ANATOMY

Bowel components

"Dow Jones Industrial Average Closing"

Diaphragm apertures: spinal levels

Aortic hiatus = 12 letters = T12
Oesophagus = 10 letters = T10
Vena cava = 8 letters = T8

Duodenum: lengths of parts

"Counting 1 to 4 but staggered":
1st part: 2 inches
2nd part: 3 inches
3rd part: 4 inches
4th part: 1 inch

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

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).

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.

Aorta vs. vena cava: right vs. left

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: Alimentary
Anonymous Contributor

Knowledge Level 1, System: Alimentary
Oriade Adeoye  Dept. of Medicine, College of Health Sciences, OAU, Ile-Ife

Knowledge Level 5, System: Alimentary
Anonymous Contributor

Knowledge Level 5, System: Alimentary
Oriade Adeoye  Dept. of Medicine, College of Health Sciences, OAU, Ile-Ife

Knowledge Level 5, System: Alimentary
Anonymous Contributor

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

Knowledge Level 1, System: Cardiovascular
Robert O'Connor  University College Dublin
Aortic arch: major branch order

"Know your ABC'S":
Aortic arch gives rise to:
- Brachiocephalic trunk
- Left Common Carotid
- Left Subclavian

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

"LAB RAT":
- Left Atrium: Bicuspid
- Right Atrium: Tricuspid

Knowledge Level 1, System: Cardiovascular
Amir A. Ghaferi  Johns Hopkins School of Medicine

Axillary artery branches

"Screw The Lawyer Save A Patient":
- Superior thoracic
- Thoracoacromial
- Lateral thoracic
- Subscapular
- Anterior circumflex humeral
- Posterior circumflex humeral

Alternatively: "Some Times Life Seems A Pain".
Knowledge Level 2, System: Cardiovascular
Anonymous contributor and Joe Azzopardi  Not specified and Xarabank

Brachial artery: recurrent and collateral branches

"I Am Pretty Sexy"
- Inferior ulnar collateral artery goes with Anterior ulnar recurrent artery.
- Posterior ulnar recurrent artery goes with Superior ulnar collateral artery.

Alternatively: "I Am Pretty Smart".
Knowledge Level 5, System: Cardiovascular
Paul's Boutique  Western University College of Osteopathic Medicine of the Pacific

Carotid sheath contents

"I See 10 CC's in the IV":
- I See (I.C.) = Internal Carotid artery
- 10 = CN 10 (Vagus nerve)
- CC = Common Carotid artery
- IV = Internal Jugular Vein

Knowledge Level 1, System: Cardiovascular
Anonymous Contributor

Cavernous sinus contents

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.
- Occulomotor nerve (III)
- Trochlear nerve (IV)
- Ophthalmic nerve (V1)
- Maxillary nerve (V2)
- Carotid artery
- Abducent nerve (VI)

T: When written, connects to the T of OTOM.
Knowledge Level 4, System: Cardiovascular
Jonathan Vafai  New York University School of Medicine
**Coelic trunk: branches**

**Left Hand Side (LHS):**
- Left gastric artery
- Hepatic artery
- Splenic artery

Knowledge Level 1, System: Cardiovascular  
Dr. Harsh Sharma

**Descending abdominal aorta branches from diaphragm to iliacs**

"Prostitutes Caused Sagging Swollen Red Testicles in men Living In Sinai":
- Phrenic [inferior]
- Celiac
- Superior mesenteric
- Suprarenal [middle]
- Renal
- Testicular ["in men" only]
- Lumbar
- Inferior mesenteric
- Sacral

Knowledge Level 2, System: Cardiovascular  
Josser Mt. Sinai Medical School

**External carotid artery branches**

"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

**Femoral triangle: arrangement of contents**

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

**Heart valve sequence**

"Try Pulling My Aorta":
- Tricuspid
- Pulmonay
- Mitral
- Aortic

Knowledge Level 1, System: Cardiovascular  
Michael Franco  Melbourne University, Australia

**Inferior vena cava tributaries**

[This section is not fully visible in the image provided.]
"I Like To Rise So High":
Iliacs
Lumbar
Testicular
Renal
Suprarenal
Hepatic vein.
Think of the IVC wanting to rise high up to the heart.
Knowledge Level 3, System: Cardiovascular
Usman Ahmad KMC

Internal iliac artery: anterior branches
What Bill admitted to Hilary: "IMilked Our Insatiable Intern's Udders Under the Desk":
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

Internal jugular vein: tributaries
"Medical Schools Let Confident People In":
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

Liver: side with ligamentum venosum/ caudate lobe vs. side with quadrate lobe/ ligamentum teres
"VC goes with VC":
The Venosum and Caudate is on same side as Vena 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

Lung lobe numbers: right vs. left
Tricuspid heart valve and tri-lobed lung both on the right side.
Bicuspid and bi-lobed lung both on the left side.
Knowledge Level 1, System: Cardiovascular
Robert O'Connor University College Dublin

Maxillary artery branches
“DAM I AM Piss Drunk But Stupid Drunk I Prefer, Must Phone Alcoholics Anonymous”:

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

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

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

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

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

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

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

**Thoracoacromial artery branches**

ABCD:
Acromial
Breast (pectorai)
Clavicular
Deltoid
Knowledge Level 6, System: Cardiovascular
Anonymous contributor UCLA School of Medicine

**Scalp layers**

SCALP:
From superficial to deep:
Skin
Connective tissue
Aponeurosis
Loose areolar tissue
Pericranium
Knowledge Level 1, System: Integumental
Anonymous Contributor
Ureter to ovarian/testicular artery relation

"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

Spleen: dimensions, weight, surface anatomy

"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

"The duck between 2 gooses": Thoracic duct (duck) is between 2 gooses, azygous and esophagus.

Knowledge Level 5, System: Lymphoid
Anonymous Contributor

Abdominal muscles

"Spare TIRE around their abdomen": Transversus abdominis Internal abdominal oblique Rectus abdominis External abdominal oblique Knowledge Level 1, System: Muscle
Anonymous Contributor

Anterior forearm muscles: superficial group

"Pimps F*ck Prostitutes For Fun": Pronator teres Flexor carpi radialis Palmaris longous Flexor carpi ulnaris Flexor digitorum superficialis Knowledge Level 3, System: Muscle Rob

Bicipital groove: attachments of muscles near it

"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

BrachioRadialis: 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

Elbow: muscles that flex it
Three B's Bend the elbow:
Brachialis
Biceps
Brachioradialis
Knowledge Level 2, System: Muscle
Anonymous Contributor

Elbow: which side has common flexor origin
 FM (as in FM Radio):
 Flexor Medial, so Common Flexor Origin is on the medial side.
Knowledge Level 2, System: Muscle
Anonymous Contributor

Erector spinae muscles
"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

Eye rotation by oblique muscles
"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

Interossei muscles: actions of dorsal vs. palmar in hand
"PADand DAb":
The Palmar Ad and the Dorsal Abd.
  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

Intrinsic muscles of hand (palmar surface)
"A OF A OF A":
  Thenar, lateral to medial:
  Abductor pollicis longus
  Opponens pollicis
  Flexor pollicis brevis
  Adductor pollicis.
  Hypothenar, lateral to medial:
  Opponens digitii minimi
  Flexor digitii minimi
  Abductor digitii minimi
Knowledge Level 4, System: Muscle
Anonymous Contributor

Inversion vs. eversion muscles in leg
Knowledge Level 4, System: Muscle
Anonymous Contributor
Second letter rule for inversion/eversion:

version muscles:
- p rineus longus
- p rineus brevis
- p rineus terius

inversion muscles:
- t bialis anterior
- t bialis posterior

Knowledge Level 6, System: Muscle

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**Lumbricals action**

joints. When look at hand in this position, can see this makes an "L" shape, since L lumbral.

