**ongenital  
**A**ging  
**T**oxicity (steroids, etc)  
**A**ccidents  
**R**adiation  
**A**bnormal metabolism (diabetes mellitus, Wilson's)  
Knowledge Level 2, System: Nervous  
Anonymous Contributor

---

**Cataracts: differential**

Hi Yield [ID 2808]

**CATARA**ct:

**C**ongenital  
**A**ging  
**T**oxicity (steroids, etc)  
**A**ccidents  
**R**adiation  
**A**bnormal metabolism (DM, Wilsons, etc)  
Knowledge Level 2, System: Nervous  
Robert O'Connor University College Dublin

---

**Corneal stromal dystrophies**

[ID 2371]

"**M**arilyn **M**onroe **G**ets **H**igh in **L**A":  
**M**acular: Mucopolysaccharide  
**G**ranular: Hyaline  
**L**attice: Amyloid  
Knowledge Level 3, System: Nervous  
Elise R. Leonard, M.D.

---

**Dacryocystitis, dacryoadenitis: apparatus affected**

Hi Yield [ID 2840]

Dacryocystitis, dacryadenitis:  
**C**ry, so affects **l**acrimal **g**land.  
Infection and inflammation, respectively.  
Knowledge Level 1, System: Nervous  
Anonymous Contributor

---

**Diplopia (uniocular): causes**

Hi Yield [ID 1974]

**ABCD:**

**A**stigmatism  
**B**ehavioral: psychogenic  
**C**ataract  
**D**islocated lens  
Knowledge Level 4, System: Nervous  
Anthony Chan

---

**Optic atrophy causes**

[ID 214]

---

**ICING:**

Ischaemia

Compressed nerve

Intracranial pressure [raised]

Neuritis history

**Glaucoma**

Knowledge Level 4, System: Nervous

Anonymous Contributor

---

**Choroidal neovascular membrane**

[ID 3235]

---

**HAMMAR:**

Histoplasmosis

ARMD

Multifocal Choroiditis

Myopia

Angiod

Rupture of the choroid

Knowledge Level 5, System: Other/Miscellaneous

Anonymous Contributor

---

**Periorbital cellulitis: etiology**

[ID 3284]

---

**SIGHT:**

Sinusitis

Insect Bite

Globular/ Glandular Spread

Heme Spread

Trauma

Knowledge Level 5, System: Other/Miscellaneous

Gregory Gulick Nova Southeastern University College of Osteopathic Medicine

---

**Nasopharyngeal cancer: classic symptoms**

[ID 2806]

---

**NOSE:**

Neck mass

Obstructed nasal passage

Serous otitis media externa

Epistaxis and discharge

Knowledge Level 4, System: Pulmonary

Robert O'Connor University College Dublin

---

**ORTHOPEDICS**

---

**Carpal tunnel syndrome: treatment**

Hi Yield [ID 2070]

---

**WRIST:**

Wear splints at night

Rest

Inject steroid

Surgical decompression

Take diuretics

Knowledge Level 4, System: Nervous

Sushant Varma University of Sheffield, UK

---

**Fracture: how to describe**

[ID 544]

---

**PLASTER OF PARIS:**

Plane

Location

Articular cartilage involvement

Simple or comminuted

Type (eg Colles')

Extent

Reason

Open or closed

Foreign bodies

disPlacement

Angulation



Rotation  
Impaction  
Shortening  
Knowledge Level 3, System: Other/Miscellaneous  
Fletcher Davies Adelaide Medical School

---

**Bone fracture types [for Star Wars fans]**

[ID 181]

**GO C3PO:**  
Greenstick  
Open  
Complete/ Closed/ Comminuted  
Partial  
Others  
Note: C3PO is droid in the Star-Wars movies.  
Knowledge Level 1, System: Skeletal  
Anonymous Contributor

---

**Bryant's traction: position**

Hi Yield [ID 2119]

**BrYant's traction:**  
**Bent Y.**  
Patient's body is the stem of the Y laying on the bed, and legs are the ends of the Y up in the air.  
Knowledge Level 1, System: Skeletal  
Kayle Luther

---

**Forearm fractures: bone in Monteggia vs. Galeazzi**

Hi Yield [ID 998]

Monteggia is fracture of ulna.  
Therefore, Galeazzi is fracture of radius.  
Knowledge Level 1, System: Skeletal  
Dr R. Coleman Junior House Officer

---

**Fracture: description**

[ID 3164]

**BLT LARD:**  
Bone  
Location on bone  
Type of fracture  
Lengthening  
Angulation  
Rotation  
Displacement  
Knowledge Level 1, System: Skeletal  
Brian Crownover Staff Family Physician, Offutt AFB, Nebraska

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**Monoarthritis differential**

Hi Yield [ID 2082]

**GHOST:**  
Gout  
Haemarthrosis  
Osteoarthritis  
Sepsis  
Trauma  
Knowledge Level 1, System: Skeletal  
Polly Weston Bristol University Med School

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**Osteosarcoma: risk factors**

Hi Yield [ID 2125]

**PRIMARY:**  
Paget's  
Radiation  
Infaction of bone  
Male  
Alcohol, poor diet, sedentary lifestyle [adults only]  
Retinoblastoma, Li-Fraumeni syndrome  
Young [10-20 yrs]  
Osteosarcoma is the most common **primary** malignant tumor of bone.  
Knowledge Level 4, System: Skeletal  
Robert O'Connor University College Dublin

**PANICS:****Pain****Arthralgia****Nerve compression / Neural deafness****Increased bone density****Cardiac failure****Skull / Sclerotic vertebrae**

Knowledge Level 3, System: Skeletal

Andrew Young UMDS

**Sacroiliitis: causes**

[ID 2927]

**PUB CAR:****Psoriasis****Ulcerative colitis****Behcet's disease****Crohn's disease****Ankylosing spondylitis****Reiter's disease**

Knowledge Level 4, System: Skeletal

Chris Brewer University of Birmingham Medical School

**Salter Harris fracture classification**

[ID 2632]

**Salter** Harris, modified to **SALTR**:type 1: **S**lipped epiphysistype 2: **A**bove the eiphyseal platetype 3: **L**ower than the eiphyseal platetype 4: **T**hrough both above and below eiphyseal platetype 5: **R**aised epiphysis, as in a compression injury

Salter Harris classification utilises visualising long bone distal portion with diaphysis superiorly placed and epiphysis inferiorly placed.

Knowledge Level 5, System: Skeletal

Anonymous Contributor

**OTHER / MISCELLANEOUS****Syncope (fainting) treatment**

[ID 212]

If the face is **red**, raise the **head**.If the face is **pale**, raise the **tail**.

Knowledge Level 2, System: Cardiovascular

Anonymous Contributor

**Clinical essay plan**

[ID 2007]

**"During Exams Please Say Silently I Must Prepare F\*\*\*\*ing Well":****Definition****Epidemiology****Pathology****Signs and Symptoms****Investigations****Management****Prognosis****Further Work**

Knowledge Level 3, System: Other/Miscellaneous

Kit and Gaj University College London Medical School

**Healthy lifestyle modification**

[ID 1114]

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**DRAINS:****Diet****Reduce weight**

Alcohol reduced

**Improve circulation (exercise)****No other disease****Smoking stopped**

Knowledge Level 1, System: Other/Miscellaneous

Lum

---

**Hospice facets**

[ID 641]

---

**HOSPICE:****Home****Outpatient****Support groups****Pain medication/ Physical needs****Inpatient****Counseling****End-stage (terminal) illness/ Emotional needs**

Knowledge Level 7, System: Other/Miscellaneous

Anonymous Contributor

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**Safety factors**

[ID 2030]

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**SETUP:****Stop****Environment****Traffic****Unknown hazards****Protect yourself, patient, bystanders**

Knowledge Level 1, System: Other/Miscellaneous

Robert Davis First aid facilitator

---

**PATHOLOGY**

---

**Achalasia: 1 possible cause, 1 treatment**

Hi Yield [ID 2172]

a**CH**Alasia:1 possible cause: **CH**agas' disease1 treatment: Ca++ **CH**annel blockers

Knowledge Level 5, System: Alimentary

Anonymous Contributor

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**Carcinoid syndrome: components**

Hi Yield [ID 1100]

**CARC**inoid:**Cutaneous flushing****Asthmatic wheezing****Right sided valvular heart lesions****Cramping and diarrhea**

Knowledge Level 2, System: Alimentary

Robert O'Connor University College Dublin

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**Colon cancer: risk factors**

[ID 2369]

**HULA:****Heridity/ Hereditary diseases****Ulcerative colitis****Low fibre, high fat diet****Adenomatous polyps**

Knowledge Level 3, System: Alimentary

Anonymous Contributor

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**Gallstones: risk factors**

Hi Yield [ID 1172]

5 F's:

**Fat**

**Female**

**Family history**

**Fertile**

**Forty**

Knowledge Level 4, System: Alimentary

Anonymous Contributor

### Haemochromatosis definition, classic triad

Hi Yield [ID 844]

"**Iron man triathlon**":

**Iron man**: deposition of **iron** in many body tissues.

**Triathlon** has 3 components, which match **triad**:

**Swimming**: **S**kin pigmentation

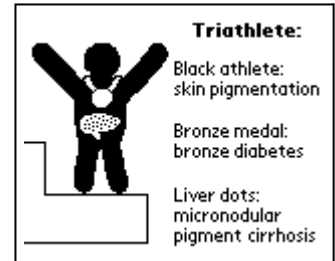
**Biking**: **B**ronze diabetes

**Marathon**: **M**icronodular pigment cirrhosis

See diagram for visual equivalent.

Knowledge Level 2, System: Alimentary

Robert O'Connor University College Dublin



### Hepatocellular carcinoma: aetiology, features

[ID 1609]

**ABC:**

**Aetiology:**

**A**flatoxins

**Hep B**

**C**irrhosis

**Features:**

**AFP** increased (classic marker)

**B**ile-producing (DDx from cholangiocarcinoma)

**C**ommonest primary liver tumor

Knowledge Level 4, System: Alimentary

Robert O'Connor University College Dublin

### Hepatomegaly: 3 common causes, 3 rarer causes

[ID 206]

Common are 3 C's:

**C**irrhosis

**C**arcinoma

**C**ardiac failure

Rarer are 3 C's:

**C**holestasis

**C**ysts

**C**ellular infiltration

Knowledge Level 3, System: Alimentary

Anonymous Contributor and Jamal Khan Not Specified and Birmingham University Medical Student

### IBD: extraintestinal manifestations

Hi Yield [ID 1780]

"Left intestine to sail the **SEAS** of the rest of the body":

**S**kin manifestations: erythema nodosum, pyoderma gangrenosum

**E**ye inflammation: iritis, episcleritis

**A**rthritis

**S**clerosing cholangitis

Knowledge Level 3, System: Alimentary

Anonymous Contributor

### Inflammatory Bowel Disease: which has cobblestones

Hi Yield [ID 286]

Crohn's has **C**obblestones on endoscopy.

Knowledge Level 1, System: Alimentary

Anonymous Contributor

### Kwashiorkor: distinguishing from Marasmus

Hi Yield [ID 1402]

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**FLAME:**

Fatty Liver

Anemia

Malabsorption

Edema

Knowledge Level 2, System: Alimentary

Chris UMF Bucharest

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**Oral cancer risks**

[ID 1500]

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**PATH LAB:**

Plummer-vinson syndrome

Alcohol

Tobacco

Human papilloma virus

Leukoplakia

Asbestos

Bad oral hygiene

Knowledge Level 6, System: Alimentary

Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan, Gujranwala

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**Pancreatitis: causes**

Hi Yield [ID 1561]

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**PANCREATITIS:**

Posterior

Alcohol

Neoplasm

Cholelithiasis

Rx (Iasix, AZT)

ERCP

Abdominal surgery

Trauma

Infection (mumps)

Triglycerides elevated

Idiopathic

Scorpion bite

Knowledge Level 4, System: Alimentary

Anonymous Contributor

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**Pancreatitis: causes**

Hi Yield [ID 1701]

---

**BAD S#!T:**

Biliary: gallstones, 1% of ERCP patients

Alcoholism/ Azotemia

Drugs

Scorpion bite/ Sea anemone/ SLE

Hyperlipidemia/ Hypercalcemia

Idiopathic/ Infectious (mumps, coxsackie, salmonella, ascariasis)

Tumor/ Trauma

The drugs are: penicillamine, furosemide, thiazides, ethacrynic acid, steroids, sulfas, ace inhibitors, N-SAIDs, erythromycin, estrogen.

Knowledge Level 3, System: Alimentary

Anonymous Contributor

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**Peptic ulcer: associated causative factors**

[ID 1099]

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**SHAZAM:**

Smoking

Hypercalcemia

Aspirin

Zollinger-Ellison

Acidity

MEN type I

These may work with H. pylori to promote ulceration, or may act alone.

Knowledge Level 5, System: Alimentary

Robert O'Connor University College Dublin

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**PKU findings**

Hi Yield [ID 821]

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**PKU:**

Pale hair, skin

Krazy (neurological abnormalities)

Unpleasant smell

Knowledge Level 1, System: Alimentary

Robert O'Connor and Lior Greenberg

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**Ulcerative colitis: features**

[ID 1005]

**ULCERATIONS:**

Ulcers

Large intestine

Carcinoma [risk]

Extraintestinal manifestations

Remnants of old ulcers [pseudopolyps]

Abscesses in crypts

Toxic megacolon [risk]

Inflamed, red, granular mucosa

Originates at rectum

Neutrophil invasion

Stools bloody

Knowledge Level 2, System: Alimentary

Samuel Atom Baek-Kim

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**Acute ischemia: signs [especially limbs]**

[ID 167]

6 P's:

Pain

Pallor

Pulselessness

Paralysis

Paraesthesia

Perishingly cold

Knowledge Level 5, System: Cardiovascular

Shebrain Cairo University

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**Anemia (normocytic): causes**

Hi Yield [ID 2000]

**ABCD:**

Acute blood loss

Bone marrow failure

Chronic disease

Destruction (hemolysis)

Knowledge Level 2, System: Cardiovascular

Anthony Chan

---

**Anemia causes (simplified)**

Hi Yield [ID 1108]

**ANEMIA:**

Anemia of chronic disease

No folate or B12

Ethanol

Marrow failure & hemaglobinopathies

Iron deficient

Acute & chronic blood loss

Knowledge Level 2, System: Cardiovascular

The Cashman University of Queensland, Australia

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**Aneurysm types**

Hi Yield [ID 1642]

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**MAD SCAB:**

**M**ycotic

**A**therosclerotic

**D**issecting

**S**yphilitic

**C**apillary microaneurysm

**A**rteriovenous fistula

**B**erry

Knowledge Level 3, System: Cardiovascular

Sushant Varma Medical student, University of Sheffield, UK

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**Atherosclerosis risk factors**

Hi Yield [ID 403]

"You're a **SAD BET** with these risk factors":

**S**ex: male

**A**ge: middle-aged, elderly

**D**iabetes mellitus

**BP** high: hypertension

**E**levated cholesterol

**T**obacco

Knowledge Level 2, System: Cardiovascular

HBV Morehouse School of Medicine

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**Atherosclerosis risk factors**

Hi Yield [ID 477]

**SHIFT MAID:**

**S**moking

**H**ypertension

(N)**I**DDM

**F**amily history

**T**riglycerdides & fats

**M**ale

**A**ge

**I**nactivity

**D**iet / **D**rink

Knowledge Level 2, System: Cardiovascular

Marcus McMillan Glasgow University

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**Blood disorders: commoner sex**

[ID 622]

**HE** (male) gets:

**HE**mophilia (X-linked)

**HE**inz bodies (G6PD deficiency, causing **HE**molytic anemia: X-linked)

**HE**mochromatosis (male predominance)

**HE**art attacks (male predominance)

**HE**noch-Schonlein purpura (male predominance)

**SHE** (female) gets:

**SHE**ehan's syndrome

Knowledge Level 5, System: Cardiovascular

Anonymous Contributor

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**Buerger's disease features**

Hi Yield [ID 809]

"**burger SCRAPS**":

**S**egmenting thrombosing vasculitis

**C**laudication (intermittent)

**R**aynaud's phenomenon

**A**ssociated with smoking

**P**ain, even at rest

**S**uperficial nodular phlebitis

Alternatively, if hungry for more detail [sic], "**CRISP PIG burgers**":

**C**hronic ulceration

**R**aynaud's phenomenon

**I**ntermittent claudication

**S**egmenting, thrombosing vasculitis

**P**ain, even at rest

**P**hlebitis (superficial nodular)

**I**diopathic

---

**Cardiovascular risk factors**

Hi Yield [ID 3276]

**FLASH BODIES:**

Family history

Lipids

Age

Sex

Homocystinaemia

Blood pressure

Obesity

Diabetes mellitus

Inflammation (raised CRP)/ Increased thrombosis

Exercise

Smoking

Knowledge Level 1, System: Cardiovascular

Hamish Mace Dunedin School of Medicine, New Zealand

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**Deep venous thrombosis: diagnosis**

Hi Yield [ID 896]

**DVT:**

Dilated superficial veins/ Discoloration/ Doppler ultrasound

Venography is gold standard

Tenderness of Thigh and calf

Knowledge Level 3, System: Cardiovascular

Rinku Uberoi UNIBE

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**Deep venous thrombosis: genetic causes**

[ID 651]

**ALASCA:**

Antithrombin III

Leiden (Factor V)

APC (Activated Protein C)

S-protein deficiency

C-protein deficiency

Antiphospholipid antibody

Knowledge Level 6, System: Cardiovascular

Anonymous Contributor University of Otago Medical School, New Zealand

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**Disseminated Intravascular Cogulation: causes**

Hi Yield [ID 1529]

**DIC:**

Delivery **TEAR** (obstetric complications)

Infections (gram negative)/ Immunological

Cancer (prostate, pancreas, lung, stomach)

Obstretrical complications are **TEAR**:

Toxemia of pregnancy

Emboli (amniotic)

Abrutio placentae

Retain fetus products

Knowledge Level 5, System: Cardiovascular

Khawaja Atif Farooq Rawalpindi Medical College, Islamabad, Pakistan (Gujranwala)

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**Fat embolism: findings**

Hi Yield [ID 1224]

**"Fat, Bat, Fract":**

Fat in urine, sputum

Bat-wing lung x-ray

Fracture history

Also, fracture of **FEMur** causes **Fat EMboli**.

Knowledge Level 3, System: Cardiovascular

Robert O'Connor & Rinku Uberoi

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**Heart failure causes**

Hi Yield [ID 1079]



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**"HEART MAY DIE":**

Hypertension

Embolism

Anemia

Rheumatic heart disease

Thyrotoxicosis (incl. pregnancy)

Myocardial infarct

Arrhythmia

Y

Diet & lifestyle

Infection

Endocarditis

Knowledge Level 3, System: Cardiovascular

The Cashman University of Queensland, Australia

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**Hemolytic anemia types**

[ID 1412]

**SHEEP T:T:**

Sickle cell

Hereditary splenocytosis

Enzyme deficiencies: [G6P, pyruvate kinase]

Erythroblastosis fetalis

Paroxysmal nocturnal hemoglobinuria

Trauma to RBCs

Immunochemolytics: [warm Ab, cold Ag]

Thalassemias: [alpha, beta]

Knowledge Level 2, System: Cardiovascular

Robert O'Connor University College Dublin

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**Hypertension: secondary hypertension causes**

[ID 200]

**CHAPS:**

Cushing's syndrome

Hyperaldosteronism [aka Conn's syndrome]

Aorta coarctation

Phaeochromocytoma

Stenosis of renal arteries

Note: only 5% of hypertension cases are secondary, rest are primary.

Knowledge Level 6, System: Cardiovascular

Anonymous Contributor

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**Kawasaki disease: diagnostic criteria**

Hi Yield [ID 1586]

**CHILD:**

5 letters=5 days, >5 years old, 5 out of 6 criteria for diagnosis:

Conjunctivitis (bilateral)

Hyperthermia (fever) >5 days

Idiopathic polymorphic rash

Lymphadenopathy (cervical)

Dryness & redness of (i) lips & mouth (ii) palms & soles [2 separate criteria]

Knowledge Level 3, System: Cardiovascular

Wen Sun Lum University of Calgary, Canada

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**Kawasaki disease: features**

Hi Yield [ID 1034]

Disease name: a Kawasaki motorcycle.

Usually young children, epidemic in Japan: Japanese child rides the motorcycle.

Conjunctival, oral erythema: red eyes, mouth.

Fever: thermometer.

Erythema of palms, soles: red palms, soles.

Generalized rash: rash dots.

Cervical lymphadenitis: enlarged cervical nodes with inflammation arrows.

Vasculitis of arteries: inflammation arrows on arteries.

Cardiovascular sequelae [20%]: inflammation arrows on cardiac arteries.

Treat with aspirin: aspirin headlight.

See diagram.

Knowledge Level 3, System: Cardiovascular

Robert O'Connor University College Dublin



## Kawasaki's disease: features

Hi Yield [ID 1745]

### FEAR ME:

Fever

Eye: periorbital conjunctival injection

Adenopathy: usually cervical

Rash

Mouth: red lips

Extremities: red hands and feet

Disease to be feared because of risk of coronary aneurysms.

Knowledge Level 3, System: Cardiovascular

Vince Yamashiroya

## Macrocytic anaemia: differential

Hi Yield [ID 2536]

### FAT RBC:

Fetus (pregnancy)

Alcohol

Thyroid disease (ie hypothyroidism)

Reticulocytosis

B12 and folate deficiency

Cirrhosis and chronic liver disease

Knowledge Level 5, System: Cardiovascular

Anonymous Contributor

## MI: complications

Hi Yield [ID 512]

### HAS CRAPPED:

Heart failure/ Hypertension

Arrhythmia

Shock

Cardiac Rupture

Aneurysm

Pericarditis

Pulmonary Emboli

DVT

Knowledge Level 5, System: Cardiovascular

Leo University College London

## MI: complications

Hi Yield [ID 1794]

### "LEAP on the MAP":

LVF

Embolism (systemic)

Aneurysm (ventricular)

Progressive infarction

Myocardial rupture

Arrhythmia

Pericarditis

Knowledge Level 1, System: Cardiovascular

Kevin Lau University of Hong Kong

## MI: post-MI complications

Hi Yield [ID 2789]

### ACT RAPID:

Arrhythmias (SVT, VT, VF)

Congestive cardiac failure

Tamponade/ Thromboembolic disorders

Rupture (ventricle, septum, papillary muscle)

Aneurysm (ventricle)

Pericarditis

Infarction (a second one)

Death/ Dressler's syndrome

Knowledge Level 2, System: Cardiovascular

Dr. Huw Davies

## MI: sequence of elevated enzymes after MI

Hi Yield [ID 230]

"**C-AST-Le**" (castle):

**CK-MB** first

**AST** second

**LDH** third

Also: can use the last 'E' for **ESR**.

Knowledge Level 2, System: Cardiovascular

Anonymous Contributor

### MI: sequence of elevated enzymes after MI

Hi Yield [ID 589]

"Time to **CALL** 911":

From first to appear to last:

**Troponin**

**CK-MB**

**AST**

**LDH1**

Knowledge Level 2, System: Cardiovascular

Marco Foramiglio Centro de Ciências Médicas e Biológicas - PUC/SP- Sorocaba/SP - Brazil

### Pericarditis: findings

Hi Yield [ID 1222]

**PERI**Carditis:

**Pulsus paradoxus**

**ECG** changes

**Rub**

**Increased JVP**

**Chest pain** [worse on inspiration, better when lean forward]

Knowledge Level 3, System: Cardiovascular

Robert O'Connor University College Dublin

### Pick's disease: location, action, epidemiology

Hi Yield [ID 1126]

See figure.

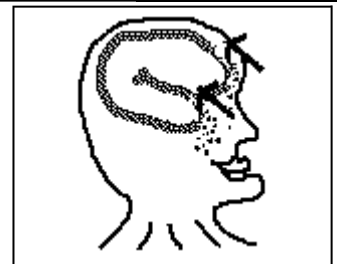
**Pick** axes are **Picking** away at the old woman's cerebral cortex, causing cortical atrophy.

2 pick axes on her brain: frontal lobe and anterior 1/3 of temporal.

An old woman, since epidemiology is elderly & more common in women.

Knowledge Level 1, System: Cardiovascular

Robert O'Connor University College Dublin



### Portal hypertension: features

Hi Yield [ID 1807]

**ABCDE**:

**Ascites**

**Bleeding** (haematemesis, piles)

**Caput medusae**

**Diminished liver**

**Enlarged spleen**

Knowledge Level 3, System: Cardiovascular

Dr. Harsh Sharma

### Protein C, Protein S: function

[ID 1603]

**C** and **S** are:

**Clot**

**Stoppers**

These proteins inhibit coagulation.

Knowledge Level 5, System: Cardiovascular

Rinku Uberoi New York Hospital

### Takayasu's disease is Pulseless disease

Hi Yield [ID 150]

"Can't **Tak'a ya pulse**" (Can't take your pulse):

Takayasu's disease known as Pulseless disease, since pulse is weakened in the upper extremities.

Knowledge Level 2, System: Cardiovascular

Anonymous Contributor

### Thrombotic thrombocytopenic purpura: signs

[ID 1564]

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**FAT RN:**

Fever

Anemia

Thrombocytopenia

Renal problems

Neurologic dysfunction

Knowledge Level 3, System: Cardiovascular

Anonymous Contributor

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**Thrombus: possible fates**

[ID 577]

**DOPE:**

Dissolution

Organization & repair

Propagation

Embolization

Knowledge Level 3, System: Cardiovascular

Robert O'Connor University College Dublin

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**TTP: clinical features**

Hi Yield [ID 2102]

Thrombosis and thrombocytopenia **PARTNER** together:

Platelet count low

Anemia (microangiopathic hemolytic)

Renal failure

Temperature rise

Neurological deficits

**ER** admission (as it is an emergency)

Knowledge Level 2, System: Cardiovascular

Anthony Chan

---

**Virchow's triad (venous thrombosis)**

Hi Yield [ID 1009]

"**VIR**chow":

Vascular trauma

Increased coagulability

Reduced blood flow (stasis)

Knowledge Level 2, System: Cardiovascular

Rinku Uberoi UNIBE

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**Von Hippel-Lindau: signs and symptoms**

Hi Yield [ID 1065]

**HIPPEL:**

Hemanigoblastomas

Increased renal cancer

Pheochromocytoma

Port-wine stains

Eye dysfunction

Liver, pancreas, kidney cysts

Bare bones version: **Hippel-Lindau**, with H and L as above.

Knowledge Level 4, System: Cardiovascular

Robert O'Connor University College Dublin

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**Addison's disease: features**

Hi Yield [ID 897]

**ADDISON:**

Autoimmune

**DIC** (meningococcus)

Destruction by cancer, infection, vascular insufficiency

Iatrogenic

Sarcoidosis, granulomatous such as TB histiomycosis

hypOtension/ hypOnatremia

Nelson's syndrome [post adrelectomy, increased ACTH]

Knowledge Level 3, System: Endocrine

Samuel Atom Baek-Kim

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**Adrenal disorders: Cushing's vs Addison's**

Hi Yield [ID 1613]

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**Cushing:** is **Gushing** cortisol.

In **Addison's**: patient's cortisol doesn't **Add up**.

Knowledge Level 1, System: Endocrine

Anonymous Contributor

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**Calcification: metastatic vs. dystrophic**

[ID 827]

**Metastatic:** **Metabolism** imbalance.

**Dystrophic:** **Damaged** tissue.

Knowledge Level 1, System: Endocrine

Anonymous Contributor

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**Cushing syndrome**

Hi Yield [ID 667]

**CUSHING:**

Central obesity/ Cervical fat pads/ Collagen fiber weakness/ Comedones (acne)

Urinary free cortisol and glucose increase

Striae/ Suppressed immunity

Hypercortisolism/ Hypertension/ Hyperglycemia/ Hirsutism

Iatrogenic (Increased administration of corticosteroids)

Noniatrogenic (Neoplasms)

Glucose intolerance/ Growth retardation

Knowledge Level 2, System: Endocrine

Rinku Uberoi

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**Goitre: differential**

[ID 1610]

**GOITRE:**

Goitrogens

Onset of puberty

Iodine deficiency

Thyrotoxicosis/ Tumor/ Thyroiditis [Hashimoto's]

Reproduction [pregnancy]

Enzyme deficiencies

Knowledge Level 3, System: Endocrine

Robert O'Connor University College Dublin

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**Hirsutism vs. virilism**

Hi Yield [ID 2839]

**Hirsutism:** **Hair** on body like a male.

**Virilism:** Voice and rest of secondary sexual characteristics like a male.

Knowledge Level 1, System: Endocrine

Anonymous Contributor

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**Hypercalcemia: symptoms of elevated serum levels**

[ID 161]

**"Bones, Stones, Groans, Moans":**

**Bones:** pain in bones

**Stones:** renal

**Groans:** pain

Psychic **moans**/ Psychological **overtones**: confused state

Knowledge Level 3, System: Endocrine

Anonymous Contributor

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**Hypothyroidism/thyroiditis: manifestations and morphology**

Hi Yield [ID 628]

**"A SCHISM** among the Axis during WWII":

Addison disease

Subacute thyroiditis

Cretinism/ Cold intolerance/ Constipation

Hashimoto's disease

Infectious-subacute thyroiditis

Silent thyroiditis

Myxedema coma

The Axis: Schmidt syndrome (when other endocrinology disorders accompany Hashimoto's disease) and "Hitler cells" (Hurthle cells, which are follicular epithelial cells with basophilic inclusions)

Knowledge Level 5, System: Endocrine

Sung H. Kim

---

**MEN I (Multiple Endocrine Neoplasia) syndrome: components**

Hi Yield [ID 874]

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"Please Please Pay Attention To **peptic ulceration**, you **worms**":

Adenomas of:

**P**ituitary

**P**ancreatic islets

**P**arathyroid

**A**drenal cortex

**T**hyroid, associated with **peptic ulceration**

Syndrome is called "**Wermer's** syndrome".

Knowledge Level 2, System: Endocrine

Anonymous Contributor

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### Multiple Endocrine Neoplasia (MEN) subtype classification

Hi Yield [ID 144]

Each subtype has 2 or 3 causes, plus something 1 or 2 more items.

MEN I is disease of 3 P's: [**P**ituitary, **P**arathyroid, **P**ancreas] plus one more: adrenal cortex.

MEN II is disease of 2 C's: [**C**arcinoma of thyroid, **C**atacholamines (pheochromocytoma)] plus two more: parathyroid for MEN IIa or mucocutaneous neuromas for MEN IIB (also called MEN III).

Knowledge Level 3, System: Endocrine

Anonymous Contributor

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### Multiple endocrine neoplasia III: components

Hi Yield [ID 960]

**MEN III** is a disease of **3 M's**:

**M**edullary thyroid carcinoma

**M**edulla of adrenal (pheochromocytoma)

**M**ucosal neuroma

Knowledge Level 4, System: Endocrine

Anonymous Contributor

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### Phaeochromocytoma: diagnosis rule

Hi Yield [ID 2040]

Rule of 10's:

10% ectopic

10% multiple

10% malignant

Knowledge Level 3, System: Endocrine

Anonymous Contributor University of Sydney, Australia

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### Pheochromocytoma: 3 most common symptoms

Hi Yield [ID 247]

"**PHE**ochromocytoma":

**P**alpitations

**H**eadache

**E**disodic sweating (diaphoresis)

Knowledge Level 4, System: Endocrine

Anonymous Contributor

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### Pheochromocytoma: common symptoms

[ID 1776]

5 P's:

**P**aroxysmal rise in BP

**P**alpitations

**P**erspiration

**P**ain in abdomen

**P**MV in urine

Knowledge Level 3, System: Endocrine

Malik Tariq Rahim King Edward Medical College, Pakistan

---

### Thyroid carcinoma: features, prognosis of most popular

Hi Yield [ID 283]

Most **P**opular is **P**apillary.

Clinical features:

**P**apillae (branching)

**P**alpable lymph nodes

"**P**upil" nuclei (Orphan Annie)

**P**sammoma bodies within lesion (often)

Also, has a **P**ositive **P**rognosis (10 year survival rate: 98%).

Knowledge Level 4, System: Endocrine

Anonymous Contributor

### Thyroid carcinoma: frequency

[ID 2997]

"Please Feel My A\$\$":

In order of most frequent to least frequent, and in order from least aggressive to most aggressive:

Papillary carcinoma

Follicular carcinoma

Medullary thyroid carcinoma

Anaplastic carcinoma

Knowledge Level 4, System: Endocrine

Medicine 2004 student University of Western Ontario

### Thyroid storm characteristics

[ID 627]

"Storm HITS girls cAMP":

Thyroid storm due to:

Hyperthyroidism

Infection or Illness at childbirth

Trauma

Surgery

girls: Thyroid storm more common in females.

cAMP: Tx involves high dose of beta blockers (beta receptors work via cAMP)

Alternatively: "S#IT storm": Surgery, Hyperthyroidism, Infection/ Illness, Trauma.

Knowledge Level 4, System: Endocrine

Sung H. Kim & Lior Greenberg

### Thyrotoxicosis syndrome: signs and symptoms

Hi Yield [ID 1082]

"A Penny For Every Symptom That Hyperthyroidism Will Make Grossly Evident":

Anxiety

Palpitations/ Pulse rapid

Fatigability

Emotional lability

Sweating

Tremor

Heat intolerance

Weight loss with good appetite

Muscular weakness/ Menstrual changes

Goitre

Eye changes

Knowledge Level 3, System: Endocrine

Daniel Clarke University of Queensland

### Baldness risk factors

[ID 780]

"Daddy Doesn't Deny Getting Hair Implants":

Diet

Disease

Drugs

Genes

Hormones

Injury to the scalp

Knowledge Level 4, System: Integumental

Anonymous Contributor

### Diabetic ketoacidosis: I vs. II

Hi Yield [ID 694]

ketONE bodies are seen in type ONE diabetes.

Knowledge Level 2, System: Integumental

Anonymous Contributor

### Lichen planus characteristics

[ID 196]

Planus has 4 P's:

Peripheral

Polygonal

Pruritus

Purple

Knowledge Level 3, System: Integumental

Anonymous Contributor

## Melanoma vs. basal cell, squamous cell carcinoma: metastatic ability

Hi Yield [ID 1606]

**M**elanoma is more likely to

**M**etastasize.

Basal and squamous hardly ever metastasize.

Knowledge Level 1, System: Integumental

Anonymous Contributor

## APKD: signs, complications, accelerators

Hi Yield [ID 1348]

11 B's:

Signs:

**B**loody urine

**B**ilateral pain [vs. stones, which are usually unilateral pain]

**B**lood pressure up

**B**igger kidneys

**B**umps palpable

Complications:

**B**erry aneurysm

**B**iliary cysts

**B**icuspid valve [prolapse and other problems]

Accelerators:

**B**oys

**B**lacks

**B**lood pressure high

Knowledge Level 5, System: Kidney/Urine

Robert O'Connor University College Dublin

## Barter's syndrome: pathogenesis, major sign

[ID 1396]

Barter: "In exchange for giving away Na<sup>+</sup>,K<sup>+</sup>,Cl<sup>-</sup>, you can drop the blood pressure".

Knowledge Level 7, System: Kidney/Urine

Samuel Atom Baek-Kim Tuckahoe, New York

## Calculi: types

[ID 1223]

**CAICU**li:

**C**alcium

**A**mmonium magnesium phosphate

**C**ystine

**U**ric acid

Knowledge Level 3, System: Kidney/Urine

Robert O'Connor University College Dublin

## Gout vs. pseudogout: crystal lab findings

Hi Yield [ID 1288]

**P**seudogout crystals are:

**P**ositive birefringent

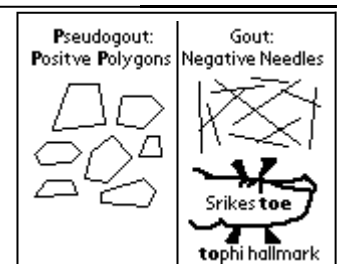
**P**olygon shaped

Gout therefore is the negative needle shaped crystals.

Also, gout classically strikes great **T**oe, and its hallmark is **T**ophi.

Knowledge Level 1, System: Kidney/Urine

Robert O'Connor University College Dublin



## Gout: factors that can precipitate an attack of acute gouty arthritis

Hi Yield [ID 345]

**D**ARK:

**D**iuretics

**A**lcohol

**R**enal disease

**K**icked (trauma)

And, the attack occurs most often at night [thus "dark"].

Knowledge Level 4, System: Kidney/Urine

Marc Miller Sackler School of Medicine

## Gout: major features

Hi Yield [ID 1854]



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**GOUT:**

Great toe

One joint (75% monoarticular)

Uric acid increased (hence urolithiasis)

Tophi

Knowledge Level 1, System: Kidney/Urine

Dr. Harsh Sharma BJ Medical College

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**Hematuria: urethral causes**

Hi Yield [ID 2069]

**NUTS:**

Neoplasm

Urethritis

Tumour

Stone

Knowledge Level 2, System: Kidney/Urine

Sushant Varma University of Sheffield, UK

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**Nephritic syndrome: glomerular diseases commonly presenting as nephritic syndrome**

Hi Yield [ID 2109]

**PARIS:**

Post-streptococcal

Alport's

RPGN

IgA nephropathy

SLE

Alternatively: **PIG ARMS** to include Goodpasture's [one cause of RPGN], Membranoproliferative [only sometimes included in the classic nephritic list].

Knowledge Level 3, System: Kidney/Urine

Knightmare Howard University College of Medicine

---

**Nephrotic syndrome: hallmark findings**

Hi Yield [ID 1644]

"Protein LEAC":

Proteinuria

Lipid up

Edema

Albumin down

Cholesterol up

In nephrotic, the **proteins leak** out.

Knowledge Level 2, System: Kidney/Urine

Anonymous Contributor

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**Renal failure (chronic): consequences**

[ID 1612]

**ABCDEFGF:**

Anemia

-due to less EPO

Bone alterations

-osteomalacia

-osteoporosis

-von Recklinghausen

Cardiopulmonary

-atherosclerosis

-CHF

-hypertension

-pericarditis

D vitamin loss

Electrolyte imbalance

-sodium loss/gain

-metabolic acidosis

-hyperkalemia

Feverous infections

-due to leukocyte abnormalities and dialysis hazards

GI disturbances

-haemorrhagic gastritis

-peptic ulcer disease

-intractable hiccups

Knowledge Level 3, System: Kidney/Urine

**Renal failure: causes**

Hi Yield [ID 1080]

**AVID GUT:**

Acute tubular necrosis

Vascular obstruction

Infection

Diffuse intravascular coagulation

Glomerular disease

Urinary obstruction

Tubulointerstitial nephritis

Knowledge Level 3, System: Kidney/Urine

Daniel Clarke University of Queensland

**Anemia: TIBC finding to differentiate iron deficiency vs. chronic disease**

Hi Yield [ID 2183]

TIBC levels at the:

Top=Iron deficiency.

Bottom=Chronic disease.

Knowledge Level 3, System: Lymphoid

Robert O'Connor University College Dublin

**Apoptosis vs. necrosis**

[ID 686]

"LIFELESS" (since cells are dead):

Differences are in:

Leaky membranes

Inflammatory response

Fate

Extent

Laddering

Energy dependent

Swell or shrink

Stimulus

	Apoptosis	Necrosis
Leaky	No	Yes
Inflamm.	None	Usual
Fate	Swallowed by neighbours	Eaten by phagocytes
Extent	Single cell	Cell groups
Laddering	Yes	No
Energy dep.	Yes	No
Swell,shrink	Shrink	Swell
Stimulus	Physiologic Pathologic	Pathologic only

See attached table for apoptosis and necrosis properties for each of the above.

Knowledge Level 3, System: Lymphoid

Robert O'Connor University College Dublin

**Hemophilia: type A factor**

Hi Yield [ID 3272]

Hemophilia A: problems with VIII factor (number V as an inverted A).

Knowledge Level 2, System: Lymphoid

Julio M. De Peña, M.D. UNIBE Med School

**Hodgkin's lymphoma classification**

[ID 195]

A: Asymptomatic

B: Bad

Knowledge Level 3, System: Lymphoid

Anonymous Contributor

**Hypersplenism: criteria**

[ID 1866]

"Hyper Splenism Ravages Cells":

Hypercellular or normal marrow

Splenomegaly

Response to splenectomy

Cytopenias

Knowledge Level 4, System: Lymphoid

Dr. Harsh Sharma BJMC, Pune, India

**Leukemias: acute vs. chronic rules of thumb**

Hi Yield [ID 1538]

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**ABCDE:**

Acute is:

Blasts predominate

Children

Drastic course

Elderly

Few WBC's (so Fevers)

Chronic is all the opposites:

Mature cells predominate

Middle aged

Less debilitating course

Elevated WBC's, so not a history of fevers and infections

Knowledge Level 2, System: Lymphoid

Anonymous Contributor

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**Megaloblastic anemia: vitamin B12 deficiency vs. folate deficiency**

Hi Yield [ID 2910]

Vitamin B12 deficiency also affects Brain (optic neuropathy, subacute combined degeneration, paresthesia).

Folate deficiency is not associated with neurological symptoms.

Knowledge Level 1, System: Lymphoid

Glen Davis Cornell University Medical College

---

**Microcytic anemia: causes**

[ID 2836]

"Find Those Small Cells":

Fe deficiency

Thalassemia

Sideroblastic

Chronic disease

Knowledge Level 1, System: Lymphoid

K. Dang University of Toronto

---

**Sarcoidosis summarized**

Hi Yield [ID 601]

**SARCOIDOSIS:**

Schaumann calcifications

Asteroid bodies/ [ACE] increase/ Anergy

Respiratory complications/ Renal calculi/ Restrictive lung disease/ Restrictive cardiomyopathy

Calcium increase in serum and urine/ CD4 helper cells

Ocular lesions

Immune mediated noncaseating granulomas/ [Ig] increase

Diabetes insipidus/ [D vit.] increase/ Dyspnea

Osteopathy

Skin (Subcutaneous nodules, erythema nodosum)

Interstitial lung fibrosis/ IL-1

Seventh CN palsy

Knowledge Level 4, System: Lymphoid

Rinku Uberoi UNIBE

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**Symptoms of TTP/HUS**

[ID 3093]

"Nasty Fever Ruined My Tubes":

Neurological symptoms

Fever

Renal failure

Microangiopathic hemolytic anemia

Thrombocytopenia

Knowledge Level 5, System: Lymphoid

Sol Shaftel University of Rochester School of Medicine

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**Wiskott-Aldrich syndrome: symptom triad**

Hi Yield [ID 592]

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"**PET WASP**":

**Pyrogenic infections**

**Eczema**

**Thrombocytopenia**

WASP is the name of the causative agent: Wiskott-Aldrich Syndrome Protein.

Alternatively: Wiskott=Hot, Aldrich=Itch, Syndrom=Throm.