Robert O'Connor University College Dublin

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**Muscles: potentially absent ones**

Muscles which may be absent but may be important:

5 P's:
- almaris longus [upper limb]
- Peroneus tertius [lower limb]
- yramidalis [anterior abdominal wall]

Knowledge Level 3, System: Muscle
Shebrain Cairo University

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

"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

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**Plantarflexion vs. dorsiflexion**

Plantar flexion occurs when you squish a Plant with your foot.

Knowledge Level 1, System: Muscle
Anonymous Contributor

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**Popliteal fossa: muscles arrangement**

The two Semi's go together, Semimembranosus and Semitendinosus.
The Membranosus is Medial 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 Tendonosus is on Top.

Knowledge Level 3, System: Muscle
Anonymous Contributor

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

Knowledge Level 7, System: Muscle
Anonymous Contributor
"Look at how your jaw ends up when saying first syllable of 'La Medial'":
La": your jaw is now , so La opens mouth.
Me": your jaw is still , so medial closes the mandible.
Knowledge Level 4, System: Muscle
Robert O'Connor University College Dublin

Rotator cuff muscles

"The SITS muscles":
   Clockwise from top:
Supraspinatus
Infraspinatus
Teres minor
Subscapularis
   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

SALT:
erratus A Long horacic.
Knowledge Level 2, System: Muscle

Serratus anterior: innervation and action

"C5-7 heaven":
Long thoracic nerve roots (567) innervate Serratus anterior.
Knowledge Level 2, System: Muscle
Anonymous Contributor

Soleus vs. gastrocnemius muscle function

Stand on your s. Explosive gas
You stand Soleus is for posture.
Gastrocnemius is for movement.
Knowledge Level 3, System: Muscle

Supination vs. pronation

"SOUP soup."
POUR- pouring out whatever is your bowl.
   Alternatively, Pronation donation Pronation is palm facing downward, as if making a .
Knowledge Level 1, System: Muscle

Bell’s palsy: symptoms

BELL’S Palsy:
   link reflex abnormal
E
Lacrimation [deficient, excess]
oss of taste
S
Palsy of VII nerve muscles
All symptoms are unilateral.
Knowledge Level 4, System: Nervous

Brachial plexus branches
"My Aunt Raped My Uncle":

- From lateral to medial:
  - Musculocutaneous
  - Axillary
  - Radial
  - Median
  - Ulnar

_Knowledge Level 1, System: Nervous_

Anonymous Contributor

---

**Brachial plexus subunits**

"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**

STAR:
- Subscapular [upper and lower]
- Thoracodorsal
- Axillary
- Radial

_Knowledge Level 2, System: Nervous_

Zaineb Vakil  Gulf Medical College Ajman

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**Buttock quadrant safest for needle insertion**

"Shut up and butt out":

- The Upper Outer quadrant of the Buttlock safely avoids hitting sciatic nerve.

_Knowledge Level 2, System: Nervous_

Anonymous Contributor

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**Carpal tunnel syndrome causes**

MEDIAN TRAP:
- Myxoeedema
- Edema premenstrually
- Diabetes
- Idiopathic
- Agromegaly
- Neoplasm
- Trauma
- Rheumatoid arthritis
- Amyloidosis
- Pregnancy
  - Mnemonic fits nicely since median nerve is trapped.

_Knowledge Level 4, System: Nervous_

Anonymous Contributor

---

**Cervical plexus: arrangement of the important nerves**
GLAST*:

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

G
Lesser occipital
cessory nerve pops out between L and S
S
Transverse cervical
See diagram.
Knowledge Level 3, System: Nervous

Deep tendon reflexes: root supply

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

Diaphragm innervation

"3, 4, 5 keeps the diaphragm alive":
Diaphragm innervation is cervical roots 3, 4, and 5.
Knowledge Level 1, System: Nervous
Michael Nawfal

Extraocular muscles cranial nerve innervation

"L6S04 rest 3":
Lateral Rectus is 6th
Superior Oblique is 4th
rest are all 3rd cranial nerve
Knowledge Level 2, System: Nervous
Atul Singh  Detroit Medical Center

Facial nerve: branches after Stylomastoid foramen

"Ten Zulus Buggered My Cat (Painfully)":
From superior to inferior:
Temporal branch
Zygomatic branch
Buccal branch
Mandibular branch
Cervical branch
(Peripheral auricular nerve)

Alternatively: "PAssing Through Zanzibar By Motor Car" (PA for Peripheral Auricular).
Knowledge Level 1, System: Nervous
Stephan Sanders and Kris Downing  Nottingham Medical School, UK and UCR/UCLA Biomedical Sciences Program, USA

Lingual nerve course

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

Lumbar plexus
"I I et L On ridays":
  I
  Ilioinguinal [L1]
  eirotfemoral [L1, L2]
  L
  Obtrator [L2, L3, L4]
  enoral [L2, L3, L4]
  Alternatively: "I twice Get Laid On Fridays".
  Alternatively: "Interested In Getting Laid On Fridays?"
Knowledge Level 3, System: Nervous
Alfred Munoz  MCP-Hahnemann School Of Medicine

Lumbar plexus roots

"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

Median nerve: hand muscles innervated

"The LOAF muscles":
  Lumbricals 1 and 2
  Opponens pollicis
  Abductor pollicis brevis
  Flexor 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

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

Pectoral nerves: path of lateral vs. medial

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

Pelvis: sacral innervation

"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
Parasympathetic uts it up. Sympathetic Spurts it out”.

Erection and Ejaculation (Emission).