Knowledge Level 2, System: Lymphoid

Robert O'Connor University College Dublin

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### Duchenne vs. Becker Muscular Dystrophy

[ID 428]

**Duchenne Muscular Dystrophy (DMD) : Doesn't Make Dystrophin.**

**Becker Muscular Dystrophy (BMD): Badly Made Dystrophin (a truncated protein).**

Knowledge Level 4, System: Muscle

Robert O'Connor University College Dublin

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### McArdle's syndrome

Hi Yield [ID 948]

**MCARDLES:**

**Myoglobinuria**

**Cramping after exercise**

**Accumulated glycogen**

**Recessive inheritance**

**Deficiency of muscle phosphorylase**

**Lactate levels fail to rise**

**Elevated creatine kinase**

**Skeletal muscle only**

Knowledge Level 5, System: Muscle

Samuel Atom Baek-Kim

---

### Alzheimer's disease (AD): associations, findings

Hi Yield [ID 1950]

**AD:**

Associations:

**Aluminum toxicity**

**Acetylcholine deficiencies**

**Amyloid B**

**Apolipoprotein gene E**

**Altered nucleus basalis of Meynert**

**Down's**

Findings:

**Actin inclusions (Hirano bodies)**

**Atrophy of brain**

**Amyloid plaques**

**Aphasia, Apraxia, Agitation**

**DNA-coiled tangles**

**Dementia, Disoriented, Depressed**

Knowledge Level 6, System: Nervous

Dr. Atif Farooq Khawaja Rawalpindi Medical College, Gujranwala, Pakistan

---

### Alzheimer's disease: features

Hi Yield [ID 1852]

**RONALD** (Ronald Reagan, a famous victim):

**Reduction of Ach**

**Old age**

**Neurofibrillary tangles**

**Atrophy of cerebral cortex (diffuse)**

**Language impairment**

**Dementia (MC in elderly)/ Down's syndrome**

Knowledge Level 2, System: Nervous

Dr. Harsh Sharma BJMC, Pune, India

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### Cerebral palsy: general features

[ID 1061]

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**PALSY:**

**P**aresis

**A**taxia

**L**agging motor development

**S**pasticity

**Y**oung

Knowledge Level 2, System: Nervous

Robert O'Connor University College Dublin

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**Dandy-Walker syndrome: components**

[ID 1060]

"**D**andy **W**alker **S**ndrome":

**D**ilated 4th ventricle

**W**ater on the brain

**S**mall vermis

Knowledge Level 4, System: Nervous

Robert O'Connor University College Dublin

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**Lou Gehrig's is both upper and lower motor neuron signs**

Hi Yield [ID 1059]

**LoU** = **L**ower & **U**pper.

Knowledge Level 1, System: Nervous

Robert O'Connor University College Dublin

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**Multiple sclerosis (MS): pathology**

Hi Yield [ID 1131]

**MS** attacks the **Myelin Sheath**, resulting in plaques.

Knowledge Level 1, System: Nervous

Lior Greenberg Technion Faculty of Medicine, Haifa, Israel

---

**Neuroblastoma: features**

Hi Yield [ID 1058]

**N-MYC:**

**N**uclei have "double minutes"

**M**alignant

**Y**oung

**C**atecholamine secreting

And hallmark is **n-myc** amplification.

Knowledge Level 3, System: Nervous

Robert O'Connor University College Dublin

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**Parkinsonism: essential features**

Hi Yield [ID 539]

**TRAPS:**

**T**remor (resting tremor)

**R**igidity

**A**kinesia

**P**ostural changes (stooped)

**S**tare (serpentine stare)

To remember what kind of tremor and postural change, can look at letter that follows in TRAPS: **T**remor is **R**esting, **P**osture is **S**tooped.

Knowledge Level 1, System: Nervous

Anonymous Contributor

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**Parkinson's disease: symptoms**

Hi Yield [ID 1032]

**PQRST:**

**P**aucity of expression

par**Q**inson

**R**igidity (cogwheel)

**S**tooped posture

**T**remor at rest

If can't remember that Parkinson's tremor is the one that is "resting tremor", look at the last 3 letters: RST.

Knowledge Level 1, System: Nervous

Mitul SUNY, Stony Brook

---

**Pick's disease: features**

Hi Yield [ID 1948]

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**PICK:**

Progressive degeneration of neurons

Intracytoplasmic Pick bodies

Cortical atrophy

Knife edge gyri

Knowledge Level 5, System: Nervous

Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan

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**Pyrogenic meningitis: likeliest bug in age group**

Hi Yield [ID 1014]

"Explaining **H**ot **N**eck **S**tiffness":

In order from birth to death:

**E. coli** [infants]

**Haemophilus influenzae** [older infants, kids]

**Neisseria meningitis** [young adults]

**Streptococcus pneumoniae** [old folks]

Knowledge Level 4, System: Nervous

Robert O'Connor University College Dublin

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**Tabes Dorsalis morphology**

Hi Yield [ID 797]

**DORSALIS:**

Dorsal column degeneration

Orthopedic pain (Charcot joints)

Reflexes decreased (deep tendon)

Shooting pain

Argyll-Robertson pupils

Locomotor ataxia

Impaired proprioception

Syphilis

Knowledge Level 2, System: Nervous

Robert O'Connor University College Dublin

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**Tuberous sclerosis: presenting features**

Hi Yield [ID 826]

"**Z**its, **F**its, **D**eficits":

**Fits:** seizures

**Deficits:** neurological deficits

Knowledge Level 4, System: Nervous

Lior Greenberg Technion Faculty of Medicine, Haifa, Israel

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**Wernicke-Korsakoff triad**

[ID 357]

Syndrome in alcoholics, who love to "drink **CANs** of beer":

Confusion

Ataxia

Nystagmus

Knowledge Level 2, System: Nervous

Victor R. Carrion Zamoira Ponce School of Medicine

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**Wernicke-Korsakoff's psychosis: findings**

Hi Yield [ID 400]

**COAT RACK:**

Wernicke's encephalopathy (acute phase):

Confusion

Ophthalmoplegia

Ataxia

Thiamine tx.

Korsakoff's psychosis (chronic phase):

Retrograde amnesia

Anterograde amnesia

Confabulation

Korsakoff's psychosis

Knowledge Level 2, System: Nervous

HBV Morehouse School of Medicine

---

**CREST syndrome: components**

Hi Yield [ID 2076]

---

**CREST:**

Calcinosis

Raynaud's phenomena

Esophageal dysmotility

Sclerodactyly

Telangiectasia

Knowledge Level 1, System: Other/Miscellaneous

Andrew J. Vasil University of Minn Medical School

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**Edwards' syndrome: characteristics**

Hi Yield [ID 2146]

**EDWARDS:**

Eighteen (trisomy)

Digit overlapping flexion

Wide head

Absent intellect (mentally retarded)

Rocker-bottom feet

Diseased heart

Small lower jaw

Knowledge Level 2, System: Other/Miscellaneous

Monika Kiripolsky Vanderbilt University School of Medicine

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**Fragile X syndrome: features**

Hi Yield [ID 2151]

**FEMALES**

FMR1 gene

Exhibits anticipation

Macro-orchidism

Autism

Long face with large jaw

Everted eyes

Second most common cause of genetic mental retardation

Knowledge Level 1, System: Other/Miscellaneous

Sung Hoon Kim El Paso, TX

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**Fragile-X syndrome: features**

Hi Yield [ID 1726]

**DSM-4:**

Discontinued chromosome staining

Shows anticipation

Male (male more affected)

Mental retardation (2nd most common genetic cause)

Macrognathia

Macroorchidism

Knowledge Level 4, System: Other/Miscellaneous

Hugo M. Rodriguez, MD University of Virginia Roanoke-Salem Program

---

**Kawasaki Disease Criteria**

Hi Yield [ID 3219]

"Be careful when riding a **Kawasaki** motorcycle, you might get **CREAM**ed.

Conjunctivitis (non-exudative)

Rash (polymorphous non-vesicular)

Edema (or erythema of hands or feet)

Adenopathy (cervical, often unilateral)

Mucosal involvement (erythema or fissures or crusting)

To have Kawasaki disease you must have fever for greater than 5 days plus 4 of the above.

Knowledge Level 2, System: Other/Miscellaneous

Eric J Ex

---

**Necrosis: the 4 types**

[ID 250]

"Life Can Get Complicated":

Liquifactive

Coagulation

Gangrene

Caseous

'Life' used since necrosis is 'death'.

Knowledge Level 1, System: Other/Miscellaneous

Robert O'Connor University College Dublin

### Turner syndrome: components

Hi Yield [ID 579]

**CLOWNS:**

Cardiac abnormalities (specifically Coartication)

Lymphoedema

Ovaries underdeveloped (causing sterility, amenorrhea)

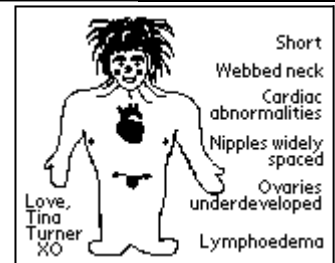
Webbed neck

Nipples widely spaced

Short

Knowledge Level 1, System: Other/Miscellaneous

Robert O'Connor University College Dublin



### Whipple's disease: full features

[ID 1912]

**WHIPPLES:**

Weight loss

Hyperpigmentation of skin

Infection with tropheryma whippelii

PAS positive granules in macrophage

Polyarthritis

Lymphadenopathy

Enteric involvement

Steatorrhea

Knowledge Level 7, System: Other/Miscellaneous

Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan

### Bronchial obstruction: consequences

Hi Yield [ID 1077]

**APPLE BABE:**

Atelectasis

Pleural adhesions

Pleuritis

Lipid pneumonia

Effusion->organisation->fibrosis

Bronchiectasis

Abscess

Broncho and lobar pneumonia

Emphysema

Knowledge Level 6, System: Pulmonary

BB University of Queensland, Australia

### COPD: 4 types and hallmark

Hi Yield [ID 851]

**ABCDE:**

Asthma

Brochiectasis

Chronic bronchitis

Dyspnea [hallmark of group]

Emphysema

Alternatively: replace **Dyspnea** with **Decreased FEV1/FVC ratio**.

Knowledge Level 1, System: Pulmonary

Robert O'Connor University College Dublin

### COPD: blue bloater vs. pink puffer diseases

Hi Yield [ID 2396]

emPhysema has letter **P** (and not B) so **Pink Puffer**.

chronic **B**ronchitis has letter **B** (and not P) so **Blue Bloater**.

Knowledge Level 1, System: Pulmonary

Harsh Sharma BJMC, Pune, India



## Emphysema: types, most important feature of each

Hi Yield [ID 823]

"Cigarettes Is Primary Problem":

Types:

Centrilobular

Irregular

Pancinar

Paraseptal

Most important feature for each type (in order as above):

Cigarettes

Inflammation healed to scar

Protease inhibitor deficiency (a1-antitrypsin)

Pneumothorax

"Cigarettes is primary problem" used since cigarettes is most common cause of emphysema.

Keeping P's straight: **Pan** is **ant**itrypsin.

Knowledge Level 4, System: Pulmonary

Robert O'Connor University College Dublin

## Interstitial lung disease: causes

Hi Yield [ID 1035]

**SARCOIDI:**

Sarcoidosis

Allergic reaction

Radiation

Connective tissue disease

Occupational exposure

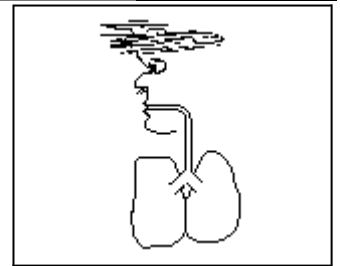
Infection

Drugs

Idiopathic

Knowledge Level 6, System: Pulmonary

Will Herrington UCL Hospital



## Lung cancer: presentation

Hi Yield [ID 894]

**ABCDE:**

Snowball turned to Avalanche

Blood: hemoptysis

Cough

Distruption to airway in bronchus-->pneumonia

whEEzing

Knowledge Level 1, System: Pulmonary

Samuel Atom Baek-Kim

## Nasopharyngeal malignant cancers

Hi Yield [ID 1138]

**NASOPharyngeal:**

Nasophayngeal

Adenocarcinoma

Squamous cell carcinoma

Olfactory neuroblastoma

Plasmacytoma

Knowledge Level 5, System: Pulmonary

Robert O'Connor University College Dublin

## Pancoast tumor: relationship with Horner's syndrome

Hi Yield [ID 1185]

"**Horner** has a **MAP** of the **Coast**":

A pan**Coast** tumor is a cancer of the lung apex that compresses the cervical sympathetic plexus, causing **Horner's** syndrome, which is

MAP:

**M**iosis

**A**nhidrosis

**P**tosia

Knowledge Level 1, System: Pulmonary

Derek Obayashi Chicago Medical School

## Pneumothorax: presentation

Hi Yield [ID 1505]

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**P-THORAX:**

Pleuretic pain

Trachea deviation

Hyperresonance

Onset sudden

Reduced breath sounds (& dyspnea)

Absent fremitus

X-ray shows collapse

Knowledge Level 3, System: Pulmonary

Robert O'Connor University College Dublin

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**Pulmonary embolism: risk factors**

[ID 243]

---

**TOM SCHREPFER:**

Trauma

Obesity

Malignancy

Surgery

Cardiac disease

Hospitalization

Rest [bed-ridden]

Elderly

Past history

Fracture

Estrogen [pregnancy, post-partum]

Road trip

Knowledge Level 2, System: Pulmonary

Anonymous Contributor

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**Pulmonary fibrosis: differential of both upper and lower lobes**

[ID 2736]

---

**BREAST SCAR:**

Upper lobe:

Berylliosis

Radiation

Extrinsic allergic alveolitis

Ankylosing spondylitis

Sarcoidosis

TB

Lower lobe:

Systemic sclerosis

Cryptogenic fibrosing alveolitis

Asbestosis

Radiation

Knowledge Level 7, System: Pulmonary

Lyndon Mason 4th Year Medical Student

---

**Respiratory distress syndrome in infants: major risk factors**

[ID 630]

**PCD** (Primary Ciliary Dyskinesia, a cause of Respiratory distress syndrome):

Prematurity

Cesarean section

Diabetic mother

Knowledge Level 4, System: Pulmonary

Shebrain Cairo University

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**TB: features**

Hi Yield [ID 1149]

TB is characterised by 4 C's:

Caseation

Calcification

Cavitation

Cicatrization

Knowledge Level 3, System: Pulmonary

Sameh Shehata Asst. Prof of Surgery, Faculty of Medicine, University of Alexandria, Egypt

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**Breast cancer: risk assessment**

Hi Yield [ID 924]

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"Risk can be assessed by **History ALONE**":

**History** (family, previous episode)

**Abortion/ Age** (old)

**Late** menopause

**Obesity**

**Nulliparity**

**Early** menarche

Knowledge Level 3, System: Reproductive

Lau Yue Young Geoffrey Hong Kong University

---

**Endometrial carcinoma: risk factors**

Hi Yield [ID 1025]

**ENDOMET**:

**Elderly**

**Nulliparity**

**Diabetes**

**Obesity**

**Menstrual** irregularity

**Estrogen** therapy

hyper**Tension**

Knowledge Level 5, System: Reproductive

Robert O'Connor University College Dublin

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**Endometrial carcinoma: risk factors**

Hi Yield [ID 1741]

**HONDA**:

**Hypertension**

**Obesity**

**Nulliparity**

**Diabetes**

**Age** (increased)

Knowledge Level 5, System: Reproductive

Sarah

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**Gynecomastia: causes**

Hi Yield [ID 1122]

**DaLAS**:

**Digitalis**

**Leydig** cell tumors

**Alcohol**

**Sertoli** cell tumors

Knowledge Level 2, System: Reproductive

Chris Jordan UAG

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**Herpes I and II: lab findings.**

[ID 1048]

She's an odd chick: whenever she's in a restaurant, she always orders **Her Peas** and **Cow dry**.

**Herpes** I and II have **Cowdry** Type A inclusion bodies

Knowledge Level 7, System: Reproductive

Lior Greenberg Technion Faculty of Medicine, Haifa, Israel

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**Ovarian cancers: important types, by WHO classification**

[ID 1674]

Surface:

"**My Sister Began Experiencing Cancer**":

**Mucinous**

**Serous**

**Brenner**

**Endometrioid**

**Clear**

Germ cell:

"**Doctor Examined The Ovaries**":

**Dysgerminoma**

**Endometrial** sinus

**Teratoma**

**Ovarian** choriocarcinoma

Sex cord:

"**She Felt Grim**":

**Sertoli-Leydig**

Fibroma  
Granulosa-theca  
Metastatic  
"Killed":  
Krukenberg  
Knowledge Level 4, System: Reproductive  
Edward Scarth Medical School, Univeristy of Nottingham

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**Polycystic ovarian disease: clinical features**

Hi Yield [ID 2833]

**OHIO:**  
Oligomenorrhea  
Hirsutism  
Infertility  
Obesity  
Knowledge Level 2, System: Reproductive  
Preethi Yerram GMC, India

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**Polycystic ovary: morphology, presentation**

Hi Yield [ID 1026]

Morphology is **poly-C**:  
Cysts  
Capsule thickened  
Cortical stromal fibrosis  
Clinical presentation is **OVARY**:  
Obese  
Virilism or hirsutism  
Amenorrhoea  
Reproductive problem [infertile]  
Young woman  
Knowledge Level 3, System: Reproductive  
Robert O'Connor University College Dublin

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**Scrotum masses**

[ID 1583]

**SHOVE IT:**  
Spermatocele  
Hydrocele/ Haematocele  
Orchitis  
Varicocele  
Epidymal cyst  
Indirect inguinal hernia  
Torsion/ Tumor  
Knowledge Level 3, System: Reproductive  
Sushant Varma Medical student, University of Sheffield, UK

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**Carcinomas having tendency to metastasize to bone**

Hi Yield [ID 372]

"**Kinds Of Tumors Leaping Primarily To Bone**":  
Kidneys  
Ovaries  
Testes  
Lungs  
Prostate  
Thyroid  
Breasts  
Alternatively: "**Promptly**" instead of "**Primarily**".  
Alternatively: "**BLT2** with a **Kosher Pickle**".  
Knowledge Level 3, System: Skeletal  
Anonymous Contributor

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**Carcinomas having tendency to metastasize to bone**

Hi Yield [ID 658]

"Particular Tumours Love Killing Bone":

Prostate

Thyroid

Lung

Kidney

Breast

Knowledge Level 3, System: Skeletal

Ben Campbell University of Otago Medical School, Dunedin, New Zealand

### Histiocytosis X: hallmark finding

Hi Yield [ID 1276]

"Birbeck's rackets is X":

Tennis rackets under electron microscope is Histiocytosis X.

Consider 2 tennis rackets in an X formation.

See diagram.

Knowledge Level 1, System: Skeletal

Robert O'Connor University College Dublin



### Marble bone disease: signs and symptoms

Hi Yield [ID 1078]

**MARBLES:**

Multiple fractures

Anemia

Restricted cranial nerves

Blind & deaf

Liver enlarged

Erlenmeyer flask deformity

Splenomegaly

Eponymous name: **Marbles** = **Albers**-Schonberg (anagram).

Knowledge Level 3, System: Skeletal

Robert O'Connor University College Dublin

### Osteomalacia: features

Hi Yield [ID 1985]

"Vit-D deficiency in **ADULT**":

Acetabuli protrusio

Decreased bone density

Under mineralization of osteoid

Looser's zone (pseudofracture)

Triradiate pelvis (females)

Knowledge Level 1, System: Skeletal

Dr. Harsh Sharma BJMC, Pune, India

### Osteosarcoma: features

Hi Yield [ID 2117]

**PEARL HARBOR:**

Paget's disease (10-20%)\*

Early age (10-20 yrs)

Around knee

Raised periosteum by expanding tumor: "**sunburst pattern**"

Lace-like architecture

Hyaline arteriosclerosis

Alkaline phosphatase increased

Retinoblastoma\*

Boys, predominantly

Osteomyelitis DDx

Radiation\*

Sunburst pattern was Japanese Navy emblem during WWII.

\*: Predisposing factors.

Knowledge Level 4, System: Skeletal

Sung H. Kim El Paso, TX

### Paget's disease of bone: signs and symptoms

Hi Yield [ID 351]

Four L's:  
Larger hat size  
Loss of hearing: due to compression of nerve  
Leontiasis ossea (lion-like face)  
Light-headed (Paget's steal)  
Knowledge Level 2, System: Skeletal  
Marc Miller Sackler School of Medicine

### Rheumatoid arthritis: features

[ID 1053]

**RHEUMATOID:**  
Ragocytes/ Rheumatoid factor (anti-IgG)  
HLA-DR4/ HLA-Dw4  
ESR increase/ Extra-articular features (restrictive lung disease, subcutaneous nodules)  
Ulnar deviation  
Morning stiffness/ MCP joint  
Ankylosis/ Atlantoaxial joint subluxation/ Autoimmune/ ANA  
T-cells (CD4)/ TNF  
Osteopenia  
Inflammatory synovial tissue/ Idiopathic/ IL-1  
Deformities (swan-neck, boutonniere)  
Knowledge Level 5, System: Skeletal  
Rinku S. Uberoi UNIBE

### Seronegative spondyloarthopathy: diseases

[ID 1587]

**RAPE:**  
Reiter's syndrome  
Ankylosing spondylitis  
Psoriatic arthritis  
Enteropathic arthritis (IBD)  
Knowledge Level 2, System: Skeletal  
Wen Sun Lum University of Calgary, Canada

## PEDIATRICS

### Bilirubin: phototherapy

[ID 1570]

BiLirUbin absorbs light maximally in the  
BLUe range.  
Knowledge Level 6, System: Alimentary  
Rinku Uberoi New York Hospital

### Duodenal atresia vs. Pyloric stenosis: site of obstruction

Hi Yield [ID 1397]

Duodenal Atresia: Distal to Ampulla of vater.  
Pyloric stenosis: Proximal to it.  
Knowledge Level 5, System: Alimentary  
Rinku Uberoi

### Gastroschisis: usual location

Hi Yield [ID 2347]

GasTROscHIsis usually occurs on the  
RIGHT side of the umbilicus.  
(Unscramble the letters).  
Knowledge Level 5, System: Alimentary  
Anonymous Contributor

### Pyloric stenosis (congenital): presentation

Hi Yield [ID 1897]

Pyloric stenosis is 3 P's:  
Palpable mass  
Paristalsis visible  
Projectile vomiting (2-4 weeks after birth)  
Knowledge Level 3, System: Alimentary  
Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan

### Vitamin toxicities: neonatal

Hi Yield [ID 2245]

Excess vitamin **A**: **A**nomalies (teratogenic)  
Excess vitamin **E**: **E**nterocolitis (necrotizing enterocolitis)  
Excess vitamin **K**: **K**ernicterus (hemolysis)  
Knowledge Level 7, System: Alimentary  
Anonymous Contributor

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**Cyanotic congenital heart diseases**

Hi Yield [ID 1746]

5 T's:  
**T**runcus arteriosus  
**T**ransposition of the great arteries  
**T**ricuspid atresia  
**T**etrology of Fallot  
**T**otal anomalous pulmonary venous return  
Knowledge Level 5, System: Cardiovascular  
Vince Yamashiroya

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**Cyanotic heart diseases: 5 types**

Hi Yield [ID 1707]

Use your five fingers:  
**1** finger up: Truncus Arteriosus (**1** vessel)  
**2** fingers up: Dextroposition of the Great Arteries (**2** vessels transposed)  
**3** fingers up: Tricuspid Atresia (**3**=Tri)  
**4** fingers up: Tetralogy of Fallot (**4**=Tetra)  
**5** fingers up: Total Anomalous Pulmonary Venous Return (**5**=5 words)  
Knowledge Level 3, System: Cardiovascular  
Jeff Simmons University of Alabama School Of Medicine

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**Cyanotic heart diseases: 5 types**

Hi Yield [ID 1971]

5 **T**'s:  
**T**etralogy of Fallot  
**T**ransposition of the great arteries  
**T**runcus arteriosus  
**T**ricuspid atresia, pulmonary a**T**resia  
**T**otal anomalous pulmonary venous drainage  
Knowledge Level 3, System: Cardiovascular  
Kok Fai Kong Final year student, University of Auckland

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**Hemolytic-Uremic Syndrome (HUS): components**

[ID 1758]

"Remember to decrease the **RATE** of IV fluids in these patients":  
**R**enal failure  
**A**nemia (microangiopathic, hemolytic)  
**T**hrombocytopenia  
**E**ncephalopathy (TTP)  
Knowledge Level 6, System: Cardiovascular  
Vince Yamashiroya

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**Haematuria: differential in children**

Hi Yield [ID 2202]

**A**BCDEFGHIJK:  
**A**natomy (cysts, etc)  
**B**ladder (cystitis)  
**C**ancer (Wilm's tumour)  
**D**rug related (cyclophosphamide)  
**E**xercise induced  
**F**actitious (Munchausen by proxy)  
**G**lomerulonephritis  
**H**aematology (bleeding disorder, sickle cell)  
**I**nfection (UTI)  
**I**n **J**ury (trauma)  
**K**idney stones (hypercalciuria)  
Knowledge Level 4, System: Kidney/Urine  
S. Jibodh University College Dublin

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**Perez reflex**

Hi Yield [ID 2073]

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Eliciting the **PErEz** reflex will make the baby **PEE**.  
Knowledge Level 7, System: Kidney/Urine  
Anonymous Contributor

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**Ataxia-Telangiectasia (AT): common sign**

[ID 1241]

**AT:**  
**Absent**  
**Thymus**  
Knowledge Level 7, System: Nervous  
Anonymous Contributor

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**Cerebral palsy (CP): most likely cause**

Hi Yield [ID 2821]

**CP:** Cerebral Palsy  
**Child Premature**  
The premature brain is more prone to all the possible insults.  
Knowledge Level 1, System: Nervous  
Anonymous Contributor

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**Pediatric milestones in development**

Hi Yield [ID 2345]

**1 year:**  
-**single** words  
**2 years:**  
-**2** word sentences  
-understands **2** step commands  
**3 years:**  
-**3** word combos  
-repeats **3** digits  
-rides **tricycle**  
**4 years:**  
-draws **square**  
-counts **4** objects  
Knowledge Level 4, System: Nervous  
Rinku Uberoi

---

**Sturge-Weber syndrome: hallmark features**

Hi Yield [ID 575]

**Sturge-Weber:**  
1. **Seizures**  
2. Port**W**ine stain  
Knowledge Level 4, System: Nervous  
Ramon Salazar

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**Guthrie card: diseases identified with it**

[ID 836]

"**Guthrie Cards Can Help Predict Bad Metabolism**":  
**Galactosaemia**  
**Cystic fibrosis**  
**Congenital adrenal hyperplasia**  
**Hypothyroidism**  
**Phenylketonuria**  
**Biotinidase deficiency**  
**Maple syrup urine disease**  
Knowledge Level 4, System: Other/Miscellaneous  
Logan Mitchell Dunedin Medical School, New Zealand

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**Guthrie card: diseases identified with it**

Hi Yield [ID 1328]

**GUTHRIE:**  
**Galactosaemia**  
**Urine** [maple syrup urine disease]  
**THyRoid** [hypothyroidism]  
**Inborn Errors** of metabolism [eg: PKU]  
Knowledge Level 4, System: Other/Miscellaneous  
Anonymous Contributor

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**Measles: complications**

Hi Yield [ID 476]



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"**MEASLES COMP**" (complications):

**Myocarditis**  
**Encephalitis**  
**Appendicitis**  
**Subacute sclerosing panencephalitis**  
**Laryngitis**  
**Early death**  
**Sh!ts** (diarrhoea)  
**Corneal ulcer**  
**Otitis media**  
**Mesenteric lymphadenitis**  
**Pneumonia and related** (bronchiolitis-bronchitis-croup)  
Knowledge Level 4, System: Other/Miscellaneous  
Joshua Goh Unimas: Universiti Malaysia Sarawak

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**Rubella: congenital signs**

Hi Yield [ID 2259]

"**Rubber Ducky, I'm so blue!**" (like the "Rubber Ducky" song):

**Rubber: Rubella**

**Ducky:** Patent **Ductus** Arteriosus, VSD and pulmonary artery stenosis.

**I'm: Eyes** (cataracts, retinopathy, microphthalmia, glaucoma).

**Blue:** "**Blueberry Muffin**" rash (extramedullary hematopoiesis in skin +purpura)

Also, deafness, growth retardation, and some more.

Knowledge Level 4, System: Other/Miscellaneous

Lior Greenberg Technion Faculty of Medicine, Haifa, Israel

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**Russell Silver syndrome: features**

[ID 1661]

**ABCDEF:**

**A**symmetric limb (hemihypertrophy)

**B**ossing (frontal)

**C**linodactyly/ **C**afe au lait spots

**D**warf (short stature)

**E**xcretion (GU malformation)

**F**ace (triangular face, micrognathia)

Knowledge Level 6, System: Other/Miscellaneous

Anthony Chan Chinese University of Hong Kong

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**Short stature: differential**

[ID 2843]

**ABCDEFGF:**

**A**lone (neglected infant)

**B**one dysplasias (rickets, scoliosis, mucopolysaccharidoses)

**C**hromosomal (Turner's, Down's)

**D**elayed growth

**E**ndocrine (low growth hormone, Cushing's, hypothyroid)

**F**amilial

**G**I malabsorption (celiac, Crohn's)

Knowledge Level 2, System: Other/Miscellaneous

Anonymous Contributor

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**Vacterl syndrome: components**

Hi Yield [ID 1317]

**VACTERL:**

**V**ertebral anomalies

**A**norectal malformation

**C**ardiac anomaly

**T**racheo-esophageal fistula

**E**xomphalos (aka omphalocele)

**R**enal anomalies

**L**imb anomalies

Knowledge Level 4, System: Other/Miscellaneous

Mohamed Azim Assistant lecturer, Pediatric surgery, Alexandria University, Egypt

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**WAGR syndrome: components**

[ID 2075]

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**WAGR:**

Wilm's tumor

Aniridia

Genital abnormalities

Mental retardation

Knowledge Level 6, System: Other/Miscellaneous

Andrew J. Vasil University of Minn Medical School

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**Weights of children with age**

[ID 1748]

**Newborn 3 kg**

**6 mos 6 kg** (2x birth wt at 6 mos)

**1 yr 10 kg** (3x birth wt at 1 yr)

**3 yrs 15 kg** (odd yrs, add 5 kg until 11 yrs)

**5 yrs 20 kg**

**7 yrs 25 kg**

**9 yrs 30 kg**

**11 yrs 35 kg** (add 10 kg thereafter)

**13 yrs 45 kg**

**15 yrs 55 kg**

**17 yrs 65 kg**

Knowledge Level 6, System: Other/Miscellaneous

Vince Yamashiroya

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**Williams syndrome: features**

[ID 1649]

**WILLIAMS:**

Weight (low at birth, slow to gain)

Iris (stellate iris)

Long philtrum

Large mouth

Increased Ca<sup>++</sup>

Aortic stenosis (and other stenoses)

Mental retardation

Swelling around eyes (periorbital puffiness)

Knowledge Level 7, System: Other/Miscellaneous

Anthony Chan Chinese University of Hong Kong

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**Cough (chronic): differential**

Hi Yield [ID 1759]

When cough in nursery, rock the "**CRADLE**":

Cystic fibrosis

**Rings, slings, and airway things** (tracheal rings)/ **R**espiratory infections

**A**spiration (swallowing dysfunction, TE fistula, gastroesophageal reflux)

**D**yskinetic cilia

**L**ung, airway, and vascular malformations (tracheomalacia, vocal cord dysfunction)

**E**dema (heart failure)

Knowledge Level 6, System: Pulmonary

Vince Yamashiroya

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**Croup: symptoms**

Hi Yield [ID 1125]

3 S's:

Stridor

Subglottic swelling

Seal-bark cough

Knowledge Level 1, System: Pulmonary

Robert O'Connor University College Dublin

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**Cystic fibrosis: exacerbation of pulmonary infection**

Hi Yield [ID 1762]

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**CF PANCREAS:**

Cough (increase in intensity and frequent spells)  
Fever (usually low grade, unless severe bronchopneumonia is present)  
Pulmonary function deterioration  
Appetite decrease  
Nutrition, weight loss  
CBC (leukocytosis with left shift)  
Radiograph (increase overaeration, peribronchial thickening, mucus plugging)  
Exam (rales or wheezing in previously clear areas, tachypnea, retractions)  
Activity (decreased, impaired exercise intolerance, increased absenteeism)  
Sputum (becomes darker, thicker, and more abundant, forming plugs)  
Knowledge Level 7, System: Pulmonary  
Vince Yamashiroya

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**Cystic fibrosis: presenting signs**

Hi Yield [ID 1761]

**CF PANCREAS:**

Chronic cough and wheezing  
Failure to thrive  
Pancreatic insufficiency (symptoms of malabsorption like steatorrhea)  
Alkalosis and hypotonic dehydration  
Neonatal intestinal obstruction (meconium ileus)/ Nasal polyps  
Clubbing of fingers/ Chest radiograph with characteristic changes  
Rectal prolapse  
Electrolyte elevation in sweat, salty skin  
Absence or congenital atresia of vas deferens  
Sputum with Staph or Pseudomonas (mucoid)  
Knowledge Level 7, System: Pulmonary  
Vince Yamashiroya

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**Breast feeding: benefits**

Hi Yield [ID 2002]

**ABCDEFGH:**

Infant:  
Allergic condition reduced  
Best food for infant  
Close relationship with mother  
Development of IQ, jaws, mouth  
Mother:  
Economical  
Fitness: quick return to pre-pregnancy body shape  
Guards against cancer: breast, ovary, uterus  
Hemorrhage (postpartum) reduced  
Knowledge Level 3, System: Reproductive  
Anthony Chan

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**Milk protein: women vs. cows**

[ID 2553]

Woman: Whey (mostly)  
Cow: Casein (mostly)  
Knowledge Level 6, System: Reproductive  
Anonymous Contributor

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**Dentition: eruption times of permanent dentition**

[ID 1688]

"Mama Is In Pain, Papa Can Make Medicine":  
1st Molar: 6 years  
1st Incisor: 7 years  
2nd Incisor: 8 years  
1st Premolar: 9 years  
2nd Premolar: 10 years  
Canine: 11 years  
2nd Molar: 12 years  
3rd Molar: 18-25 years  
Knowledge Level 7, System: Skeletal  
Saurabh Sikka

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**Head circumference with age**

[ID 1747]

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Remember 3, 9, and multiples of 5:

Newborn **35** cm

**3** mos **40** cm

**9** mos **45** cm

**3** yrs **50** cm

**9** yrs **55** cm

Knowledge Level 6, System: Skeletal

Vince Yamashiroya

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**Septic Arthritis: most common cause**

[ID 1646]

Staphylococcus **Aureus** is the most common cause of

Septic Arthritis in the pediatric population.

Knowledge Level 5, System: Skeletal

Anonymous Contributor

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**PHARMACOLOGY**

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**Hepatic necrosis: drugs causing focal to massive necrosis**

[ID 409]

"Very Angry Hepatocytes":

Valproic acid

Acetaminophen

Halothane

Knowledge Level 6, System: Alimentary

Calvin Sy University of Pittsburgh School of Medicine

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**Adrenoceptors: vasomotor function of alpha vs. beta**

Hi Yield [ID 2144]

**ABCD:**

Alpha = Constrict.

Beta = Dilate.

Knowledge Level 1, System: Cardiovascular

Anonymous Contributor

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**Amiodarone: action, side effects**

[ID 1146]

6 P's:

Prolongs action potential duration

Photosensitivity

Pigmentation of skin

Peripheral neuropathy

Pulmonary alveolitis and fibrosis

Peripheral conversion of T4 to T3 is inhibited -> hypothyroidism

Knowledge Level 3, System: Cardiovascular

Archana

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**Antiarrhythmics: class III members**

Hi Yield [ID 2043]

**BIAS:**

Bretylium

Ibutilide

Amiodarone

Sotalol

Knowledge Level 1, System: Cardiovascular

Dr. Harsh Sharma and Robert O'Connor BJMC, Pune, India and University College Dublin

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**Antiarrhythmics: classification I to IV**

Hi Yield [ID 1976]

**MBA** College

In order of class I to IV:

Membrane stabilizers (class I)

Beta blockers

Action potential widening agents

Calcium channel blockers

Knowledge Level 1, System: Cardiovascular

Dr. Harsh Sharma BJMC, Pune, India

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**Beta blockers with intrinsic sympathomimetic activity**

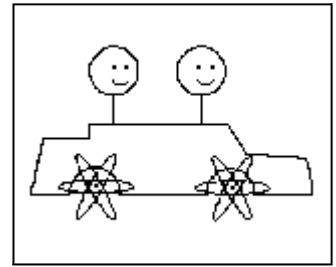
[ID 1534]

Picture **diabetic** and **asthmatic** kids riding away on a **cart** that rolls on **pinwheels**.

**Pindolol** and **Carteolol** have high and moderate ISA respectively, making them acceptable for use in some diabetics or asthmatics despite the fact that they are non-selective beta blockers.

Knowledge Level 7, System: Cardiovascular

David Shprecher Lake Erie College of Osteopathic Medicine



#### Beta blockers: B1 selective vs. B1-B2 non-selective

Hi Yield [ID 2513]

**A through N: B1 selective:** Acebutalol, Atenolol, Esmolol, Metoprolol.

**O through Z: B1, B2 non-selective:** Pindolol, Propanolol, Timolol.

Knowledge Level 1, System: Cardiovascular

Amir Butt Quaid-e-Azam Medical College, Bahawalpur, Pakistan

#### Beta blockers: members

Hi Yield [ID 3095]

"The **NEPAL** Prime Minister":

**Timolol**

**Nadolol**

**Esmolol**

**Pindolol**

**Atenolol**

**Labetalol**

**Propranolol**

**Metoprolol**

Knowledge Level 2, System: Cardiovascular

Javaid H. Wani Spartan University School of Medicine, St. Lucia, W.I.

#### Beta-blockers: main contraindications, cautions

[ID 518]

**ABCDE:**

**Asthma**

**Block** (heart block)

**COPD**

**Diabetes** mellitus

**Electrolyte** (hyperkalemia)

Knowledge Level 4, System: Cardiovascular

Anonymous Contributor

#### Beta-blockers: nonselective beta-blockers

Hi Yield [ID 1725]

"**Tim Pinches His Nasal Problem**" (because he has a runny nose...):

**Timolol**

**Pindolol**

**Hismolol**

**Naldolol**

**Propranolol**

Knowledge Level 2, System: Cardiovascular

Hugo M. Rodriguez, MD University of Virginia Roanoke-Salem Program

#### Beta-blockers: side effects

[ID 435]

"**BBC Loses Viewers In Rochedale**":

**Bradycardia**

**Bronchoconstriction**

**Claudication**

**Lipids**

**Vivid dreams & nightmares**

-ve **Inotropic** action

**Reduced sensitivity** to hypoglycaemia

Knowledge Level 4, System: Cardiovascular

Anonymous Contributor

#### Ca++ channel blockers: uses

Hi Yield [ID 779]

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**CA++ MASH:**

Cerebral vasospasm/ CHF

Angina

Migranes

Atrial flutter, fibrillation

Supraventricular tachycardia

Hypertension

Alternatively: "**CHASM**":

Cerebral vasospasm / CHF

Hypertension

Angina

Supraventricular tachyarrhythmia

Migranes

Knowledge Level 2, System: Cardiovascular

Robert O'Connor University College Dublin

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**Captopril (an ACE inhibitor): side effects**

Hi Yield [ID 515]

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**CAPTOPRIL:**

Cough

Angioedema/ Agranulocytosis

Proteinuria/ Potassium excess

Taste changes

Orthostatic hypotension

Pregnancy contraindication/ Pancreatitis/ Pressure drop (first dose hypertension)

Renal failure (and renal artery stenosis contraindication)/ Rash

Indomethacin inhibition

Leukopenia/ Liver toxicity

Knowledge Level 2, System: Cardiovascular

Dr. Chetan Wasekar MBBS KEM Hospital

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**Clopidogrel: use**

[ID 1355]

**CLOPIDOGREL** is a drug that prevents

**CL**ots, an **O**ral **P**latelet **I**nhibitor (**OPI**).

Knowledge Level 7, System: Cardiovascular

Rinku Uberoi

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**Enoxaprin (prototype low molecular weight heparin): action, monitoring**

[ID 1657]

Eno**X**aprin only acts on factor **Xa**.

Monitor **Xa** concentration, rather than APTT.

Knowledge Level 7, System: Cardiovascular

Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan, Gujranwala

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**HMG-CoA reductase inhibitors (statins): side effects, contraindications, interactions**

Hi Yield [ID 2025]

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**HMG-CoA:**

Side effects:

**H**epatotoxicity

**M**yositis [aka rhabdomyolysis]

Contraindications:

**G**irl during pregnancy/ **G**rowing children

Interactions:

**C**oumarin/ **C**yclosporine

Knowledge Level 4, System: Cardiovascular

Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan, Gujranwala

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**Hypertension: treatment**

Hi Yield [ID 2627]

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**ABCD:**

**A**CE inhibitors/ **A**ngII antagonists (sometimes **A**lpha agonists also)

**B**eta blockers

**C**alcium antagonists

**D**iuretics

Knowledge Level 1, System: Cardiovascular

Mr. LW Mason 4th Year Medical Student

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**Patent ductus arteriosus: treatment**

Hi Yield [ID 1191]

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"Come **In** and **Close** the door":

**IN**domethacin is used to **Close** PDA.

Knowledge Level 2, System: Cardiovascular

Milixa Fortuna UAG Medical Student

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**Propranolol and related '-olol' drugs: usage**

[ID 246]

"**olol**" is just two backwards lower case b's.

Backward b's stand for "**beta blocker**".

Beta blockers include acebutolol, betaxolol, bisoprolol, oxprenolol, propranolol.

Knowledge Level 1, System: Cardiovascular

Robert O'Connor University College Dublin

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**Thrombolytic agents**

Hi Yield [ID 1902]

**USA:**

Urokinase

Streptokinase

Alteplase (tPA)

Knowledge Level 2, System: Cardiovascular

Dr. Harsh Sharma BJMC, Pune, India

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**Warfarin: action, monitoring**

[ID 432]

**WePT:**

Warfarin works on the **extrinsic** pathway and is monitored by **PT**.

Knowledge Level 3, System: Cardiovascular

Marcus James Fidel Medical Student, University of New Mexico

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**Warfarin: metabolism**

[ID 901]

**SLOW:**

Has a **slow** onset of action.

A quick **K** Vitamin **K** antagonist, though.

Small lipid-soluble molecule

Liver: site of action

Oral route of administration.