Radial nerve: muscles innervated

“Try A Big Chocolate Chip Sundae, Double Dip Cherries And Peanuts Preferably Included”:

In order of their innervation, proximal to distal:

- Triceps
- Anconeus
- Brachioradialis
- ext. Carpi radialis longus
- ext. Carpi radialis brevis
- Supinator
- ext. Digitorum
- ext. Digitii minimi
- ext. Carpi ulnaris
- Abductor poll. longus
- ext. P poll. brevis
- ext. P poll. longus
- ext. Indicis

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)

Radial nerve: muscles supplied (simplified)

“BEST muscles”:

- Brachioradialis
- Extensors
- Supinator
- Triceps

Scalp: nerve supply

GLASS:
- Greater occipital/ Greater auricular
- Lesser occipital
- Auriculotemporal
- Supratrochlear
- Supraorbital

Spinal cord: length in vertebral column

SCULL:
- Spinal Cord Until L2 (LL).

Thigh: innervation by compartment
"MAP OF Sciatic
Medial compartment: bturator
A    Femoral
    posterior compartment: Sciatic
    So all the thigh muscles in that compartment get innervated by that nerve.
Knowledge Level 1, System: Nervous

Trigeminal nerve: where branches exit skull
"Standing R  Only":

foramen Rotundum is V2
foramen
Knowledge Level 1, System: Nervous
Anonymous Contributor

"M.D. My TV
Mastication [masseter, temporalis, pterygoids]
   igastric [anterior belly]
My
tensor T
tensor V
Knowledge Level 2, System: Nervous
Christian Erickson  Duke University

V3: sensory branches

Buccaneers
Bucca
Auriculotemporal
    alveolar
Lingu
Knowledge Level 5, System: Nervous
Jennifer Chuang  University of Vermont School of Medicine

Vagus nerve: path into thorax

Left my  in Vegas
Left Vagus nerve goes    erior descending into the thorax.
Knowledge Level 4, System: Nervous

Anatomical planes: coronal, horizontal, sagittal

Coronal: A classic painting/stained glass window of a saint/angel has a    radiating around the person's head. The plane of the glass/page is cutting their head in the coronal plane.
    : Someone coming over the horizon
Sagittal: the remaining one by default.
Knowledge Level 1, System: Other/Miscellaneous

Cubital fossa contents
"Really Need Booze To Be At My Nicest": From lateral to medial:
Radial N
Biceps
Brachial
Median
Knowledge Level 2, System: Other/Miscellaneous
Anonymous Contributor

Hand: nerve lesions

D Radial nerve
d = U
Median nerve = pc hand (or A)
Knowledge Level 1, System: Other/Miscellaneous
Anonymous Contributor

Inguinal canal: walls

"MALT: 2M, 2A, 2L, 2T": Starting from superior, moving around in order to posterior:
Superior wall (roof): 2 Muscles:
   internal oblique Muscle
   transverse abdominus Muscle
Anterior wall: 2 Aponeuroses:
   Aponeurosis of external oblique
   Aponeurosis of internal oblique
Lower wall (floor): 2 Ligaments:
   inguinal Ligament
   lacunar Ligament
Posterior wall: 2Ts:
   Transversalis fascia
   conjoint Tendon
Knowledge Level 1, System: Other/Miscellaneous
Miruna Segarceanu UMF Carol Davila, Bucharest, Romania

Mediastinums: posterior mediastinum structures

There are 4 birds:
The esophaGOOSE (esophagus)
The vaGOOSE nerve
The azyGOOSE vein
The thoracic DUCK (duct)
Knowledge Level 2, System: Other/Miscellaneous
Aron Flagg Finch University of Health Sciences / The Chicago Medical School

Perineal vs. peroneal

Perineal is in between the legs.
Peroneal is on the leg.
Knowledge Level 1, System: Other/Miscellaneous
Anonymous Contributor

Retroperitoneal structures list

SAD PUCKER:
Suprarenal glands
Aorta & IVC
Duodenum (half)
Pancreas
Ureters
Colon (ascending & descending)
Kidneys
Esophagus (anterior & left covered)
Rectum

Ron Norman  AECC

"  & TENT
Brachiocephalic veins
rch of aorta
T
Superior vena cava
rachea
Esophagus
Nerves (vagus & phrenic)
Thoracic duct
Knowledge Level 2, System: Other/Miscellaneous
Sumeet Verma  East Carolina University SOM

Superior mediastinum: contents

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

"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

"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

Bronchopulmonary segments of right lung

"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
**Lung lobes: one having lingula, lobe numbers**

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

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**Nasal cavity components**

"Never Call Me Needle Nose!"

Nares [external]

Conchae

Meatuses

Nares [internal]

Nasopharynx

Note mnemonic sentence is nasally-related.

Knowledge Level 5, System: Pulmonary

Anonymous Contributor

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**Pleura surface markings**

"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

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**Tonsils: The three types**

PPL (people) have tonsils:

haryngeal

P

Lingual

Anonymous Contributor

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**-section**

"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

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

"Ante Anteverted both bend toward rior".

Verted is for the cervix (therefore flexed must be uterus).

Knowledge Level 4, System: Reproductive

---

**Broad ligament: contents**

Knowledge Level 4, System: Reproductive
BROAD:
- Bundle (ovarian neurovascular bundle)
- Ovarian ligament
- Artifacts (vestigial structures)

R

D
Knowledge Level 1, System: Reproductive
David Colbert  UWA Medicine

Scrotum layers

"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

Sperm pathway through male reproductive tract

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: path through male reproductive system

"My boyfriend's name is STEVE":
- Seminiferous Tubules
- Epididymis
- Vas deferens
- Ejaculatory duct

Knowledge Level 1, System: Reproductive
Amy Harrington  MCP Hahnemann

Spermatic cord contents

"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

Arm fractures: nerves affected by humerus fracture location  Hi Yield  [ID 2797]
ARM fracture:
- From superior to inferior:
  A
  Radial: mid shaft
  Median: supracondular

Knowledge Level 1, System: Skeletal

Carpal bones

“Stop Letting Those People Touch The Cadaver’s Hand”:
- Proximal row, lateral-to-medial:
  Scaphoid
  Lunate
  Triquetrum
  Pisiform
- Distal row, lateral-to-medial:
  Trapezium
  Trapezoid
  Capitate
  Hamate

Knowledge Level 1, System: Skeletal
Edward Tanner  University of Alabama SOM

Carpal bones: trapezium vs. trapezoid location

Since there’s two T’s in carpal bone mnemonic sentences, need to know which T is where:
TrapeziUM is by the thUMB, TrapeziOID is inSIDE.
Alternatively, TrapeziUM is by the thUMB, TrapezOID is by its SIDE.