Warfarin

Knowledge Level 2, System: Cardiovascular

Samuel Atom Baek-Kim

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**Corticosteroids: adverse side effects**

Hi Yield [ID 2786]

**CUSHINGS BAD MD:**

Cataracts

Up all night (sleep disturbances)

Suppression of HPA axis

Hypertension/ buffalo **Hump**

Infections

Necrosis (avascular)

Gain weight

Striae

Bone loss (osteoporosis)

Acne

Diabetes

Myopathy, moon faces

Depression and emotional changes

Knowledge Level 6, System: Endocrine

Anita Dunn University of Toronto

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**Gynaecomastia-causing drugs**

[ID 1798]

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**DISCOS:**

Digoxin

Isoniazid

Spironolactone

Cimetidine

Oestrogens

Stilboestrol

Knowledge Level 4, System: Endocrine

Nasser University of Sheffield

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**K+ increasing agents**

[ID 2088]

**K-BANK:**

K-sparing diuretic

Beta blocker

ACEI

NSAID

K supplement

Knowledge Level 3, System: Endocrine

Anthony Chan

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**Propylthiouracil (PTU): mechanism**

Hi Yield [ID 1617]

It inhibits **PTU**:

Peroxidase/ Peripheral deiodination

Tyrosine iodination

Union (coupling)

Knowledge Level 4, System: Endocrine

Dr. Atif Farooq Khawaja and Mediha Farooq Rawalpindi Medical College, Pakistan/ Gujranwala

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**Steroid side effects**

Hi Yield [ID 1526]

**CUSHINGOID:**

Cataracts

Ulcers

Skin: striae, thinning, bruising

Hypertension/ Hirsutism/ Hyperglycemia

Infections

Necrosis, avascular necrosis of the femoral head

Glycosuria

Osteoporosis, obesity

Immunosuppression

Diabetes

Knowledge Level 2, System: Endocrine

Anonymous Contributor

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**Steroids: side effects**

Hi Yield [ID 483]

**BECLOMETHASONE:**

Buffalo hump

Easy bruising

Cataracts

Larger appetite

Obesity

Moonface

Euphoria

Thin arms & legs

Hypertension/ Hyperglycaemia

Avascular necrosis of femoral head

Skin thinning

Osteoporosis

Negative nitrogen balance

Emotional liability

Knowledge Level 4, System: Endocrine

Rob Cambridge University

---

**Lupus: drugs inducing it**

[ID 530]



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**HIP:**

Hydralazine

INH

Procanimide

Knowledge Level 6, System: Integumental

Hodge/Gupta LSU Medicine Firm

---

**Diuretics: thiazides: indications**

Hi Yield [ID 2091]

"CHIC to use thiazides":

CHF

Hypertension

Inspidous

Calcium calculi

Knowledge Level 3, System: Kidney/Urine

Anonymous Contributor

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**Nitrofurantoin: major side effects**

Hi Yield [ID 482]

NitroFurAntoin:

Neuropathy (peripheral neuropathy)

Fibrosis (pulmonary fibrosis)

Anemia (hemolytic anemia)

Knowledge Level 4, System: Kidney/Urine

Joshua Goh Unimas: University Malaysia Sarawak

---

**Osmotic diuretics: members**

[ID 772]

GUM:

Glycerol

Urea

Mannitol

Knowledge Level 4, System: Kidney/Urine

Robert O'Connor University College Dublin

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**Prazocin usage**

[ID 1521]

Prazocin sounds like an acronym of "praszz zour urine".

Therefore Prazocin used for urinary retention in BPH.

Knowledge Level 5, System: Kidney/Urine

Diljot Singh Bedi GMCH Chandigarh, India

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**SIADH-inducing drugs**

Hi Yield [ID 2086]

ABCD:

Analgesics: opioids, NSAIDs

Barbiturates

Cyclophosphamide/ Chlorpromazine/ Carbamazepine

Diuretic (thiazide)

Knowledge Level 3, System: Kidney/Urine

Anthony Chan

---

**Sulfonamide: major side effects**

Hi Yield [ID 774]

Sulfonamide side effects:

Steven-Johnson syndrome

Skin rash

Solubility low (causes crystalluria)

Serum albumin displaced (causes newborn kernicterus and potentiation of other serum albumin-binders like warfarin)

Knowledge Level 3, System: Lymphoid

Robert O'Connor University College Dublin

---

**Vir-named drugs: use**

[ID 771]

"-vir at start, middle or end means for virus":

Drugs: Abacavir, Acyclovir, Amprenavir, Cidofovir, Denavir, Efavirenz, Indavir, Invirase, Famvir, Ganciclovir, Norvir, Oseltamivir, Penciclovir, Ritonavir, Saquinavir, Valacyclovir, Viracept, Viramune, Zanamivir, Zovirax.

Knowledge Level 1, System: Lymphoid

Robert O'Connor University College Dublin

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**4-Aminopyradine (4-AP) use**

[ID 768]

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**"4-AP is For AP":**

For AP (action potential) propagation in Multiple Sclerosis.

Knowledge Level 7, System: Nervous

Robert O'Connor University College Dublin

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**Anesthesia: 4 stages**

[ID 775]

"Anesthesiologists Enjoy S & M":

Analgesia

Excitement

Surgical anesthesia

Medullary paralysis

Knowledge Level 1, System: Nervous

Robert O'Connor University College Dublin

---

**Anticholinergic side effects**

Hi Yield [ID 1958]

"Know the ABCD'S of anticholinergic side effects":

Anorexia

Blurry vision

Constipation/ Confusion

Dry Mouth

Sedation/ Stasis of urine

Knowledge Level 1, System: Nervous

Youngin Kim University of Rochester School of Medicine and Dentistry

---

**Antimuscarinics: members, action**

Hi Yield [ID 1187]

"Inhibits Parasympathetic And Sweat":

Ipratropium

Pirenzepine

Atropine

Scopolamine

Muscarinic receptors at all parasympathetic endings sweat glands in sympathetic.

Knowledge Level 3, System: Nervous

Derek Obayashi Chicago Medical School

---

**Aspirin: side effects**

Hi Yield [ID 1349]

**ASPIRIN:**

Asthma

Salicyalism

Peptic ulcer disease/ Phosphorylation-oxidation uncoupling/ PPH/ Platelet disaggregation/ Premature closure of PDA

Intestinal blood loss

Reye's syndrome

Idiosyncrasy

Noise (tinnitus)

Knowledge Level 4, System: Nervous

Dr. Chetan Wasekar, MBBS KEM Hospital

---

**Atropine use: tachycardia or bradycardia**

[ID 170]

"A goes with B":

Atropine used clinically to treat Bradycardia.

Knowledge Level 4, System: Nervous

Anonymous Contributor

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**Benzodiazapines: ones not metabolized by the liver (safe to use in liver failure)**

[ID 1566]

**LOT:**

Lorazepam

Oxazepam

Temazepam

Knowledge Level 3, System: Nervous

Lorne Basskin Butler University College of Pharmacy and Health Sciences

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**Benzodiazepenes: antidote**

Hi Yield [ID 776]

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"**Ben** is **off** with the **flu**":

**Benzodiazepine** effects **off** with **Flumazenil**.

Knowledge Level 1, System: Nervous

Robert O'Connor University College Dublin

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**Benzodiazepenes: drugs which decrease their metabolism**

[ID 875]

"**I'm Overly Calm**":

**Isoniazid**

**Oral** contraceptive pills

**Cimetidine**

These drugs increase calming effect of BZDs by retarding metabolism.

Knowledge Level 3, System: Nervous

Anonymous Contributor

---

**Benzodiazepines: actions**

Hi Yield [ID 464]

"**Ben SCAMs** Pam into seduction **not by brain** but by muscle":

**Sedation**

anti-**Convulsant**

anti-**Anxiety**

**Muscle** relaxant

Not by brain: No antipsychotic activity.

Knowledge Level 2, System: Nervous

Sung H. Kim

---

**Benzodiazepins: 3 members that undergo extrahepatic metabolism**

[ID 3167]

"**Outside The Liver**":

**Oxazepam**

**Temazepam**

**Lorazepam**

These undergo extrahepatic metabolism and do not form active metabolites.

Knowledge Level 8, System: Nervous

Anonymous Contributor

---

**Beta 1 selective blockers**

Hi Yield [ID 2148]

"**BEAM ONE** up, Scotty":

**Beta 1** blockers:

**Esmolol**

**Atenolol**

**Metoprolol**

Knowledge Level 1, System: Nervous

Anonymous Contributor

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**Botulism toxin: action, related bungarotoxin**

Hi Yield [ID 229]

Action: "**Botulism Bottles** up the Ach so it can't be the released":

Related bungarotoxin: "**Botulism** is related to **Beta Bungarotoxin** (beta-, not alpha-bungarotoxin--alpha has different mechanism).

Knowledge Level 3, System: Nervous

Robert O'Connor University College Dublin

---

**Bromocriptine [for USA gang members]**

Hi Yield [ID 3055]

The **CRYPTS** are an LA street gang that likes to smoke **DOPE**.

Bromo**CRYPT**ine is a **DOP**amine agonist.

Knowledge Level 1, System: Nervous

Mario Cruz Albany Medical College

---

**Cholinergics (eg organophosphates): effects**

Hi Yield [ID 388]

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If you know these, you will be **"LESS DUMB"**:

**L**acrimation

**E**xcitation of nicotinic synapses

**S**alivation

**S**weating

**D**iarrhea

**U**rination

**M**icturition

**B**ronchoconstriction

Knowledge Level 4, System: Nervous

Anonymous Contributor

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#### **Delerium-causing drugs**

[ID 617]

**ACUTE CHANGE IN MS:**

Antibiotics (biacin, penicillin, ciprofloxacin)

Cardiac drugs (digoxin, lidocaine)

Urinary incontinence drugs (anticholinergics)

Theophylline

Ethanol

Corticosteroids

H<sub>2</sub> blockers

Antiparkinsonian drugs

Narcotics (esp. meperidine)

Geriatric psychiatric drugs

ENT drugs

Insomnia drugs

NSAIDs (eg indomethacin, naproxin)

Muscle relaxants

Seizure medicines

Knowledge Level 7, System: Nervous

Muhammad Asif Iqbal Resident, SLU, MO

---

#### **Depression: 5 drugs causing it**

[ID 398]

**PROMS:**

Propranolol

Reserpine

Oral contraceptives

Methyldopa

Steroids

Knowledge Level 6, System: Nervous

Sunu George

---

#### **Direct sympathomimetic catecholamines**

Hi Yield [ID 769]

**DINED:**

Dopamine

Isoproterenol

Norepinephrine

Epinephrine

Dobutamine

Knowledge Level 2, System: Nervous

Robert O'Connor University College Dublin

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#### **Epilepsy types, drugs of choice**

Hi Yield [ID 1979]

**"Military General Attacked Weary Fighters Pronouncing 'Veni Vede Veci' After Crushing Enemies":**

Epilepsy types:

**M**yoclonic

**G**rand mal

**A**tonic

**W**est syndrome

**F**ocal

**P**etit mal (absence)

Respective drugsy:

**V**alproate

**V**alproate

Valproate  
ACTH  
Carbamazepine  
Ethosuximide  
Knowledge Level 3, System: Nervous  
Dr. Harsh Sharma BJMC, Pune, India

---

**Inhalation anesthetics**

Hi Yield [ID 534]

**SHINE:**

Sevoflurane  
Halothane  
Isoflurane  
Nitrous oxide  
Enflurane

If want the defunct Methoxyflurane too, make it MoonSHINE.

Knowledge Level 2, System: Nervous  
Robert O'Connor University College Dublin

---

**ipratropium: action**

[ID 231]

**Atropine** is buried in the middle: ipr**Atropium**, so it behaves like Atropine.

Knowledge Level 4, System: Nervous  
Robert O'Connor University College Dublin

---

**Lead poisoning: presentation**

[ID 517]

**ABCDEFGF:**

Anemia  
Basophilic stripping  
Colicky pain  
Diarrhea  
Encephalopathy  
Foot drop  
Gum (lead line)  
Knowledge Level 8, System: Nervous  
Anonymous Contributor

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**Lithium: side effects**

Hi Yield [ID 531]

**LITH:**

Leukocytosis  
Insipidus [diabetes insipidus, tied to polyuria]  
Tremor/ Teratogenesis  
Hypothyroidism  
Knowledge Level 3, System: Nervous  
Robert O'Connor and Rinku Uberoi

---

**Lithium: side effects**

Hi Yield [ID 1252]

**LITHIUM:**

Leukocytes **I**ncreased (leukocytosis)  
Tremors  
Hypothyroidism  
Increased **U**rine  
**M**oms beware (teratogenic)  
Knowledge Level 6, System: Nervous  
Marc Miller Sackler School of Medicine

---

**MAOIs: indications**

Hi Yield [ID 2059]

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**MAOIS:**

**Melancholic** [classic name for atypical depression]

**Anxiety**

**Obesity disorders** [anorexia, bulimia]

**Imagined illnesses** [hypochondria]

**Social phobias**

Listed in decreasing order of importance.

Note MAOI is inside **MeAnchOIc**.

Knowledge Level 2, System: Nervous

Robert O'Connor University College Dublin

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**Methyldopa: side effects**

[ID 487]

**METHYLDOPA:**

**Mental retardation**

**Electrolyte imbalance**

**Tolerance**

**Headache/ Hepatotoxicity**

**Psychological upset**

**Lactation in female**

**Dry mouth**

**Oedema**

**Parkinsonism**

**Anaemia** (haemolytic)

Knowledge Level 5, System: Nervous

Yazeed A. Oqaili King Saud University Medical College

---

**Migraine: prophylaxis drugs**

[ID 1984]

"Very Volatile Pharmacotherapeutic Agents For Migraine Prophylaxis":

**Verpamil**

**Valproic acid**

**Pizotifen**

**Amitriptyline**

**Flunarizine**

**Methysergide**

**Propranolol**

Bare bones version [eg Lippincott's two], just **Migraine Prophylaxis**, as above.

Knowledge Level 8, System: Nervous

Dr. Harsh Sharma BJMC, Pune, India

---

**Monoamine oxidase inhibitors: members**

Hi Yield [ID 1186]

"**PIT** of despair":

**Phenelzine**

**Isocarboxazid**

**Tranylcypromine**

A pit of despair, since MAOs treat depression.

Knowledge Level 3, System: Nervous

Derek Obayashi Chicago Medical School

---

**Morphine: effects**

Hi Yield [ID 1174]

**MORPHINES:**

**Miosis**

**Orthostatic hypotension**

**Respiratory depression**

**Pain suppression**

**Histamine release/ Hormonal alterations**

**Increased ICT**

**Nausea**

**Euphoria**

**Sedation**

Knowledge Level 6, System: Nervous

Dr. Chetan Wasekar, MBBS KEM Hospital

---

**Morphine: effects at mu receptor**

Hi Yield [ID 1837]

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**PEAR:**

Physical dependence

Euphoria

Analgesia

Respiratory depression

Knowledge Level 2, System: Nervous

Robert Copeland Howard University College of Medicine

---

**MPTP: mechanism, effect**

Hi Yield [ID 1274]

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**MPTP:**

Mitochondrial Parkinson's-Type Poison.

A mitochondrial poison that elicits a Parkinson's-type effect.

Knowledge Level 4, System: Nervous

Robert O'Connor University College Dublin

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**Muscarinic effects**

Hi Yield [ID 1788]

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**SLUG BAM:**

Salivation/ Secretions/ Sweating

Lacrimation

Urination

Gastrointestinal upset

Bradycardia/ Bronchoconstriction/ Bowel movement

Abdominal cramps/ Anorexia

Miosis

Knowledge Level 3, System: Nervous

John Nguyen University of Texas Medical Branch

---

**Myasthenia gravis: edrophonium vs. pyridostigmine**

Hi Yield [ID 964]

eDrophonium is for Diagnosis.

pyRIDostigmine is to get RID of symptoms.

Knowledge Level 4, System: Nervous

Samuel

---

**Narcotic antagonists**

Hi Yield [ID 533]

The Narcotic Antagonists are NAloxone and NAltrexone.

Important clinically to treat narcotic overdose.

Knowledge Level 2, System: Nervous

Robert O'Connor University College Dublin

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**Narcotics: side effects**

Hi Yield [ID 777]

"SCRAM if you see a drug dealer":

Synergistic CNS depression with other drugs

Constipation

Respiratory depression

Addiction

Miosis

Knowledge Level 2, System: Nervous

Robert O'Connor University College Dublin

---

**Nicotinic effects**

Hi Yield [ID 1787]

MTWTF (days of week):

Mydriasis/ Muscle cramps

Tachycardia

Weakness

Twitching

Hypertension/ Hyperglycemia

Fasciculation

Knowledge Level 2, System: Nervous

John Nguyen University of Texas Medical Branch

---

**Opioids: mu receptor effects**

Hi Yield [ID 2161]

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**"MD CARES":**

**Miosis**

**Dependency**

**Constipation**

**Analgesics**

**Respiratory depression**

**Euphoria**

**Sedation**

Knowledge Level 1, System: Nervous

Sung Hoon Kim El Paso, TX

---

**Opioids: effects**

Hi Yield [ID 603]

**BAD AMERICANS:**

**Bradycardia & hypotension**

**Anorexia**

**Diminished pupillary size**

**Analgesics**

**Miosis**

**Euphoria**

**Respiratory depression**

**Increased smooth muscle activity (biliary tract constriction)**

**Constipation**

**Ameliorate cough reflex**

**Nausea and vomiting**

**Sedations**

Knowledge Level 5, System: Nervous

Sung H. Kim

---

**Parkinsonism: drugs**

Hi Yield [ID 1812]

**SALAD:**

**Selegiline**

**Anticholinergics (trihexyphenidyl, benzhexol, ophenadrine)**

**L-Dopa + peripheral decarboxylase inhibitor (carbidopa, benserazide)**

**Amantadine**

**Dopamine postsynaptic receptor agonists (bromocriptine, lisuride, pergolide)**

Knowledge Level 3, System: Nervous

Dr. Harsh Sharma

---

**Phenobarbitone: side effects**

[ID 347]

Children are annoying (hyperkinesia, irritability, insomnia, aggression).

Adults are dosy (sedation, dizziness, drowsiness).

Knowledge Level 4, System: Nervous

Afif El-khuffash Trinity College Dublin

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**Phenytoin: adverse effects**

Hi Yield [ID 1796]

**PHENYTOIN:**

**P-450 interactions**

**Hirsutism**

**Enlarged gums**

**Nystagmus**

**Yellow-browning of skin**

**Teratogenicity**

**Osteomalacia**

**Interference with B12 metabolism (hence anemia)**

**Neuropathies: vertigo, ataxia, headache**

Knowledge Level 6, System: Nervous

Ram Mohan SVRR Hospital Tirupathi, India

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**Physostigmine vs. neostigmine**

[ID 1434]



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**LMNOP:**

Lipid soluble

Miotic

Natural

Orally absorbed well

Physostigmine

Neostigmine, on the contrary, is:

Water soluble

Used in myasthenia gravis

Synthetic

Poor oral absorption

Knowledge Level 3, System: Nervous

Manpreet Saini GMC Amritsar

---

**Pupils in overdose: morphine vs. amphetamine**

Hi Yield [ID 156]

"Mor**PHINE**: **Fine**. Am**PHET**amine: **Fat**":

Morphine overdose: pupils constricted (**fine**).

Amphetamine overdose: pupils dilated (**fat**).

Knowledge Level 2, System: Nervous

Anonymous Contributor

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**Reserpine action**

[ID 222]

**Reserpine** depletes the **Reserves** of catecholamines [and serotonin].

Knowledge Level 3, System: Nervous

Robert O'Connor University College Dublin

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**Serotonin syndrome: components**

Hi Yield [ID 2273]

Causes **HARM**:

**Hyperthermia**

**Autonomic instability** (delirium)

**Rigidity**

**Myoclonus**

Knowledge Level 4, System: Nervous

Anonymous Contributor

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**Sodium valproate: side effects**

[ID 493]

**VALPROATE**:

Vomiting

Alopecia

Liver toxicity

**Pancreatitis/ Pancytopenia**

**Retention of fats** (weight gain)

**Oedema** (peripheral oedema)

**Appetite increase**

**Tremor**

**Enzyme inducer** (liver)

Knowledge Level 4, System: Nervous

Joshua Goh Unimas: University Malaysia Sarawak

---

**SSRIs: side effects**

Hi Yield [ID 532]

**SSRI**:

Serotonin syndrome

Stimulate CNS

Reproductive disfunctions in male

Insomnia

Knowledge Level 2, System: Nervous

Robert O'Connor University College Dublin

---

**Succinylcholine: action, use**

[ID 248]

Succinylcholine gets **Stuck** to Ach receptor, then **Sucks** ions in through open pore.

You **Suck** stuff in through a mouth-tube, and drug is used for intubation.

Knowledge Level 4, System: Nervous

Anonymous Contributor

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**Tricyclic antidepressants: members worth knowing**

Hi Yield [ID 2236]

"I have to hide, the **CIA** is after me":

**Clomipramine**

**Imipramine**

**Amitriptyline**

If want the next 3 worth knowing, the **DND** is also after me:

**Desipramine**

**Nortriptyline**

**Doxepin**

Knowledge Level 5, System: Nervous

Dr. Enrique Cifuentes University Autonomus of Guadalajara

---

**Tricyclic antidepressants (TCA): side effects**

Hi Yield [ID 2878]

**TCA'S:**

**Thrombocytopenia**

**Cardiac** (arrhythmia, MI, stroke)

**Anticholinergic** (tachycardia, urinary retention, etc)

**Seizures**

Knowledge Level 2, System: Nervous

Anonymous Contributor

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**Vigabatrin: mechanism**

Hi Yield [ID 1578]

**Vi-GABA-Tr-In:**

**Via GABA Transferase Inhibition**

Knowledge Level 2, System: Nervous

Anonymous Contributor

---

**Antibiotics contraindicated during pregnancy**

Hi Yield [ID 1250]

**MCAT:**

**Metronidazole**

**Chloramphenicol**

**Aminoglycoside**

**Tetracycline**

Knowledge Level 1, System: Other/Miscellaneous

Kyongbin Baek

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**Beta blockers with CYP2D6 polymorphic metabolism**

[ID 1533]

"I Met **Tim Carver**, the metabolic polymorph":

The following beta blockers require dose adjustment due to CYP2D6 polymorphic metabolism:

**Metoprolol**

**Timolol**

**Carvedilol**

(in patients with lower or higher than normal CYP2D6 activity)

Knowledge Level 7, System: Other/Miscellaneous

David Shprecher Lake Erie College of Osteopathic Medicine

---

**Bleomycin: action**

Hi Yield [ID 232]

"**Bleo-Mycin Blows My DNA** to bits":

Bleomycin works by fragmenting DNA (blowing it to bits).