Knowledge Level 1, System: Skeletal
Tom Ball  Imperial College, UK

Carpal bones

“So Long To Pinky, Here Comes The Thumb”:
- Proximal row, lateral-to-medial, then distal row, medial-to-medial:
  Scaphoid
  Lunate
  Triquetrum
  Pisiform
  Hamate
  Capitate
  Trapezoid
  Trapezium

Knowledge Level 1, System: Skeletal
Anonymous Contributor

Cartilage derivatives of 1st pharyngeal arch (mandibular)

“TM A Super Sexy Guy” (or Girl):
  Incus
  Malleus
  Anterior ligament of malleus
  Spine of sphenoid
  Sphenomandibular ligament
  Genial tubercle of mandible

Knowledge Level 7, System: Skeletal
Ron Norman  AECC

Cranial bones
"PEST OF 6":
Parietal
Ethmoid
Sphenoid
Temporal
Occipital
Frontal
The 6 just reminds that there's 6 of them to remember.
Knowledge Level 1, System: Skeletal
Anonymous Contributor

**Foramen ovale contents**

**OVALE:**
Otic ganglion (just inferior)
V3 cranial nerve
Accessory meningeal artery
Lesser petrosal nerve
Emissary veins
Knowledge Level 6, System: Skeletal
Syukree UKM

**Genu valgum vs. genu vargum**

Genu valGUM (knock-knee): knees are GUMmed 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**

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

**Joints in the midline**

"SC":
In medial line, below Second Cervical, joints are Secondary Cartilaginous and usually have a diSC.
Notes: secondary cartilaginous is also known as symphysis. The one that doesn't have a disc is xiphi-ternal.
Knowledge Level 1, System: Skeletal
Anonymous Contributor

**Lordosis vs. kyphosis**

Lordosis: Lumbar.
KYphosis is HY up on the spine.
Knowledge Level 3, System: Skeletal
Anonymous Contributor

**Medial malleolus: order of tendons, artery, nerve behind it**
"T Dick, nd N Harry": From anterior to posterior:
- Tibialis Posterior
- Flexor Digitorum Longus
- Posterior Tibial Artery
- Posterior Tibial Nerve
- Flexor Hallicus Longus

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

Alternatively: "Tom, ick A Not arry".

Knowledge Level 3, System: Skeletal

**Navicular contacts 3 of 5 cuneiform bones**

"Navicular is like the gator logo":
- There are 3 things coming off each.
- See diagram.
- Therefore, cuboid has to contact 2 of the 5.

Robert O'Connor  University College Dublin

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**Ossification ages**

Every otential A Should now W
- When they ossify, in order of increasing year:
  - Elbow: 16 years
  - Pelvis, knee: 17 years
  - Shoulder, K 18 years

W years

Knowledge Level 4, System: Skeletal

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

Vein
- artery

N

Knowledge Level 2, System: Skeletal

Anonymous Contributor

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**Superior orbital fissure: structures passing through**

Lazy rench T Lie aked I Anticipation f S
- Lacrimal nerve
- Rontal nerve
- Lateral nerve
- Asociiliary nerve
- Abduccens nerve
- Phalamic veins

S

Knowledge Level 4, System: Skeletal

Anonymous Contributor

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**Tibia: muscles of pes anserinus (the muscles attached to tibia's medial side)**
"A Girl between Two Sergeants":  
Gracilus is between  
Sartorius and  
Semitendinosus  
Knowledge Level 4, System: Skeletal  
Beenish Dow Medical College

**Vertebral body shape**:  
Thoracic is heart-shaped body since your heart is in your thorax.  
Lumbar is kidney-bean shaped since kidneys are in lumbar area.  
Knowledge Level 3, System: Skeletal  
Robert O'Connor University College Dublin

**Wrist: radial side vs. ulnar side**  
Make a fist with your thumb up in the air and say "Rad!
Your thumb is now pointing to your Rad  
Note: 'Rad!' was a late 80's catchphrase, short for 'Radical'. Things that were good were called 'Rad'.  
Patrick Esperanzate University College Dublin

**ANESTHESIOLOGY**

**Xylocaine: where not to use with epinephrine**  
Vasoconstrictive effects of xylocaine with epinephrine are helpful in providing hemostasis while suturing. However, may cause local ischemic  
Knowledge Level 5, System: Integumental  
Robert Lueken Eastern Virginia Medical School

**Spinal anesthesia agents**  
"Little Boys Prefer Toys":  
Lidocaine  
Bupivacaine  
Procaine  
Tetracaine  
Knowledge Level 3, System: Nervous  
Anonymous Contributor

**Anesthesia machine/room check**  
MS MAID:  
Monitors (EKG, SpO2, EtCO2, etc)  
Suction  
Machine check (according to ASA guidelines)  
Airway equipment (ETT, laryngoscope, oral/nasal airway)  
IV equipment  
Drugs (emergency, inductions, NMBs, etc)  
Knowledge Level 1, System: Other/Miscellaneous  
Anonymous Contributor

**General anaesthesia: equipment check prior to inducing**
MALES:

Asks

A
- Laryngoscopes
- Endotracheal tubes

S
- Stylette, bougie

Steve Gust  HMO, Gove District Hospital, NT Australia

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

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

Knowledge Level 5, System: Pulmonary

Marc Colbeck

**BEHAVIOURAL SCIENCE / PSYCHOLOGY**

**Cluster personality disorders**

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

**Depression: major episode characteristics**

**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

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

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

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

**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**
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

Sleep stages: features
DElta waves during DEepest sleep (stages 3 & 4, slow-wave).
dREaM during REM sleep.
Knowledge Level 3, System: Nervous
Anonymous Contributor

Keober-Ross dying process: stages
"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

Impotence causes
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

Male erectile dysfunction (MED): biological causes
MED:
Medicines(propranalol, methyldopa, SSRI, etc.)
Ethanol
Diabetes mellitus
Knowledge Level 4, System: Reproductive
Dr. Atif Farooq Khawaja  Rawalpindi Medical College, Pakistan, Gujranwala

Premature ejaculation: treatment
2 S's:
SSRIs [eg: fluoxitine]
Squeezing technique [glans pressure before climax]
    More detail with 2 more S's:
Sensate-focus excercises [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
B vitamin names
Hi Yield  [ID 399]
"TRhythm early P Contagious": 
In increasing order: 
T
Riboflavin (B2)
iacin (B3)
P
Cobalamin (B12)
Knowledge Level 2, System: Alimentary 
Anonymous Contributor

Essential amino acids

"PVT. TIM HALL always argues, never tires": 
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

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

"Muscles LIVe fast": 
Leucine
Isoleucine
Valine
Knowledge Level 2, System: Alimentary 
Daniel Marcano  Medical school graduate

Folate deficiency: causes

A FOLIC DROP: 
Alcoholism
Folic acid antagonists
Oral contraceptives
Low dietary intake
Infection with Giardia
Celiac sprue
Dilatin
Relative folate deficiency
Old
Pregnant
Knowledge Level 5, System: Alimentary 
Robert O'Connor  University College Dublin

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

ABCD: 
Anderson's=Branching enzyme.
Cori's=Debranching enzyme.
Otherwise, can't really distinguish clinically.
Knowledge Level 3, System: Alimentary 
Anonymous Contributor

Glycogen storage: names of types I through VI
"V Pill ause A Major ardon":
V
Pompe's
ori's
A
McArdle's
er's
Knowledge Level 1, System: Alimentary
Chris Reed  Medical College of Wisconsin

Glycolysis steps

"Goodness Gracious, Father Franklin Did Go By Picking Pumpkins (to) Prepare Pies":
Glucose
Glucose-6-P
Fructose-6-P
Fructose-1,6-diP
Dihydroxyacetone-P
Glyceraldehyde-P
1,3-Biphosphoglycerate
3-Phosphoglycerate
2-Phosphoglycerate (to)
Phosphoenolpyruvate [PEP]
Pyruvate
'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

Hypervitaminosis A: signs and symptoms

"Increased Vitamin A makes you HARD":
Headache/ Hepatomegaly
Anorexia/ Alopecia
Really painful bones
Dry skin/ Drowsiness
Knowledge Level 1, System: Alimentary
Usman Ahmad  KMC

Infantile Beriberi symptoms

Restlessness
Sleeplessness
Breathlessness
Soundlessness (aphonia)
Eatlessness (anorexia)
Great heartedness (dilated heart)
Alternatively: Get 5 of 'em with BERI: Breathless/ Big hearted, Eatless, Restless, Insomnia.
Knowledge Level 3, System: Alimentary
Usman Ahmad  KMC

Phosphorylation cascade: action during low glucose

"In the Phasted State, Phosphorylate":
The phosphorylation cascade becomes active when blood glucose is low.
Knowledge Level 5, System: Alimentary
Anonymous Contributor

Type 1 glycogen storage disease

Type 1 = one (Von), ie Von Giereke's disease
Knowledge Level 3, System: Alimentary
'Dr. Waqas H. Sheikh  BVI Co.'

Van den Bergh reaction (Jaundice test)
"Inconjugated bilirubin":  
Indirect & unconjugated.

Vitamin B3 (niacin, nicotinic acid) deficiency: pellagra

The 3 D's of pellagra:
Dermatitis
Diarrhea
Dementia

Note vitamin B3 is the 3 D's.
Knowledge Level 3, System: Alimentary
Andrew J. Vasil  UMD School of Medicine, Duluth, MN

Vitamins: which are fat soluble

KADE:
Vitamin K
Vitamin A
Vitamin D
Vitamin E

Knowledge Level 2, System: Alimentary
Anonymous Contributor

Coagulation common pathway: factors in order

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

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

Hemoglobin binding curve: causes of shift to right

"CADET, face right!":
CO2
Acid
2,3-DPG (aka 2,3 BPG)
Exercise
Temperature
Knowledge Level 1, System: Cardiovascular
Anonymous Contributor

Porphyrias: acute intermittent porphyria symptoms

Knowledge Level 2, System: Alimentary
5 P's:
P  Polyneuropathy
  Psychological abnormalities
P  Precipitated by drugs (eg barbiturates, oral contraceptives, sulpha drugs)

Anuradha

SICKle cell disease is due to a S SICKth amino acid of the B chain.

Knowledge Level 4, System: Cardiovascular

Vitamin K dependent cofactors

Several d To Nicely top C
Factor Seve Ten, Ni
Protein S, Protein C
Knowledge Level 1, System: Cardiovascular
Medical Student Class 2004, University of Western Ontario

Adrenaline mechanism

ABC of Adrenaline*:
  Adrenaline--> activates B Cyclic AMP

Usman Ahmad

IN IN stimulates things to go
IN 2 cells: Potassium and Glucose.

Anonymous Contributor

ABCD
Azotremia (pre-renal)
Ceding (GI)
C
Diet (high protein parenteral nutrition)

Anthony Chan

AAA
Antibiotic (eg: sulfamethoxazole)
Aintimalar (eg: primaquine)
A
Knowledge Level 3, System: Lymphoid
Andrew J. Vasil, UMD School of Medicine, Duluth, MN

Carbon monoxide: electron transport chain target

Carbon monoxide (CO) blocks Cytochrome Oxidase (CO)
Knowledge Level 3, System: Other/Miscellaneous

Citric acid cycle compounds
"Can I Keep Selling Sex For Money, Officer?":
Citrate
Isocitrate
alpha Ketoglutarate
Succinyl CoA
Succinate
Fumarate
Malate
Oxaloacetate
Knowledge Level 1, System: Other/Miscellaneous
Ramon Ter-Oganesyan and Rebecca University of California Irvine

DNA bond strength (nucleotides)
Knowledge Level 1, System: Other/Miscellaneous
Ramon Ter-Oganesyan and Rebecca University of California Irvine

"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 competitive inhibition: Km increases; no change in Vmax.
With non-competitive inhibition: No change in Km; 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]
Competition is hard because we have to travel with the same velocity
With competitive velocity remains same but
Knowledge Level 1, System: Other/Miscellaneous
Dr. Waqas H. Sheikh BVI Co.

G protein type for respective receptors
Knowledge Level 1, System: Other/Miscellaneous
Dr. Waqas H. Sheikh BVI Co.

"KISS and KICK till you're SICK of SEX" (QISS and QIQ till you're SIQ of SQS):
This gives the G-protein type (Gq, Gi, or Gs) 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
Metabolism sites

"Use both HUG":

- Ume synthesis
- U gluconeogenesis both cytoplasm and mitochondria.

Rinku Uberoi

HIKIN:

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

钠：K (2 K) and Na Na Na

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

Anonymous Contributor

Phenylketonuria: which enzyme is deficient

Phenylketonuria is caused by a deficiency of:

- H enylalanine

Anonymous Contributor

Pompe's disease: type

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

Anonymous Contributor

Pyruvate: products of complete oxidation

Complete oxidation of pyruvate yields:

- ADH

Anonymous Contributor

Tangier's disease: hallmark
"Tangierene 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

CARDIOLOGY

CREAM
Congenital
eumonic damage
E
Aortic dissection/ aortic root dilatation
M’s
Jamal Khan  Birmingham University Medical Student

SAD
Syncope
D
Knowledge Level 1, System: Cardiovascular
Anonymous Contributor

Apex beat: abnormalities found on palpation, causes of impalpable

H
Impalpable
aterally displaced
T  Tapping
  If it is impalpable, causes are COPD
COPD
besity
P  Pericardial effusion
  extracardia
Knowledge Level 2, System: Cardiovascular

Apex beat: differential for impalpable apex beat

DOPES:
  extracardia
O
Pericarditis/ ericardial tamponade/ P
Emphysema
  inus inversus/ S  Scoliosis/ keletal abnormalities (eg pectus excavatum)
Knowledge Level 2, System: Cardiovascular

Atrial fibrillation: causes
A S#!T:
Alcohol
Stenosis (mitral valve)
Hypertension
Infarction/ Ischaemia
Thyrotoxicosis
Knowledge Level 1, System: Cardiovascular
Anonymous Contributor