**My DNA** signals that its used for cancer (targeting self cells).

Knowledge Level 3, System: Other/Miscellaneous

Robert O'Connor University College Dublin

---

**Busulfan: features**

Hi Yield [ID 2198]

**ABCDEF:**

**Alkylating agent**

**Bone marrow suppression** s/e

**CML** indication

**Dark skin** (hyperpigmentation) s/e

**Endocrine insufficiency** (adrenal) s/e

**Fibrosis** (pulmonary) s/e

Knowledge Level 3, System: Other/Miscellaneous

Sung Hoon Kim El Paso, TX

---

**Cancer drugs: time of action between DNA->mRNA**

Hi Yield [ID 2195]

**ABCDEF:**

Alkylating agents

**Bleomycin****Cisplatin****Dactinomycin/ Doxorubicin****Etoposide****Flutamide** and other steroids or their antagonists (eg tamoxifen, leuprolide)

Knowledge Level 2, System: Other/Miscellaneous

Sung Hoon Kim El Paso, TX

---

**Cisplatin: major side effect, action**

Hi Yield [ID 48]

**"Ci-Splat-In":**Major side effect: **Splat** (vomiting sound)--vomiting so severe that anti-nausea drug needed.Action: Goes **Into** the DNA strand.

Knowledge Level 5, System: Other/Miscellaneous

Anonymous Contributor

---

**Disulfiram-like reaction inducing drugs**

Hi Yield [ID 624]

**"PM PMT"** as in Pre Medical Test in the PM:**Procarbazine****Metronidazole****Cefo (Perazone, Mandole, Tetan).**

Knowledge Level 4, System: Other/Miscellaneous

Prashant A. Mehta

---

**Etoposide: action, indications, side effect**

Hi Yield [ID 1193]

**"eTOPoside":**

Action:

Inhibits **TOPoisomerase II**

Indications:

**Testicular carcinoma****Oat cell carcinoma of lung****Prostate carcinoma**

Side effect:

Affects **TOP** of your head, causing **alopecia**

Knowledge Level 5, System: Other/Miscellaneous

Milixa Fortuna UAG Medical Student

---

**Metabolism enzyme inducers**

Hi Yield [ID 299]

**"Randy's Black Car Goes Putt Putt and Smokes":****Rifampin****Barbiturates****Carbamazepine****Grisofulvin****Phenytoin****Phenobarb****Smoking** cigarettes

Knowledge Level 4, System: Other/Miscellaneous

Brad

---

**Microtubules: drugs that act on microtubules.**

Hi Yield [ID 3099]

**"The MicroTubule Growth Voiding Chemicals":****Thiabendazole****Mebendazole****Taxol****Griseofulvin****Vincristine/ Vinblastine****Colchicine**

Knowledge Level 5, System: Other/Miscellaneous

Javaid H. Wani, Ph.D. Spartan University School of Medicine

---

**Morphine: side-effects**

Hi Yield [ID 2550]

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**MORPHINE:**

Myosis

Out of it (sedation)

Respiratory depression

Pneumonia (aspiration)

Hypotension

Infrequency (constipation, urinary retention)

Nausea

Emesis

Knowledge Level 1, System: Other/Miscellaneous

Tony Duffy Medical Student Glasgow

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**Quinolones [and Fluoroquinolones]: mechanism**

Hi Yield [ID 1261]

"**Topple the Queen**":

Quinolone interferes with **Topoisomerase II**.

Knowledge Level 3, System: Other/Miscellaneous

Samuel Atom Baek-Kim

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**Routes of entry: most rapid ways meds/toxins enter body**

[ID 393]

"**S**tick it, **S**niff it, **S**uck it, **S**oak it":

Stick = Injection

Sniff = inhalation

Suck = ingestion

Soak = absorption

Knowledge Level 5, System: Other/Miscellaneous

Anonymous Contributor

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**Therapeutic dosage: toxicity values for most commonly monitored medications**

[ID 597]

"The magic 2s":

Digitalis (.5-1.5) Toxicity = **2**.

Lithium (.6-1.2) Toxicity = **2**.

Theophylline (10-20) Toxicity = **20**.

Dilantin (10-20) Toxicity = **20**.

APAP (1-30) Toxicity = **200**.

Knowledge Level 7, System: Other/Miscellaneous

Anonymous Contributor

---

**Therapeutic index: formula**

Hi Yield [ID 2032]

**TILE:**

**TI** = **LD50** / **ED50**

Knowledge Level 1, System: Other/Miscellaneous

Robert O'Connor University College Dublin

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**Torsades de Pointes: drugs causing**

[ID 2269]

**APACHE:**

Amiodarone

Procainamide

Arsenium

Cisapride

Haloperidol

Eritromycin

Knowledge Level 7, System: Other/Miscellaneous

Flavio Nacul Federal University of Rio de Janeiro

---

**Zero order kinetics drugs (most common ones)**

Hi Yield [ID 462]

"**PEAZ** (sounds like pees) out a constant amount":

Phenytoin

Ethanol

Aspirin

Zero order

Someone that pees out a constant amount describes zero order kinetics (always the same amount out)

Knowledge Level 3, System: Other/Miscellaneous

Anonymous Contributor UHS-COM

### Asthma drugs: leukotriene inhibitor action

Hi Yield [ID 2241]

zAfirlukast: Antagonist of lipoxigenase

zIlueton: Inhibitor of LT receptor

Knowledge Level 3, System: Pulmonary

Mumtaz Ali Shah 2000 graduate, Khyber Medical College, Pakistan

### Beta-1 vs Beta-2 receptor location

[ID 34]

"You have **1 heart** and **2 lungs**":

Beta-**1** are therefore primarily on **heart**.

Beta-**2** primarily on **lungs**.

Knowledge Level 1, System: Pulmonary

Anonymous Contributor

### Pulmonary infiltrations inducing drugs

[ID 1981]

"Go **BAN Me!**":

**Gold**

**Bleomycin/ Busulphan/ BCNU**

**Amiodarone/ Acyclovir/ Azathioprine**

**Nitrofurantoin**

**Melphalan/ Methotrexate/ Methysergide**

Knowledge Level 7, System: Pulmonary

Dr. Harsh Sharma BJMC, Pune, India

### Respiratory depression inducing drugs

Hi Yield [ID 1980]

"**STOP** breathing":

Sedatives and hypnotics

Trimethoprim

Opiates

Polymyxins

Knowledge Level 2, System: Pulmonary

Dr. Harsh Sharma BJMC, Pune, India

### Ribavirin: indications

Hi Yield [ID 2101]

**RIB**avirin:

**RSV**

**Influenza B**

**Arenaviruses** (Lassa, Bolivian, etc.)

Knowledge Level 1, System: Pulmonary

Robert O'Connor University College Dublin

### TB: antibiotics used

Hi Yield [ID 1581]

**STRIPE**:

**ST**reptomycin

**R**ifampicin

**I**soniazid

**P**yrizina**m**ide

**E**thambutol

Knowledge Level 2, System: Pulmonary

Sushant Varma Medical student, University of Sheffield, UK

### Zafirlukast, Montelukast, Cinalukast: mechanism, usage

Hi Yield [ID 648]

"Zafir-**luk-ast**, Monte-**luk-ast**, Cina-**luk-ast**":

Anti-**Luk**otrienes for **Asthma**.

Dazzle your oral examiner: Zaf**ir**lukast antagonizes leukotriene-**4**.

Knowledge Level 3, System: Pulmonary

Oisin and Robert O'Connor UCC and University College Dublin

### Sex hormone drugs: male

[ID 778]

"Feminine Males Need **Testosterone**":

Fluoxymesterone

Methyltestosterone

Nandrolone

**Testosterone**

Knowledge Level 3, System: Reproductive

Robert O'Connor University College Dublin

### Teratogenic drugs

Hi Yield [ID 1972]

"W/ **TERATO**genic":

Warfarin

Thalidomide

Epileptic drugs: phenytoin, valproate, carbamazepine

Retinoid

ACE inhibitor

Third element: lithium

OCP and other hormones (eg danazol)

Knowledge Level 3, System: Reproductive

Anthony Chan

### Teratogenic drugs: major non-antibiotics

Hi Yield [ID 1433]

**TAP CAP:**

Thalidomide

Androgens

Progestins

Corticosteroids

Aspirin & indomethacin

Phenytoin

Knowledge Level 2, System: Reproductive

Manpreet GMC Amritsar

### Tetracycline: teratogenicity

Hi Yield [ID 876]

**T**etracycline is a

**T**eratogen that causes staining of

**T**eeth in the newborn.

Knowledge Level 1, System: Reproductive

### Antirheumatic agents (disease modifying): members

Hi Yield [ID 2035]

**CHAMP:**

Cyclophosphamide

Hydroxychloroquine and chloroquine

Auranofin and other gold compounds

Methotrexate

Penicillamine

Knowledge Level 2, System: Skeletal

Robert O'Connor University College Dublin

### Auranofin, aurothioglucose: category and indication

Hi Yield [ID 2036]

**Aurum** is latin for "gold" (gold's chemical symbol is **Au**).

Generic Aur- drugs (**Auranofin**, **Aurothioglucose**) are gold compounds.

If didn't learn yet that gold's indication is rheumatoid arthritis, **AUR-** Acts Upon **R**heumatoid.

Knowledge Level 2, System: Skeletal

Robert O'Connor University College Dublin

## PHYSICS

### Electric units

[ID 520]

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"Vaulting John Says: 'Ann Can Sing OVA'. What Just Sing? And Vault.":

Volts = Joules/Sec

Amps = Coulombs/Sec

Ohms = Volts/Amp

Watts = Joules/Sec=Amps x Volts

Knowledge Level 3, System: Other/Miscellaneous

Sabra

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#### Ideal gas law

[ID 190]

"Pure Virgins Never Really Tire":

**PV=nRT**

Knowledge Level 1, System: Other/Miscellaneous

Anonymous Contributor

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#### Ideal gas law [for All My Children fans]

[ID 521]

"Pine Valley is Not Real Time"

**PV=nRt**

Knowledge Level 1, System: Other/Miscellaneous

Sabra

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#### Ohm's Law

[ID 169]

"Virgins Are Rare":

Volts = Amps x Resistance

Note: can then rearrange to more common form Resistance = Volts / Amps.

Knowledge Level 2, System: Other/Miscellaneous

Anonymous Contributor

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#### Resistor colour codes

[ID 154]

"Bad Boys Rape Our Young Girls But Violet Gives Willingly - Get Some Now":

In ascending resistor value order:

Black: 0

Brown: 1

Red: 2

Orange: 3

Yellow: 4

Green: 5

Blue: 6

Violet: 7

Grey: 8

White: 9

Gold: 5%

Silver: 10%

None: 20%

Knowledge Level 8, System: Other/Miscellaneous

Anonymous Contributor

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#### Visible spectrum colors in order

[ID 163]

**ROY G. BIV**

In order from low end of spectrum:

Red

Orange

Yellow

Green

Blue

Indigo

Violet

Alternatively: "Richard Of York Gained Battles In Vain" (Richard III was an English king defeated in 1485).

Knowledge Level 3, System: Other/Miscellaneous

Anonymous Contributor

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#### Work: formula

[ID 2286]

"Lots of **Work** gets me **Mad!**":

**Work = Mad:**

**M=Mass**

**a=acceleration**

**d=distance**

Knowledge Level 1, System: Other/Miscellaneous

Fox Man

## PHYSIOLOGY

### Gut intrinsic innervation: myenteric plexus vs. submucosal plexus function

Hi Yield [ID 885]

**Myenteric: Motility.**

**Submucosal: Secretion and blood flow.**

Knowledge Level 3, System: Alimentary

Robert O'Connor University College Dublin

### Pepsin-producing cells

Hi Yield [ID 1358]

"**Chief** of **Pepsi-Cola**":

**Chief** cells of stomach produce **Pepsin**.

Knowledge Level 2, System: Alimentary

Dr. Atif Farooq Khawaja Rawalpindi Medical College, Horizon Medical Institute, Pakistan

### Carotid sinus vs. carotid body function

Hi Yield [ID 2615]

carotid **SinuS**: measures pre**SS**ure.

carotid **bO2**dy measures **O2**.

Knowledge Level 2, System: Cardiovascular

Omar Boissard, MD INTEC

### Einthoven's Triangle: organization

[ID 287]

Corners are at **RA** (right arm), **LA** (left arm), **LL** (left leg).

Number of L's at a corner tell how many + signs are at that corner [eg **LL** is ++].

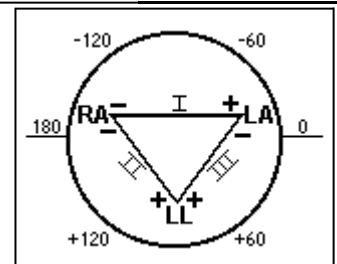
Sum of number of L's of any 2 corners tells the name of the lead [eg **LL-LA** is lead **III**].

For reference axes, the **negative angle** hemisphere is on the half of the triangle drawing that has all the **negative signs**; **positive angle** hemisphere contains only **positive signs**.

See diagram.

Knowledge Level 3, System: Cardiovascular

Robert O'Connor University College Dublin



### Hb-oxygen dissociation curve shifts: effect, location

[ID 1391]

**Left shift:** causes **Loading** of O2 in **Lungs**.

**Right shift:** causes **Release** of O2 from Hb.

Knowledge Level 3, System: Cardiovascular

Dr. Khawaja Atif Farooq Rawalpindi Medical College, Horizon Medical Institute, Pakistan

### Heart electrical conduction pathway

Hi Yield [ID 2314]

"If patient's family are all having **Heart** attacks, you must **SAVe HIS KIN!**"

**SA** node --->

**AV** node --->

**His** (bundle of) -->

Pur**KIN**je fibers

Knowledge Level 1, System: Cardiovascular

Carlo Adan, MPH University of Michigan

### Heart valves: closure sequence

Hi Yield [ID 2563]

"**Many Things Are Possible**":

**Mitral, Tricuspid, Aortic, Pulmonic**

Knowledge Level 1, System: Cardiovascular

Desales University Physician Assistant Class of 2001

### Heart valves: sequence of flow

[ID 394]



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**TRIPS BIAS:**

**TRI**cuspid

**P**ulmonary

**S**emilunar

**BI**cuspid

**A**ortic

**S**emilunar

Alternatively: "TRIPS, MI ASs!" (uses **M**itral instead of **BI**cuspid)

Knowledge Level 1, System: Cardiovascular

Anonymous Contributor

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**Heart: -tropic definitions**

[ID 296]

**L**usitropic: **l**oose is relaxed. Definition: relax heart.

**I**notropic: when heart wall **contracts**, moves **in**ward. Definition: contract heart.

**C**hronotropic: 'chrono-' means 'time'. Definition: heart rate (of SA node impulses).

Dromotropic: only one left, it must be conduction speed by default.

Knowledge Level 2, System: Cardiovascular

Robert O'Connor University College Dublin

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**Hemoglobin and myoglobin: binding strengths, sites**

[ID 1329]

"**ABC**" of glycosylated Hb (Hb1c):

Glucose binds to **A**mino terminal of **B**eta **C**hain.

"Hb**F** binds **F**orcefully":

HbF binds oxygen more forcefully than HbA, so Oxy-Hb dissociation curve shifts to left.

Stored blood is **SOS**:

Stored blood Hb binds to **O**xygen **S**trongly because of decrease in 2,3 BPG.

2,3 BPG binding site is **BBC**:

**B**PG binds to **B**eta **C**hain of Hb.

Myoglobin binding strength is **MOM**:

**M**yoglobin binds **O**xygen **M**ore strongly than Hb.

Knowledge Level 3, System: Cardiovascular

Dr. Atif Farooq Khawaja Rawalpindi Medical College, Horizon Medical Institute, Pakistan

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**Intrinsic vs. extrinsic pathway tests**

Hi Yield [ID 431]

"**PeT PiTT**bull":

**PeT**: **PT** is for extrinsic pathway.

**PiTT**bull: **PTT** is for intrinsic pathway.

Knowledge Level 3, System: Cardiovascular

Marcus James Fidel Medical Student, University of New Mexico

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**PGI2 vs. TxA2 coagulation function**

Hi Yield [ID 254]

**TxA2** Aggregates platelets.

**PGI2** **I**nhibits aggregation.

Note: full name of PGI2 is prostaglandin I2 or prostacyclin, full name of TxA2 is thromboxane A2.

Knowledge Level 3, System: Cardiovascular

Robert O'Connor University College Dublin

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**Adrenal cortex layers and products**

Hi Yield [ID 180]

"**Go Find Rex, Make Good Sex**":

Layers:

**G**lomerulosa

**F**asiculata

**R**eticulata

Respective products:

**M**ineralcorticoids

**G**lucocorticoids

**S**ex hormones

Alternatively for layers: **GFR** (Glomerular Filtration Rate, convenient since adrenal glands are atop kidney).

Knowledge Level 1, System: Endocrine

Anonymous Contributor

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**Adrenal cortex layers and products**

Hi Yield [ID 412]

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"Get your **Facts Right**, **Men are Glued** to their **Gonads**":

**Glomerulosa**

**Fasciculata**

**Reticularis**

**Mineralocorticoids**

**Glucocorticoids**

**Gonadocorticoids** [androgens]

Knowledge Level 1, System: Endocrine

Anonymous Contributor

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#### Adrenal cortex layers and products

Hi Yield [ID 553]

"Get **All Fat Chicks Right** Away":

Layers:

**Glomerulosa**

**Fasciculata**

**Reticularis**

Products:

**Aldosterone**

**Cortisol**

**Androgens**

Knowledge Level 1, System: Endocrine

Anonymous Contributor

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#### Adrenal cortex layers and products

[ID 2056]

"Great **Attire And Fast Cars** Are Really **Sexy Attributes**":

**Granulosa** secretes **Aldosterone** in response to **Angiotensin II**.

**Fasciculata** secretes **Cortisol** in response to **ACTH**.

**Reticularis** secretes **Sex** steroids in response to **ACTH**.

Knowledge Level 1, System: Endocrine

Fyodor

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#### Adrenal cortex layers and products

Hi Yield [ID 2201]

"Get **My Freakin' Gun Right** Away":

**Glomerulosa**: **Mineralcorticoid** (aldosterone)

**Fasiculata**: **Glucocorticoid** (cortisol)

**Reticularis**: **Androgens**

Knowledge Level 1, System: Endocrine

Thomas B. Edmunds, Jr Chief Urology Resident at SUNY @ Stony Brook

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#### Adrenal gland: functions

Hi Yield [ID 1098]

**ACTH**:

Adrenergic functions

Catabolism of proteins/ Carbohydrate metabolism

T cell immunomodulation

**Hyper/ Hypotension** (blood pressure control)

Knowledge Level 1, System: Endocrine

The Cashman University of Queensland, Australia

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#### Diabetes Insipidous: diagnosing subtypes

Hi Yield [ID 556]

After a desmopression injection:

**Concentrated urine** = **Cranial**.

**No effect** = **Nephrogenic**.

Knowledge Level 5, System: Endocrine

Robert O'Connor University College Dublin

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#### Hyperthyroidism: signs and symptoms

Hi Yield [ID 1046]

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**THYROIDISM:**

Tremor

Heart rate up

Yawning [fatigability]

Restlessness

Oligomenorrhea & amenorrhea

Intolerance to heat

Diarrhea

Irritability

Sweating

Muscle wasting & weight loss

Knowledge Level 6, System: Endocrine

Robert O'Connor University College Dublin

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**Oestrogen: functions**

Hi Yield [ID 2993]

**OESTROGEN SUX:**

Organ development (sex organs)

Endocrine: FSH and LH regulation

Secondary sex characteristics development

Tropic for pregnancy

Receptor synthesis (of progesterone, oestrogen, LH)

Osteoporosis decrease (inhibits bone reabsorption)

Granulosa cell development

Endocrine: increases prolactin secretion, but then blocks its effect

Nipple development

Sex drive increase

Uterine contractility increase

oXytocin sensitivity increase

Knowledge Level 3, System: Endocrine

David Colbert UWA Medicine

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**Oxytocin-producing nucleus of hypothalamus**

[ID 653]

Paraventricular nucleus--> **Parturition** (childbirth is oxytocin's most important role).

Knowledge Level 7, System: Endocrine

Usman Ahmad

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**Pituitary hormones**

Hi Yield [ID 152]

**FLAGTOP:**

Follicle stimulating hormone

Luteinizing hormone

Adrenocorticotropin hormone

Growth hormone

Thyroid stimulating hormone

Oxytocin

Prolactin

Alternatively: **GOAT FLAP** with the second 'A' for Anti-diuretic hormone/vasopressin

Note: there is also melanocyte secreting hormone and Lipotropin, but they are not well understood.

Knowledge Level 2, System: Endocrine

Anonymous Contributor

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**Pituitary: anterior hypophysis hormones**

Hi Yield [ID 380]

**FLATPiG:**

FSH

LH

ACTH

TSH

Prolactin

ignore GH

Knowledge Level 1, System: Endocrine

Fropvd

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**Progesterone: actions**

Hi Yield [ID 647]

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**PROGESTE:**

Produce cervical mucous

Relax uterine smooth muscle

Oxycotin sensitivity down

Gonadotropin [FSH, LH] secretions down

Endometrial spiral arteries and secretions up

Sustain pregnancy

Temperature up / Tit development

Excitability of myometrium down

Knowledge Level 4, System: Endocrine

Robert O'Connor University College Dublin

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**Prostaglandins: dilatation abilities**

[ID 904]

Prospectors keep mineshafts open:

Mineshaft 1: Patent ductus arteriosus.