Atrial fibrillation: causes

PIRATES:
Pulmonary: PE, COPD
Iatrogenic
Rheumatic heart: mitral regurgitation
Atherosclerotic: MI, CAD
Thyroid: hyperthyroid
Endocarditis
Sick sinus syndrome
Knowledge Level 1, System: Cardiovascular
Anonymous Contributor

Atrial fibrillation: management

ABCD:
Anti-coagulate
Beta-block to control rate
Cardiovert
Digoxin
Knowledge Level 1, System: Cardiovascular
Anonymous Contributor

Beck’s triad (cardiac tamponade)

3 D’s:
Distant heart sounds
Distended jugular veins
Decreased arterial pressure
Knowledge Level 3, System: Cardiovascular
Anonymous Contributor

Betablockers: cardioselective betablockers

"Betablockers Acting Exclusively At Myocardium"
Cardioselective betablockers are:
Betaxolol
Acebutolol
Esmolol
Atenolol
Metoprolol
Knowledge Level 5, System: Cardiovascular
Diljot Singh Bedi  GMCH Chandigarh, India

CHF: causes of exacerbation

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
Hi Yield  [ID 1607]

**DUST**
Depressed ventricular function
Unstable angina
S
Triple vessel disease

Sushant Varma  Medical student, University of Sheffield, UK

**Coronary artery bypass graft: indications**

**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**

**DEPRESSED ST:**
Drooping valve (MVP)
Enlargement of LV with strain
Potassium loss (hypokalemia)
Reciprocal ST- depression (in I/W AMI)
Emboli 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.

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

"WiLLaMMaRRoW":
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

**Exercise ramp ECG: contraindications**

**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**

Knowledge Level 1, System: Cardiovascular
Anonymous Contributor

Knowledge Level 8, System: Cardiovascular
Dr. Sonali V.
"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

JVP: wave form

ASK ME:
Atrial contraction
Systole (ventricular contraction)
Closure (closure) of tricusps, so atrial filling
Maximal atrial filling
Emptying of atrium
See diagram.
Knowledge Level 3, System: Cardiovascular
Hafizur Rahman Manchester Royal Infirmary, Manc Medical School

MI: basic management

BOOMAR:
ed rest
O
Opiate
onitor
A
Reduce clot size

Anonymous Contributor

PULSE:
 Persistent chest pains
U
Lightheadedness
Lhortness of breath
E
Knowledge Level 1, System: Cardiovascular
Sara Nemetz

MI: therapeutic treatment

O
Beta blocker
SA
T
Morphine
ce prn
N
Knowledge Level 1, System: Cardiovascular
Kristy Thomas, PA-C Mesquite Medical Associates, Mesquite, NV

Anonymous Contributor
MONAH
Morphine
xygen
N
Aspirin
eparin
Knowledge Level 1, System: Cardiovascular
Anonymous Contributor

COAG
Cyclomorph
xygen
A
Glycerol trinitrate

Alan Desmond  Cork University Hospital

MS is a female title (Ms)
MR is a male title (Mr) and it is male predominant.
Knowledge Level 4, System: Cardiovascular
Anonymous Contributor

" " (person has ill PQRST heart waves):

I
Location
itch
Q
Radiation
hape
T
Knowledge Level 6, System: Cardiovascular
Ghassan Abu Said  4th year Medical Student

Murmurs: innocent murmur features

Soft
ystolic
S
Sounds (S1 & S2) normal
S
Special tests normal (X-ray, EKG)
Standing (vary with position)
S
Knowledge Level 4, System: Cardiovascular
Ziad Jaradat  Jordan University School of Medicine

Murmurs: questions to ask

Anonymous Contributor
Character (eg harsh, soft, blowing)

Radiation

Intensity

P

Timing

Jamal Khan  Birmingham University Medical Student

**Murmurs: right vs. left loudness**

RILE*:

Right sided heart murmurs are louder on I

Left sided heart murmurs are loudest on Expiration.

Anonymous Contributor

**Murmurs: systolic vs. diastolic**

PAID: aortic tenosis=S

PAID: valmonic & A Insufficiency= iastic.

Knowledge Level 1, System: Cardiovascular

W. Ciulla, RN, PA-

**Myocardial infarctions: treatment**

IV access

Aspirin/ nticoagulant (heparin)

Rest

onverting enzyme inhibitor

T

IV beta blocker

xygen 60%

N

Stool Softeners

Anonymous Contributor

**Pericarditis: causes**

CARDIAC RIND:

ollagen vascular disease

A

Radiation

ugs (such as hydralazine)

I

Acute renal failure

Cardiac infarction

R

Injury

eoplasms

D

Knowledge Level 5, System: Cardiovascular

Anonymous Contributor
"ERIcarditis"
PR depression in recordial leads.

Knowledge Level 3, System: Cardiovascular
Anonymous Contributor

**SICVD:**
- Symmetry of leg musculature
- I
- Color of toenails
- V
- Distribution of hair

Jeffrey Turner  Memorial University, Canada

**Pulseless electrical activity: causes**

**PATCH MED:**
- Pulmonary embolus
- Acidosis
- Tension pneumothorax
- Cardiac tamponade
- Hypokalemia/
  Hyperkalemia/
  Hypoxia/
  Hypothermia/
  Hypovolemia
- Myocardial infarction
- Electrolyte derangements
- Drugs

Knowledge Level 2, System: Cardiovascular

**Rheumatic fever: Revised Jones’ criteria**

**cRITERIA:**
- Major criteria:
  - J
  - Obvious (Cardiac)
    -odule (Rheumatic)
  - E
  - Sydenham chorea
- Minor criteria:
  - I
  - Temperature (fever)
  - SR/CRP elevated
  - R
  - Itself (previous Hx of Rheumatic fever)
  - rthralgia

Knowledge Level 3, System: Cardiovascular

**ST elevation causes in ECG**

**ELEVATION:**
- Electrolytes
- L
- Early repolarization
  - Ventricular hypertrophy
- A
- Treatment (eg pericardiocentesis)
  - Injury (AMI, contusion)
- O
- Non occlusive vasospasm

Knowledge Level 4, System: Cardiovascular
Supraventricular tachycardia: treatment

ABCD:
- Adenosine
- Beta-blocker
- Calcium channel antagonist
- Digoxin
- Excitation (vagal stimulation)

Knowledge Level 5, System: Cardiovascular
Richard Thompson  Queens University, Belfast, NI

Ventricular tachycardia: treatment

LAMB:
- Lidocaine
- Amiodarone
- Mexiltene/ Magnesium
- Beta-blocker

Knowledge Level 5, System: Cardiovascular
Richard Thompson  Queens University, Belfast, NI

CHEMISTRY

Benzene ring: order of substituents

"Benzene likes to ROMP":
- From R group moving around the ring:
  - R group
  - Ortho
  - Meta
  - Para

Knowledge Level 1, System: Other/Miscellaneous
Sabra and Josh Kunken  Undergrad, Univ. of Calif, Berkeley

Cation vs. anion: positive vs. negative

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

"Zame Zide. Epposite."
- 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) isomers: arrangement of functional groups

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

Knowledge Level 1, System: Other/Miscellaneous
Anonymous Contributor
"Good Honey Tastes Sweet":

\[ \Delta G = H - T \Delta S \]

Knowledge Level 1, System: Other/Miscellaneous
Ken Evans  Saskatchewan Health, Acute and Emergency Services

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

**AN OIL RIG CAT:**
At the **ANode**, **Oxidation** involves **Loss** of electrons.
**Reduction** involves **Gaining** electrons at the **CAThode**.

Knowledge Level 1, System: Other/Miscellaneous
Susan  Monash (Peninsula) Undergrad

**DERMATOLOGY**

**Clubbing: causes**

**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

**White patch of skin: differential**

"**Vitiligo PATCH**":
Vitiligo
Pityriasis alba/ Post-inflammatory hypopigmentation
Age related hypopigmentation
Tinea versicolor/ Tuberous sclerosis (ashleaf macule)
Congenital birthmark
Hansen’s (leprosy)
Knowledge Level 5, System: Integumental
Dr. Chetan Wasekar  Set G.S. Medical College, KEM Hospital, Bombay

**Wound healing: factors delaying**

**DID NOT HEAL:**
Drugs
Infection/ Icterus/ Ischemia
Diabetes
Nutrition
Oxygen (hypoxia)
Toxins
Hypothermia/ Hyperthermia
EtOH
Acidosis
Local anesthetics
Knowledge Level 4, System: Integumental
Mohamed Azim  Assistant lecturer of Pediatric Surgery, Alexandria University, Egypt

**EMBRYROLOGY**

**Branchial arch giving rise to aorta**
"Aor- from Four":
Aorta is from fourth arch.
Knowledge Level 4, System: Cardiovascular
Robert O'Connor  University College Dublin

**Tetrology of Fallot**

"Don't DROP the baby":
Defect (VSD)
Right ventricular hypertrophy
Overriding aorta
Pulmonary stenosis
Knowledge Level 1, System: Cardiovascular
K. Ennix  University of Tennessee at Memphis

**Potter syndrome: features**

**POTTER:**
Pulmonary hypoplasia
Oligohydrominios
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**

**GAMES:**
Glial cells (of peripheral ganglia)
Arachnoid (and pia)
Melanocytes
Enteric ganglia
Schwann cells
Knowledge Level 3, System: Nervous
Ron Norman  AECC

**Neuroectoderm derivatives**

Neuroectoderm gives rise to:
Neurons
Neuroglia
Neurolhypophysis
pitNeuro (pineal) gland
Knowledge Level 6, System: Nervous
Payam Mehranpour

**Fetal alcohol syndrome (FAS): features**

**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**
MESODERM:
Mesothelium (peritoneal, pleural, pericardial)/ Muscle (striated, smooth, cardiac)
Embryologic
Spleen/ Soft tissue/ Serous linings/ Sarcoma/ Somite
Osseous tissue/ Outer layer of suprarenal gland (cortex)/ Ovaries
Dura/ Ducts of genitalia
Endothelium
Renal
Microglia/ Mesenchyme/ Male gonad
Knowledge Level 5, System: Other/Miscellaneous
Rinku Uberoi UNIBE

Teratogenesis: when it occurs
Teratogenesis is most likely during organogenesis--between the:
Third and
Eighth weeks of gestation.
Knowledge Level 3, System: Other/Miscellaneous
Rinku Uberoi

Weeks 2, 3, 4 of development: an event for each
Week Two: Bilaminar germ disc.
Week Three: Trilaminar germ disc.
Week Four: Four limbs appear.
Knowledge Level 2, System: Other/Miscellaneous
Robert O'Connor University College Dublin

Placenta-crossing substances
"WANT My Hot Dog":
Wastes
Antibodies
Nutrients
Teratogens
Microorganisms
Hormones/ HIV
Drugs
Knowledge Level 4, System: Reproductive
Anonymous Contributor

EMERGENCY MEDICINE

Ipecac: contraindications
4 C's:
Comatose
Convulsing
Corrosive
Corrosive Carbon
Knowledge Level 6, System: Alimentary
Vince Yamashiroya

Acute LVF management
LMNOP:
Lasex (frusemide)
Morphine (diamorphine)
Nitrites
Oxygen (sit patient up)
Pulmonary ventilation (if doing badly)
Knowledge Level 2, System: Cardiovascular
Graeme Little University College London
**Atrial fibrillation: causes of new onset**

**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

---

**JVP: raised JVP differential**

**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

---

**MI: immediate treatment**

**DOGASH:**
- Diamorphine
- Oxygen
- GTN spray
- Asprin 300mg
- Streptokinase
- Heparin

*Knowledge Level 2, System: Cardiovascular*

Ken Hodson  Medical Student, University of Bristol

---

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

**ITCHPAD:**
- Infarction
- Tension pneumothorax
- Cardiac tamponade
- Hypovolemia/ Hypothermia/ Hypo-, Hyperkalemia/ Hypomagnesmia/ Hypoxemia
- Pulmonary embolism
- Acidosis
- Drug overdose

*Knowledge Level 4, System: Cardiovascular*

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

---

**Shock: signs and symptoms**
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

Subarachnoid hemorrhage (SAH) causes

**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

**HEAD HEART VESSELS:**
CNS causes include HEAD:
Hypoxia/Hypoglycemia
Epilepsy
Anxiety
Dysfunctional brain stem (basivertebral TIA)
Cardiac causes are HEART:
Heart attack
Emboli (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

Ventricular fibrillation: treatment

Shock= Defibrillate
Everybody= Epinephrine
Little= Lidocaine
Big= Bretylium
Momma= MgSO4
Poppa= Pocainamide

Knowledge Level 1, System: Cardiovascular
Anonymous Contributor

Vfib/Vtach drugs used according to ACLS

Anonymous Contributor
"Every Little Boy Must Pray":
Epinephrine
Lidocaine
Bretylium
Magsulfate
Procainamide
Knowledge Level 2, System: Cardiovascular
Midnight Medic  Paramedic in Texas