Mineshaft 2: renal afferent arteriole dilatation.

Knowledge Level 1, System: Endocrine

Sameul Atom Baek-Kim

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**Skin vasoconstriction and temperature**

[ID 3285]

When the skin needs to **CON**Serve heat, the blood vessels of the skin **CON**Strict.

When the skin is **COLD**, the blood vessels of the skin **CON**strict.

Knowledge Level 1, System: Integumental

Rinku Uberoi Willsey Institute

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**Muscle spindle: origin of primary vs. secondary endings**

[ID 112]

"1 from 1, 2 from 2":

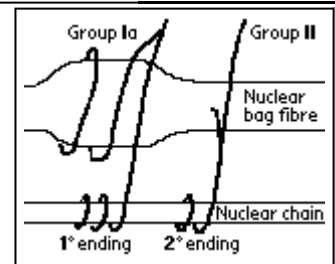
**Primary** ending is from Group **Ia**.

**Secondary** ending from Group **II**.

See diagram.

Knowledge Level 8, System: Muscle

Robert O'Connor University College Dublin



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**Balance organs**

[ID 183]

Utricle and Saccule keep **US** balanced.

Knowledge Level 2, System: Nervous

Anonymous Contributor

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**Cochlea: inner vs. outer hair cell function**

[ID 53]

"**Outer** cells are **Out** of the brain. **Inner** cells are **Into** the brain":

Outer hair cells are motor efferents to amplify signal.

Inner hair cells are sensory afferents that actually pick up the sound.

Knowledge Level 5, System: Nervous

Robert O'Connor University College Dublin

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**Electrical conductivity of tissues**

[ID 3107]

"**Be Careful To Shock My Best Nerve**":

In order of least conductive to most conductive:

**B**ones

**C**artilage

**T**endon

**S**kin

**M**uscle

**B**lood

**N**erve

Knowledge Level 7, System: Nervous

Luz Ann M. Sabado Philippine Physical Therapy Association

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**MAO isoenzyme form locations**

[ID 1145]

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MAO-A in:  
Adrenergic peripheral structures  
Alimentary mucosa [intestine]  
MAO-B in:  
Brain  
Blood platelets  
Knowledge Level 7, System: Nervous  
Archana

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### Mechanoreceptor types

[ID 785]

"**F**rustated **M**uscular **M**echanics **R**ub **H**er **P**\*ssy":  
**F**ree nerve endings  
**M**eisner's  
**M**erkel's disc  
**R**uffini's  
**H**air end organ  
**P**acinian corpuscle  
Knowledge Level 4, System: Nervous  
Usman Ahmad KMC

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### Nervous stimulus: the 4 ways to classify

[ID 109]

"A **MILD** stimulus":  
**M**odality  
**I**ntensity  
**L**ocation  
**D**uration  
Knowledge Level 6, System: Nervous  
Robert O'Connor University College Dublin

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### Rods vs. cone function

[ID 353]

**R**o**D**: **D**im light.  
**C**ones: **C**olor.  
Knowledge Level 1, System: Nervous  
Anonymous Contributor

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### Temperature control: cerebral regions

[ID 841]

"**H**igh **P**ower **A**ir **C**onditioner":  
**H**eating = **P**osterior hypothalamo [hypothalamus].  
**A**nterior hypothalamo [hypothalamus] = **C**ooling.  
Knowledge Level 5, System: Nervous  
Gilvano Amorim Oliveira Universidade de Santo Amaro São Paulo/Brasil

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### Urination: autonomic control

[ID 618]

"When you pee, it's **PIS**s":  
**P**arasympathetic **I**nhibits **S**ympathetic.  
Knowledge Level 1, System: Nervous  
Muhammad Asif Iqbal Resident, SLU, MO

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### Alkalosis vs. acidosis: directions of pH and HCO<sub>3</sub>

[ID 1598]

**R**OME:  
**R**espiratory= **O**pposite:  
pH is high, PCO<sub>2</sub> is down (Alkalosis).  
pH is low, PCO<sub>2</sub> is up (Acidosis).  
**M**etabolic= **E**qual:  
pH is high, HCO<sub>3</sub> is high (Alkalosis).  
pH is low, HCO<sub>3</sub> is low (Acidosis).  
Knowledge Level 5, System: Pulmonary  
Anonymous Contributor

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### Compliance of lungs factors

[ID 529]

## COMPLIANCE:

Collagen deposition (fibrosis)

Ossification of costal cartilages

Major obesity

Pulmonary venous congestion

Lung size

Increased expanding pressure

Age

No surfactant

Chest wall scarring

Emphysema

All but L/A/E decrease compliance.

Knowledge Level 5, System: Pulmonary

Robert O'Connor University College Dublin

## V/Q gradient in lung

Hi Yield [ID 886]

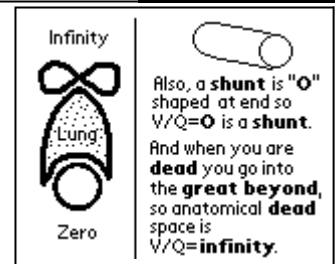
Infinity, a lung and a zero stack nicely.

V/Q is lowest at bottom, highest at top.

See diagram.

Knowledge Level 1, System: Pulmonary

Robert O'Connor University College Dublin



## VO2 normal value is 250 mL/min

[ID 244]

"V02" is the numbers, just need to rearrange the order.

V is roman numeral for 5, so rearrange to 2V0, or 250 mL/min.

Knowledge Level 7, System: Pulmonary

Robert O'Connor University College Dublin

## LH vs FSH: function in male

[ID 1427]

LH: Leydig cells stimulated to produce testosterone.

FSH: Spermatogenesis stimulated.

Knowledge Level 1, System: Reproductive

Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan

## Prolactin and oxytocin: functions

Hi Yield [ID 3247]

PROlactin stimulates the mammary glands to PROduce milk.

Oxytocin stimulates the mammary glands to Ooze (release) milk.

Knowledge Level 1, System: Reproductive

Rinku Uberoi Willsey Institute

## Osteoblast vs. osteoclast

Hi Yield [ID 2383]

OsteoBlast Builds bone.

OsteoClast Consumes bone.

Knowledge Level 1, System: Skeletal

Anonymous Contributor

## PODIATRY

### Blue toe (microembolic toe)

Hi Yield [ID 939]

#### CAVEMAN:

Cholesterol embolizations

Atrial fib with electricity or digitoxin

Valvular problems

Endocarditis

Mural thrombosis

Aneurysm/ AV fistula

Nothing

Knowledge Level 3, System: Cardiovascular

Samuel Atom Baek-Kim

## Peripheral vascular diseases

[ID 1004]

### ABCDEF:

Atherosclerosis.

Buerger's disease (TAO)

Cyanosis/ Cold agglutinin/ Connective tissue disease (Raynaud's phenomenon)

Deep vein phlebothrombosis

Embolism

inflammation of veins

Knowledge Level 3, System: Cardiovascular

Samuel Atom Baek-Kim

## TIA: internal carotid vs. vertebrobasilar

Hi Yield [ID 1400]

### MD vs. DPM

Internal carotid:

Monocular blindness (amaurosis fugax)

Dominant hemisphere (aphasia)

The weakness or numbness is still less in the legs.

Vertebrobasilar:

Diplopia/ Double blindness

Paralysis (quadriplegia)

Motor weakness (ipsilateral)

Ataxia is characteristic in vertebrobasilar lesions.

Knowledge Level 1, System: Cardiovascular

Samuel Atom Baek-Kim Tuckahoe, New York

## White toe (arterial insufficiency toe)

[ID 938]

5 P's:

Pale coloration

Pain (excruciating)

Paresthesia

Pulselessness

Warm compression and vasodilatory Patch to Proximal area

Knowledge Level 2, System: Cardiovascular

Samuel Atom Baek-Kim

## Diabetic neuropathy types

[ID 1407]

### DPM:

Distal, symmetric, polyneuropathy

Proximal diabetic neuropathy

Mononeuritis multiplex

Knowledge Level 1, System: Endocrine

Samuel Atom Baek-Kim Tuckahoe, New York

## Cortical vs. subcortical brain disease

[ID 1346]

### "MD vs. DPM":

Cortical brain:

Memory

Discrimination (2 point)

Subcortical brain:

Devoid of seizure

Primary sensation through thalamus

Movement disorders (most)

Lower extremities manifestations are characteristic of the subcortical brain lesions.

Knowledge Level 2, System: Nervous

Samuel Atom Baek-Kim

## Proprioception and stereognosis deficits: causes

[ID 1279]

### D.P.M.:

Tabes Dorsalis

Pernicious anemia

Multiple sclerosis

Knowledge Level 2, System: Nervous

Samuel Atom Baek-Kim

## Arthritides: the six classifications

[ID 882]

"Round COINS":

Rheumatoid diseases (inflammation of synovium)

Crystal depositions (gout, pseudogout)

Osteoarthritis

Infections

Neuropathy

SLE, mixed scleroderma

Knowledge Level 1, System: Skeletal

Samuel Atom Baek-Kim

## Charcot's joints: common disorders

Hi Yield [ID 881]

"Come See A Handsome DPM":

Congenital insensitivity to pain

Syringomyelia/ Spina bifida

Alcoholism

Hansen's disease

Diabetes mellitus

Peripheral nerve injury

Menigomyelocele

Knowledge Level 1, System: Skeletal

Samuel Mae Baek-Kim

## Skeletal disease: differential diagnosis

[ID 1028]

VITAMIN:

Vascular disease

Infection

Tumor

Arthritis

Metabolic bone disease

Injury

Neurodevelopmental disorders

Knowledge Level 1, System: Skeletal

Samuel Atom Baek-Kim

## PSYCHIATRY

### Depression

[ID 1888]

UNHAPPINESS:

Understandable (such as bereavement, major stresses)

Neurotic (high anxiety personalities, negative parental upbringing)

Hypochondriasis

Agitation (usually organic causes such as dementia)

Pseudodementia

Pain

Importuniing (whingeing, complaining)

Nihilistic

Endogenous

Secondary (ie cancer at the head of the pancreas, bronchogenic cancer)

Syndromal

Knowledge Level 5, System: Nervous

Peter Loa Medical Student at Adelaide University

### Depression criteria/symptoms

Hi Yield [ID 2545]

A SAD FACES:

Appetite, weight changes

Sleep changes

Anhedonia

Dysphoria (low mood)

Fatigue

Agitation (psychomotor)

Concentration

Esteem

Suicide



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**Depression: major depression criteria**

Hi Yield [ID 2649]

**DEAD SWAMP:**

Depressed mood most of the day

Energy loss or fatigue

Anhedonia

Death thoughts (recurrent), suicidal ideation or attempts

Sleep disturbances (insomnia, hypersomnia)

Worthlessness or excessive guilt

Appetite or weight change

Mentation decreased (ability to think or concentrate, indecisiveness)

Psychomotor agitation or retardation

Knowledge Level 1, System: Nervous

Dr. Mike de Beer GP

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**Depression: melancholic features (DSM IV)**

[ID 2003]

**MELAN**cholic:

**M**orning worsening of symptoms/ **psychoM**otor agitation, retardation/ early **M**orning waking

**E**xcessive guilt

**L**oss of emotional reactivity

**AN**orexia/ **AN**hedonia

Knowledge Level 5, System: Nervous

Anthony Chan

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**Mania: cardinal symptoms**

[ID 2456]

**DIG FAST:**

Distractibility

Indiscretion (DSM-IV's "excessive involvement in pleasurable activities")

Grandiosity

Flight of ideas

Activity increase

Sleep deficit (decreased need for sleep)

Talkativeness (pressured speech)

Knowledge Level 1, System: Nervous

Anonymous Contributor

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**Mania: diagnostic criteria**

Hi Yield [ID 3029]

Must have 3 of **MANIAC**:

**M**outh (pressure of speech)/ **M**oodl

**A**ctivity increased

**N**aughty (disinhibition)

**I**nsomnia

**A**ttention (distractability)

**C**onfidence (grandiose ideas)

Knowledge Level 1, System: Nervous

Waqar Ahmed Queens University, Belfast

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**Schizophrenia: negative features**

Hi Yield [ID 239]

4 A's:

**A**mbivalence

**A**ffective incongruence

**A**ssociative loosening

**A**utism

Knowledge Level 1, System: Nervous

Anonymous Contributor

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**Substance dependence: features (DSM IV)**

Hi Yield [ID 2004]

"**WITHDRAW IT**":

3 of 7 within 12 month period:

**Withdrawal**

**Interest or Important activities given up or reduced**

**Tolerance**

**Harm to physical and psychosocial known but continue to use**

**Desire to cut down, control**

**Intended time, amount exceeded**

**Time spent too much**

Knowledge Level 3, System: Nervous

Anthony Chan

### Biological symptoms in psychiatry

[ID 1326]

**SCALED:**

**Sleep disturbance**

**Concentration**

**Appetite**

**Libido**

**Energy**

**Diurnal mood variation**

Knowledge Level 5, System: Other/Miscellaneous

Diablo Royal Free Hospital Medical School

### Conduct disorder vs. Antisocial personality disorder

Hi Yield [ID 1070]

Conduct disorder is seen in **Children**.

Antisocial personality disorder is seen in **Adults**.

Knowledge Level 3, System: Other/Miscellaneous

Anonymous Contributor

### Dementia: main causes

[ID 2063]

**VITAMIN D VEST:**

**Vitamin deficiency (B12, folate, thiamine)**

**Intracranial tumour**

**Trauma (head injury)**

**Anoxia**

**Metabolic (diabetes)**

**Infection (postencephalitis, HIV)**

**Normal pressure hydrocephalus**

**Degenerative (Alzheimer's, Huntington's, CJD, etc)**

**Vascular (multi infarct dementia)**

**Endocrine (hypothyroid)**

**Space occupying lesion (chronic subdural haematoma)**

**Toxic (alcohol)**

Knowledge Level 3, System: Other/Miscellaneous

Mark P UWCM, UK



### Depression: symptoms and signs (DSM-IV criteria)

Hi Yield [ID 1136]

**AWESOME:**

**Affect flat**

**Weight change (loss or gain)**

**Energy, loss of**

**Sad feelings/ Suicide thoughts or plans or attempts/ Sexual inhibition/ Sleep change (loss or excess)/ Social withdrawal**

**Others (guilt, loss of pleasure, hopeless)**

**Memory loss**

**Emotional blunting**

Knowledge Level 9, System: Other/Miscellaneous

Muhammad Firdaus, MD Private Practice

### Erikson's developmental stages

Hi Yield [ID 969]

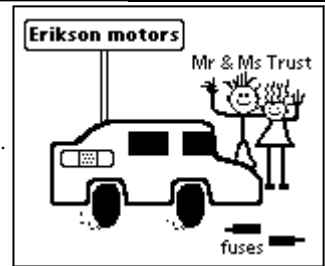
"The sad tale of Erikson Motors":

The stages in order by age group:

Mr. **Trust** and **MsTrust** had an **auto** they were **ashamed** of. She took the **initiative** to find the **guilty** party. She found the **industry** was **inferior**. They were making cars with **dents** [identity] and **rolling fuses** [role confusion]. Mr. **N.T. Macy** [intimacy] **isolated** the problem, **General TVT** absorbed the cost. In the end, they found the tires were just **gritty** and they should have used **de-spare!**

Knowledge Level 1, System: Other/Miscellaneous

VTF SN, NHCC, Texas



Hi Yield [ID 1071]

### Parasomnias: time of onset

**S**leep terrors and **S**leepwalking occur during **S**Low-wave sleep (stages 3 & 4).

**N**ightma**R**E occurs during **R**EM sleep (and is **R**EMembered).

Knowledge Level 4, System: Other/Miscellaneous

Anonymous Contributor

### Psychiatric review of symptoms

[ID 1839]

"Depressed Patients Seem Anxious, So Claim Psychiatrists":

Depression and other mood disorders (major depression, bipolar disorder, dysthymia)

Personality disorders (primarily borderline personality disorder)

Substance abuse disorders

Anxiety disorders (panic disorder with agoraphobia, obsessive-compulsive disorder)

Somatization disorder, eating disorders (these two disorders are combined because both involve disorders of bodily perception)

Cognitive disorders (dementia, delirium)

Psychotic disorders (schizophrenia, delusional disorder and psychosis accompanying depression, substance abuse or dementia)

Knowledge Level 3, System: Other/Miscellaneous

Michael Waddell University of Wisconsin Medical School

## RADIOLOGY / ONCOLOGY

### Esophageal cancer: risk factors

[ID 1022]

**ABCDEF:**

**A**chalasia

**B**arret's esophagus

**C**orrosive esophagitis

**D**iverticuliis

**E**sophageal web

**F**amilial

Knowledge Level 6, System: Alimentary

Lau Yue Young Geoffrey HKU

### TIGAN (Trimethobenzamide hydrochloride): indication

[ID 2652]

**TIGAN:**

**T**his **I**s **G**ood Against Nausea

Knowledge Level 1, System: Alimentary

Sabrina

### Pituitary endocrine functions often affected by pituitary-associated tumor

Hi Yield [ID 332]

"Go Look For the Adenoma Please":

Tropic hormones affected by growth tumor are:

**GnRH**

**LSH**

**FSH**

**ACTH**

**P**rolactin function

Knowledge Level 5, System: Endocrine

Anonymous Contributor

### Anterior mediastinal masses

[ID 540]

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4 T's:

Teratoma

Thymoma

Testicular-type

T-cell / Hodgkin's lymphoma

Knowledge Level 4, System: Lymphoid

Anonymous Contributor

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**Head CT scan: evaluation checklist**

[ID 371]

"Blood Can Be Very Bad":

Blood

Cistern

Brain

Ventricles

Bone

Knowledge Level 2, System: Nervous

Anonymous Contributor

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**MR imaging/ spectroscopy: important metabolites**

[ID 2093]

"Lying Lazy No Good Crooks Collected My insurance":

Lipid: abnormal

Lactate: abnormal

NAA

Glutamine/glutamate

Creatinine/phosphocreatinine

Choline containing compounds

Myoinositol

Knowledge Level 7, System: Nervous

Berlin Go

---

**Chest radiograph: checklist to examine**

Hi Yield [ID 1763]

**ABCDEFGH:**

Aorta

Bronchus

Cord, spinal

Diaphragm (look for hyperinflation)

Eosophagus (look for foreign body)

Fracture (ribs)

Gas (look for pneumothorax)

Heart (look for cardiomegaly)

Iatrogenic (subclavian line, pacemakers)

Knowledge Level 3, System: Other/Miscellaneous

Vince Yamashiroya

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**Dermatomyositis or polymyositis: risk of underlying malignancy**

[ID 242]

Risk is **30%** at age **30**.

Risk is **40%** at age **40**, and so on.

Knowledge Level 6, System: Other/Miscellaneous

Anonymous Contributor

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**Prognostic factors for cancer: general**

[ID 1107]

**PROGNOSIS:**

Presentation (time & course)

Response to treatment

Old (bad prog.)

Good intervention (i.e. early)

Non-compliance with treatment

Order of differentiation (>1 cell type)

Stage of disease

Ill health

Spread (diffuse)

Knowledge Level 2, System: Other/Miscellaneous

Cashman, Reidy, Motty, BB University of Queensland, Australia

## T2 vs. T1 MRI scan

[ID 1724]

"**WW 2**" (World War II):

Water is **White** in a **T2** scan.

Conversely, a T1 scan shows fat as being whiter.

Knowledge Level 2, System: Other/Miscellaneous

Jason Galarneau Flinders University School of Medicine, South Australia

## Chest radiograph: checklist to examine

[ID 605]

"**Pamela Found Our Rotation Particularly Exciting; Very Highly Commended Mainly 'Cus She Arouses'**":

Patient details

Film details

Objects (eg. lines, electrodes)

Rotation

Penetration

Expansion

Vessels

Hila

Costophrenic angles

Mediastinum

Cardiothoracic Ratio

Soft tissues and bones

Air (diaphragm, pneumothorax, subcut. emphysema)

Knowledge Level 4, System: Pulmonary

Andrew Booshan

## Chest X-ray interpretation

[ID 2900]

Preliminary is **ABCDEF**:

AP or PA

Body position

Confirm name

Date

Exposure

Films for comparison

Analysis is **ABCDEF**:

Airways (hilar adenopathy or enlargement)

Breast shadows/ **B**ones (rib fractures, lytic bone lesions)

Cardiac silhouette (cardiac enlargement)/ **C**ostophrenic angles (pleural effusions)

**D**iaphragm (evidence of free air)/ **D**igestive tract

**E**edges (apices for fibrosis, pneumothorax, pleural thickening or plaques)/ **E**xtrathoracic tissues

**F**ields (evidence of alveolar filling)/ **F**ailure (alveolar air space disease with prominent vascularity with or without pleural effusions)

Knowledge Level 6, System: Pulmonary

Fahed Al-Daour

## Chest X-ray: cavitating lesions differential

[ID 2626]

"If you see **HOLES** on chest X-ray, they are **WEIRD**":

Wegener's syndrome

Embolic (pulmonary, septic)

Infection (anaerobes, pneumocystis, TB)

Rheumatoid (necrobiotic nodules)

Developmental cysts (sequestration)

Histiocytosis

Oncological

Lymphangioleiomyomatosis

Environmental, occupational

Sarcoid

Alternatively: **L**=Left atrial myxoma

Knowledge Level 6, System: Pulmonary

LW Mason, and Anonymous Contributor 4th Year Medical Student and Not Specified

## Chest x-ray: differential diagnoses of shadow on the upper zones of lung fields

[ID 2398]

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5 Ts:

Thymoma

Thyroid (retrosternal)

Tuberculosis

Terrible lymphoma

Teratoma

Knowledge Level 6, System: Pulmonary

Kok Fai Kong Final Year Medical Student, University of Auckland, New Zealand

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**Lung cancer: main sites for distant metastases**

Hi Yield [ID 1906]

**BLAB:**

Bone

Liver

Adrenals

Brain

Knowledge Level 1, System: Pulmonary

Ian Silver Queen's University School of Medicine, Kingston, ON, Canada

---

**Lung cancer: notorious consequences**

Hi Yield [ID 2256]

**SPEECH:**

Superior vena cava syndrome

Paralysis of diaphragm (**P**hrenic nerve)

Ectopic hormones

Eaton-Lambert syndrome

Clubbing

**H**orner syndrome/ **H**oarseness

Knowledge Level 1, System: Pulmonary

Rinku Uberoi

---

**Upper lobe shadowing: causes**

Hi Yield [ID 931]

**BREASTS:**

Beryllium

Radiation

Extrinsic allergic alveolitis

Ankylosing spondylitis

Sarcoidosis

TB

Siliconiosis

Knowledge Level 4, System: Reproductive

A Bywaters

---

**Elbow ossification centers, in sequence**

[ID 1750]

**CRITOE:**

Capitellum

Radial head

Internal epicondyle

Trochlea

Olecranon

External epicondyle

In order: appear at **1, 3, 5, 7, 9, 11** years; each closes 2 years later.

Knowledge Level 4, System: Skeletal

Vince Yamashiroya

---

**Mole: signs of trouble**

Hi Yield [ID 225]

**ABCDE:**

Asymmetry

Border irregular

Colour irregular

Diameter usually > 0.5cm

Elevation irregular

Knowledge Level 3, System: Skeletal

Oisín University College Cork

---

**Neck sagittal x-ray: examination checklist**

[ID 118]

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**ABCD:**

**Anterior:** look for swelling

**Bones:** examine each bone for fractures

**Cartilage:** look for slipped discs

**Dark spots:** ensure not abnormally big, or could mean excess blood

Knowledge Level 1, System: Skeletal

Robert O'Connor University College Dublin

---

**Osteoarthritis: x-ray signs**

Hi Yield [ID 1916]

**LOSS:**

**Loss of joint space**

**Osteophytes**

**Subcondral sclerosis**

**Subchondral cysts**

Knowledge Level 1, System: Skeletal

Gajan Rajeswaran Final Year Medical Student, Imperial College School Of Medicine, London

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**RHEUMATOLOGY / ALLERGY**

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**SLE (Systemic Lupus Erythematosus) diagnosis (ARA criteria)**

[ID 2820]

**DAMP AS RHINO:**

**Discoid rash**

**ANA (+)**

**Malar rash**

**Photosensitivity**

**Arthritis**

**Serositis (pleural, pericardial)**

**Renal involvement**

**Hematologic abnormality**

**Immunologic abnormality**

**Neurologic abnormality (seizures, psychosis)**

**Oral / nasal ulcer, Observed**

Knowledge Level 4, System: Integumental

Thomas K. Vaughan MD Madigan Army Medical Center, Washington

---

**SLE (Systemic Lupus Erythematosus) diagnosis**

Hi Yield [ID 382]

**"MD SOAP 'N HAIR":**

**Malar rash**

**Discoid rash**

**Serositis**

**Oral ulcer**

**Arthritis**

**Photosensitivity**

**Neurologic abnormality**

**Hematologic abnormality**

**ANA (+)**

**Immunologic abnormality**

**Renal involvement**

Knowledge Level 3, System: Kidney/Urine

Anonymous Contributor

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**Felty's syndrome: components**

Hi Yield [ID 1864]

**SANTA:**

**Splenomegaly**

**Anaemia**

**Neutropenia**

**Thrombocytopenia**

**Arthritis (rheumatoid)**

Knowledge Level 2, System: Lymphoid

Dr. Harsh Sharma BJMC, Pune, India

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**Carpal tunnel syndrome**

Hi Yield [ID 2275]

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**TIN**el's sign:  
**TIN**gling sensation after  
**T**apping on  
**T**raumatized nerve in carpal  
**T**unnel syndrome  
Knowledge Level 5, System: Nervous  
Anonymous Contributor

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**Henoch schonlein purpura: signs and symptoms**

Hi Yield [ID 1765]

**NAPA:**  
**N**ephritis  
**A**rthritis, arthralgias  
**P**urpura, palpable (especially on buttocks and lower extremities)  
**A**bdominal pain (need to rule out intussusception)  
Knowledge Level 4, System: Other/Miscellaneous  
Vince Yamashiroya

---

**Asthma: treatment**

Hi Yield [ID 514]

**ASTHMA:**  
**A**drenergics  
**S**teroids  
**T**heophylline  
**H**ydration  
**M**ask [O2 at 24%]  
**A**ntibiotics  
Knowledge Level 4, System: Pulmonary  
Anonymous Contributor

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**Ankylosing spondylitis: extra-articular manifestations**

[ID 2917]

6 A's:  
**A**tlanto-axial subluxation  
**A**nterior uveitis  
**A**pical lung fibrosis  
**A**ortic incompetence  
**A**myloidosis (kidneys)  
**A**utoimmune bowel disease (UC)  
Knowledge Level 5, System: Skeletal  
Matt Smith Birmingham Medical School

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**Arthritis: juvenile idiopathic: differential**

[ID 1777]

**ARTHRITIS:**  
**A**nxiety  
**R**ickets and metabolic  
**T**umor  
**H**ematological  
**R**eactive arthritis  
**I**mmunological (SLE)  
**T**rauma  
**I**njury  
**S**epsis  
Knowledge Level 4, System: Skeletal  
Malik Tariq Rahim King Edward Medical College, Pakistan

---

**Arthritis: seronegative spondyloarthropathies**

Hi Yield [ID 2292]

**PEAR:**  
**P**soriatic arthritis  
**E**nteropathic arthritis  
**A**nyklosing sponylitis  
**R**eiter's/ **R**eactive  
Knowledge Level 1, System: Skeletal  
Dave Hassan

---

**Gout: drugs and foods raising uric acid levels**

[ID 3126]



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Drugs are **FACT**:

Frusemide

Aspirin/ Alcohol

Cytotoxic drugs

Thiazide diuretics

Foods are **SALTS**:

Shellfish

Anchovies

Liver and kidney

Turkey

Sardines

Knowledge Level 5, System: Skeletal

Sushant Varma Junior Doctor

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### Joint pain causes

[ID 236]

#### **SOFTER TISSUE:**

Sepsis

Osteoarthritis

Fractures

Tendon/muscle

Epiphyseal

Referred

Tumor

Ischaemia

Seropositive arthritides

Seronegative arthritides

Urate

Extra-articular rheumatism (such as polymyalgia)

Knowledge Level 4, System: Skeletal

Anonymous Contributor

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### Osteoporosis risk factors

Hi Yield [ID 1115]

#### **ACCESS:**

Alcohol

Corticosteroid

Calcium low

Estrogen low

Smoking

Sedentary lifestyle

Knowledge Level 1, System: Skeletal

Lum

## **SURGERY**

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### Fistulas: conditions preventing closure

Hi Yield [ID 1664]

#### **FRIEND:**

Foreign body

Radiation

Infection/ Inflammation (Crohn)

Epithelialization

Neoplasia

Distal obstruction

Knowledge Level 4, System: Alimentary

Danny Rosin and Adam W. Beck, M.D. Unspecified and UT-Southwestern Hospital Systems

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### Oesophageal cancer risk factors

Hi Yield [ID 2085]

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**PC BASTARDS:**

Plummer-Vinson syndrome

Coeliac disease

Barrett's

Alcohol

Smoking

Tylosis

Achalasia

Russia (geographical distribution)

Diet

Stricture

Knowledge Level 2, System: Alimentary

Dr. John Holme

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**Pancreatitis: treatment**

[ID 3125]

**MACHINES:**

Monitor vital signs

Analgesia/ Antibiotics

Calcium gluconate (if deemed necessary)

H<sub>2</sub> receptor antagonist

IV access/ IV fluids

Nil by mouth

Empty gastric contents

Surgery if required/ Senior review

Knowledge Level 3, System: Alimentary

Sushant Varma Junior Doctor

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**Abdominal aortic aneurysm: genetic component**

[ID 2293]

AAA (3 A's) is sometimes due to a defect in the gene encoding for type III procollagen.

Knowledge Level 6, System: Cardiovascular

Anonymous Contributor

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**GI bleeding: causes**

Hi Yield [ID 1021]

**ABCDEFGH:**

Angiodysplasia

Bowel cancer

Colitis

Diverticulitis/ Duodenal ulcer

Epitaxis/ Esophageal (cancer, esophagitis, varices)

Fistula (anal, aortoenteric)

Gastric (cancer, ulcer, gastritis)

Hemorrhoids

Infectious diarrhoea/ IBD/ Ischemic bowel

Knowledge Level 9, System: Cardiovascular

Lau Yue Young Geoffrey HKU

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**Haematocele: etiology**

[ID 2793]

3T's and 2 H's:

Tumor

Torsion

Trauma

Hydrocele as a complication

Haemophilia (blood diseases)

Knowledge Level 2, System: Cardiovascular

Zeinab Abd El Shafy Aboud 6th year medical student, University of Alexandria, Egypt

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**Varicose veins: symptoms**

Hi Yield [ID 3080]

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**AEIOU:**

Aching

Eczema

Itching

Oedema

Ulceration/ Ugly (LDS, haemosiderin, varicosities)

Knowledge Level 2, System: Cardiovascular

Jamal Khan Birmingham University Medical Student

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**Melanoma sites**

Hi Yield [ID 1262]

"**Mel SEA**" (Pronounced "Mel C" from the Spice Girls)

**Melanoma** sites, in order of frequency:

Skin

Eyes

Anus

Knowledge Level 3, System: Integumental

Lior Greenberg Technion Faculty of Medicine, Haifa, Israel

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**Ulcers: edge types**

[ID 3083]

**F PURE:**

Flat (eg venous)

Punched-out (eg trophic, arterial)

Undetermined (eg pressure, TB)

Rolled (eg BCC)

Everted (eg SCC)

Knowledge Level 2, System: Integumental

Jamal Khan Birmingham University Medical Student

---

**Post-operative fever causes**

Hi Yield [ID 41]

Six W's:

**Wind:** pulmonary system is primary source of fever first 48 hours, may have pneumonia

**Wound:** infection at surgical site

**Water:** check IV for phlebitis

**Walk:** deep venous thrombosis, due to pelvic pooling or restricted mobility related to pain and fatigue

**Whiz:** urinary tract infection if urinary catheterization

**Wonder drugs:** drug-induced fever

Knowledge Level 4, System: Lymphoid

Anonymous Contributor

---

**Abdomen: inspection**

[ID 3077]

5 S's:

Size

Shape

Scars

Skin lesions

Stoma

Knowledge Level 1, System: Other/Miscellaneous

Jamal Khan Birmingham University Medical Student

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**Appendicectomy: complications**

Hi Yield [ID 1880]

**WRAP IF HOT:**

Wound infection

Respiratory (atelectasis, pneumonia)

Abscess (pelvic)

Portal pyemia

Ileus (paralytic)

Fecal fistula

Hernia (r. inguinal)

Obstruction (intestinal due to adhesions)

Thrombus (DVT)

Knowledge Level 2, System: Other/Miscellaneous

Sami Almusawa JUST

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**Disease description: organization of answer**

[ID 2502]

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"In A Surgeon's Gown, Physicians May Make Some Clinical Progress":

Incidence

Age

Sex

Geography

Predisposing factors

Macroscopic appearance

Microscopic appearance

Spread

Clinical features

Prognosis

Knowledge Level 3, System: Other/Miscellaneous

Anonymous Contributor

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**Fistulas: conditions preventing closure**

[ID 538]

**FETID:**

Foreign body

Epithelialization

Tumor

Infection

Distal obstruction

Knowledge Level 5, System: Other/Miscellaneous

Anonymous Contributor

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**Inguinal mass: differential**

[ID 2537]

"Hernias Very Much Like To Swell":

Hernias (inguinal, femoral)

Vascular (femoral aneurysm, sapheno varyx)

Muscle (psoas abscess)

Lymph nodes

Testicle (ectopic, undescended)

Spermatic cord (lipoma, hydrocoele)

Knowledge Level 4, System: Other/Miscellaneous

Josh Brostoff University of Birmingham Med School, UK

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**Oedema causes: generalised**

[ID 868]

"HILARI IS SAVE" (Hilary):

Heart failure

Iatrogenic

Liver causes

Aldosterone increased/ ADH increased

Renal cause

Inadequate protein in blood (hypoalbuminaemia)

Causes for the inadequate protein in blood are:

Intake Inadequate (Kwashiorkor)

Secretion fro pancreas decreased (pancreatitis)

Synthesis decreased (liver failure)

Absorption decreased (Crohn's disease)

Vomit (pyloric stenosis)

Excretion increased (nephrotic)

Knowledge Level 6, System: Other/Miscellaneous

Lau Yue Young Geoffrey Medical Student '03, Hong Kong University

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**Oedema causes: localised**

[ID 869]

**ALIVE:**

Allergic (angio-oedema)

Lymphatic (elephantiasis)

Inflammatory (infection, injury)

**VENOUS** (DVT, chronic venous insufficiency)

Knowledge Level 6, System: Other/Miscellaneous

Lau Yue Young Geoffrey Medical Student '03, Hong Kong University

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**Post-operative complications (immediate)**

Hi Yield [ID 350]

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**"Post-op PROBS":**

**Pain**

**Primary haemorrhage**

**Reactionary haemorrhage**

**Oliguria**

**Basal atelectasis**

**Shock/ Sepsis**

Knowledge Level 2, System: Other/Miscellaneous

Jacob George University of Sheffield, UK

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**Swollen leg: unilateral swelling causes**

Hi Yield [ID 3081]

**TV BAIL:**

**Trauma**

**Venous** (varicose veins, DVT, venous insufficiency)

**Baker's cyst**

**Allergy**

**Inflammation** (cellulitis)

**Lymphoedema**

Knowledge Level 3, System: Other/Miscellaneous

Jamal Khan Birmingham University Medical Student

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**Scrotum: scrotum swelling differential**

Hi Yield [ID 2651]

**THE THEATRES:**

**Torsion**

**Hernia**

**Epididymitis, orchitis**

**Trauma**

**Hydrocoele, varicocele, hematoma**

**Edema**

**Appendix testes** (torsion, hemorrhage)

**Tumour**

**Recurrent leukemia**

**Epididymal cyst**

**Syphilis, TB**

Knowledge Level 2, System: Reproductive

Noam Kurtis Sackler School of Medicine, Tel Aviv

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**Compartment syndrome: signs and symptoms**

Hi Yield [ID 1014]

5 P's:

**Pain**

**Palor**

**P**ulseless

**P**aresesthesia

**P**ressure (increased)

Knowledge Level 4, System: Skeletal

Michelle Zetoony Medical Student 2003, Philadelphia College of Osteopathic Medicine

## UROLOGY / NEPHROLOGY

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**Dialysis: indications**

Hi Yield [ID 1702]

**AEIOU:**

**Acid-base problems** (severe acidosis or alkalosis)

**Electrolyte problems** (hyperkalemia)

**Intoxications**

**Overload, fluid**

**Uremic symptoms**

Knowledge Level 6, System: Kidney/Urine

Malvinder S. Parmar, MD, FRCPC, FACP Timmins & District Hospital, Timmins, ON, Canada

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**Enlarged kidneys: causes**

Hi Yield [ID 1838]

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**SHAPE:**

Scleroderma

HIV nephropathy

Amyloidosis

Polycystic kidney disease

Endocrinopathy (diabetes)

Knowledge Level 5, System: Kidney/Urine

Dino Santoro University of Manitoba

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**Glomerular disease with a reduced complement level**

[ID 2126]

**PELICAN:**

Post-streptococcal glomerulonephritis

Endocarditis (sub-acute)

Lupus erythematosus

Idiopathic membranoproliferative glomerulonephritis

Cryoglobulinemia

Abscess (visceral)

Nephritis

Knowledge Level 4, System: Kidney/Urine

Alexandre de Freitas Miranda Federal University of Rio de Janeiro -Brazil -RJ

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**Hematuria: differential**

Hi Yield [ID 198]

**"S#!T":**

Stones/ Systemic disease (SLE)/ Structural lesions (UPJ obstruction)

Hematologic disease (sickle cell, coagulopathy)/ Hypercalciuria/ Hereditary (Alport nephritis)/ HSP/ HUS

Infectious and Immunologic (PSGN)/ IgA nephropathy (Berger nephritis)/ Interstitial disease (interstitial nephritis)/ Idiopathic conditions (thin glomerular basement membrane disease or benign familial hematuria)

Trauma/ Tumor/ TB/ Toxins

Knowledge Level 4, System: Kidney/Urine

Vince Yamashiroya

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**Hydronephrosis: differential**

Hi Yield [ID 1611]

Unilateral is **PACT**:

Pelvic-uteric obstruction (congenital or acquired)

Aberrant renal vessels

Calculi

Tumours of renal pelvis

Bilateral is **SUPER**:

Stenosis of the urethra

Urethral valve

Prostatic enlargement

Extensive bladder tumour

Retro-peritoneal fibrosis

Knowledge Level 3, System: Kidney/Urine

Sushant Varma Medical student, University of Sheffield, UK

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**Metabolic waste products retention: clinical features**

[ID 3204]

**ABCDEFGHI:**

Apathy/ Anorexia/ Anemia

Bleeding

Confusion/ Coma

Dizziness

Emesis/ Edema of the lung

Fits

Gastrointestinal bleeding

Hiccups

Infection

Knowledge Level 4, System: Kidney/Urine

Seyi Kayode College of Health Sciences, Obafemi Awolowo University, Ile-ife, Osun State, Nigeria

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**Nephrotic syndrome: causes for secondary nephrotic syndrome**

[ID 233]

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**DAVID:**

Diabetes mellitus

Amyloidosis

Vasculitis

Infections

Drugs

Knowledge Level 3, System: Kidney/Urine

Anonymous Contributor

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**Polycystic kidney: genetic marker**

Hi Yield [ID 1892]

"**P**" is the **16th** letter of the alphabet.

Autosomal dominant **Polycystic** kidney disease is associated with abberation on the **16th** chromosome.

Knowledge Level 6, System: Kidney/Urine

Thomas B. Edmunds, Jr, MD Chief Resident at SUNY Stony Brook

---

**Prostatism: initial symptoms**

Hi Yield [ID 1850]

"Prostatism is initially **FUN**":

Frequency

Urgency

Nocturia

Knowledge Level 1, System: Kidney/Urine

Peter L University of Queensland Medical School

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**Pyelonephritis (acute): predisposing factors**

[ID 489]

**SCARRIN' UP:**

Sex (females <40, males >40)

Catheterization

Age (infant, elderly)

Renal lesions

Reflux (vesciouteral)

Immunodeficient

**NIDDM, IDDM**

Urinary obstruction

Pregnant

Acute pyelonephritis heals by scarrin' up the area (pyelonephritic scar).

Knowledge Level 4, System: Kidney/Urine

Yazeed A.Oqaili King Saud University Medical College

---

**Renal Cell Cancer (RCC): genetic marker**

Hi Yield [ID 1891]

"RCC" equals **three**. Or, "C" is the **third** letter of the alphabet.

RCC is associated with genetic abberations on the **third** chromosome (VHL gene)

Knowledge Level 5, System: Kidney/Urine

Thomas B. Edmunds, Jr, MD Chief Resident at SUNY Stony Brook

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**Renal failure: symptoms/signs**

Hi Yield [ID 1084]

"**My Big Nob Vibrates Gently In Her Purulent Pelvis**":

Malaise

Breathlessness

Nausea

Vomiting

**GI** motility

Headache

Pruritis

Pigmentation

Knowledge Level 3, System: Kidney/Urine

Daniel Clarke University of Queensland

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**Renal tubular acidosis: type with common nephrocalcinosis**

[ID 3101]

The st**ONE** (nephrocalcinosis) is common in type **ONE**.

Knowledge Level 4, System: Kidney/Urine

Dr. Sharad Chandra Pediatrics

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**Urinary incontinence: causes of acute and reversible**

Hi Yield [ID 134]

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**DRIP:**

**Delirium**

**Restricted mobility/ Retention**

**Inflammation / Infection/ Impaction [fecal]**

**Pharmaceuticals / Polyuria**

"Drip" is convenient since it is urinary incontinence, so urine only drips out.

Knowledge Level 3, System: Kidney/Urine

Anonymous Contributor

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**Urinary incontinence: differential**

[ID 3000]

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**DIAPERS:**

**Delirium**

**Infection**

**Atrophic urethritis and vaginitis**

**Pharmaceuticals/ Psychologic**

**Excessive urine output**

**Restricted mobility**

**Stool impaction**

Knowledge Level 4, System: Kidney/Urine

Cheah Soon Keat 4th year medical student, UNIMAS, Malaysia

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**Epididmyitis: bacterial causes**

[ID 1511]

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**CENT:**

**Chlamydia trachomatis**

**E. coli**

**Nisseria gonorrhoeae**

**Tuberculos bacteria**

Knowledge Level 2, System: Reproductive

Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan, Gujrnwala

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**Testicular atrophy: differential**

[ID 1620]

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**TESTES SHRINK:**

**Trauma**

**Exhaustional atrophy**

**Sequelae**

**Too little food**

**Elderly**

**Semen obstruction**

**Sex hormone therapy**

**Hypopituitarism**

**Radiation**

**Inflammatory orchitis**

**Not descended**

**Klinefelter's**

Knowledge Level 4, System: Reproductive

Robert O'Connor University College Dublin