<table>
<thead>
<tr>
<th>Diabetic ketoacidosis management</th>
<th>Hi Yield [ID 470]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>F</strong>e<strong>K</strong>ING:</td>
<td></td>
</tr>
<tr>
<td>Fluids (crytalloids)</td>
<td></td>
</tr>
<tr>
<td>Urea (check it)</td>
<td></td>
</tr>
<tr>
<td>Creatinine (check it) / Catheterize</td>
<td></td>
</tr>
<tr>
<td><strong>K</strong>+ (potassium)</td>
<td></td>
</tr>
<tr>
<td>Insulin (5u/hour. Note: sliding scale no longer recommended in the UK)</td>
<td></td>
</tr>
<tr>
<td>Nasogastic tube (if patient comatose)</td>
<td></td>
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<tr>
<td>Glucose (once serum levels drop to 12)</td>
<td></td>
</tr>
<tr>
<td>Knowledge Level 4, System: Endocrine</td>
<td></td>
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<tr>
<td>Graeme Little  University College London</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Coma causes checklist</th>
<th>[ID 349]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong>cidosis / <strong>A</strong>lcohol</td>
<td></td>
</tr>
<tr>
<td><strong>E</strong>pilepsy</td>
<td></td>
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<tr>
<td><strong>I</strong>nfection</td>
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<tr>
<td><strong>O</strong>verdosed</td>
<td></td>
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<tr>
<td><strong>U</strong>remia</td>
<td></td>
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<tr>
<td>Trauma to head</td>
<td></td>
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<tr>
<td>Insulin: too little or too much</td>
<td></td>
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<tr>
<td>Pychosis episode</td>
<td></td>
</tr>
<tr>
<td>Stroke occurred</td>
<td></td>
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<tr>
<td>Knowledge Level 2, System: Nervous</td>
<td></td>
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<tr>
<td>Midnight Medic  Paramedic in Texas</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Meningicoccal meningitis: complications</th>
<th>Hi Yield [ID 1735]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>S</strong>epsis / <strong>S</strong>hock / <strong>S</strong>ubdural effusion</td>
<td></td>
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<tr>
<td><strong>A</strong>taxia / <strong>A</strong>bscess (brain)</td>
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<tr>
<td><strong>D</strong>IC / <strong>D</strong>eafness</td>
<td></td>
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<tr>
<td>Retardation</td>
<td></td>
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<tr>
<td>Epilepsy</td>
<td></td>
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<tr>
<td>Paralysis</td>
<td></td>
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<tr>
<td>Knowledge Level 5, System: Nervous</td>
<td></td>
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<tr>
<td>Richard Thompson  Queens University, Belfast, NI</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Miosis: causes of pin-point pupils</th>
<th>Hi Yield [ID 1734]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>C</strong>PR ON <strong>S</strong>LIME:</td>
<td></td>
</tr>
<tr>
<td>Clonidine</td>
<td></td>
</tr>
<tr>
<td>Phenothiazines</td>
<td></td>
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<tr>
<td>Resting (deep sleep)</td>
<td></td>
</tr>
<tr>
<td><strong>O</strong>piates</td>
<td></td>
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<tr>
<td><strong>N</strong>arcotics</td>
<td></td>
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<tr>
<td>Stroke (pontine hemorrhage)</td>
<td></td>
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<tr>
<td>Lomotil (diphenoxylate)</td>
<td></td>
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<tr>
<td>Insecticides</td>
<td></td>
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<tr>
<td>Mushrooms / Muscarinic (inocybe, clitocybe)</td>
<td></td>
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<tr>
<td>Eye drops</td>
<td></td>
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<tr>
<td>Knowledge Level 7, System: Nervous</td>
<td></td>
</tr>
<tr>
<td>Sam LaCapra, M.D., F.A.C.E.P.  Emergency Physician</td>
<td></td>
</tr>
</tbody>
</table>
Neurological focal deficits

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

Unconsciousness: differential

FISH SHAPED:
Fainted
Illness/ Infantile febrile convulsions
Shock
Head injuries
Stroke (CVE)
Heart problems
Asphyxia
Poisons
Epilepsy
Diabetes

Knowledge Level 1, System: Nervous
B Sylvester  Surrey Ambulance Service (UK)

Coma and significantly reduced conscious state causes: causes

COMA:
CO2 and CO excess
Overdose: TCAs, Benzos, EtOH, insulin, paracetamol, etc.
Metabolic: BSL, Na+, K+, Mg2+, 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

Malignant hyperthermia treatment

"Some Hot Dude Better Give Iced Fluids Fast!" (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

RLQ pain: differential
APPENDICITIS:
Appendicitis/ Abscess
PID/ Period
Pancreatitis
Ectopic/ Endometriosis
Neoplasia
Diverticulitis
Intussusception
Crohns Disease/ Cyst (ovarian)
IBD
Torsion (ovary)
Irritable Bowel Syndrome
Stones
Knowledge Level 1, System: Other/Miscellaneous
Anonymous Contributor

Shock: types

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

ARDS: diagnostic criteria

ARDS:
Acute onset
Ratio (PaO2/FiO2) less than 200
Diffuse infiltration
Swan-Ganz Wedge pressure less than 19 mmHg
Knowledge Level 6, System: Pulmonary
Fahed Al-Daour

Asthma: management of acute severe

"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

Fall: potential causes

I'VE FALLEN:
Illness
Vestibular
Environmental
Feet/ Footwear
Alcohol and drugs
Low blood pressure
Low O2 states
Ears/ Eyes
Neuropathy
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

EPIDEMIOLOGY / BIOSTATISTICS

**Alcohol withdrawal effects**

Hi Yield [ID 402]

"SHIT":
- Shakes/ Seizures/ Sweats/ Stomach pains (n/v)
- Hallucinosis (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

**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:

**S**ensitive: **N**o **N**egatives.

**S**pecific: **P**seudo-**P**ositives.

**Hill criteria for causality**

"'Clowns Pursuing Epidemiology' Commonly Behind The Silly Samples":

- Consistency
- Plausibility
- Experimentation
- Biological gradient
- Coherence
- Temporality
- Strength of association
- Specificity

**Incidence vs. prevalence**

**Incidence:** Initiate Infection In Interval.

**Prevalence:** Population's Percentage Positive.

**Informed consent: requirements, exceptions**

"Sign this DOC before we can start":

- Discussion
- Obtain agreement
- Coercion-free

Exceptions to informed consent are **WIPE**:

- Waiver
- Incompetent
- Privilege (therapeutic privilege)
- Emergency

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

**Primary:** Predisposing factors decreased.

**Secondary:** Severity decreased.

**Tertiary:** Therapy, Training.

**Recall bias**

REcall bias is a problem with

REspective studies and is based on ability to

REmember.

**GASTROENTEROLOGY**

**Billirubin: common causes for increased levels**
"HOT Liver":
Hemolysis
Obstruction
Tumor
Liver disease
Knowledge Level 4, System: Alimentary
Sung H. Kim

Celiac sprue gluten sensitive enteropathy: gluten-containing grains

BROW:
Barley
Rye
Oats
Wheat

Flattened intestinal villi of celiac are smooth, like an eye brow.
Knowledge Level 4, System: Alimentary
Jack A. Pasquale, MD  St. George's University, School of Medicine

Charcot's triad (gallstones)

"Charge a FEE":
Charcot's triad is:
Fever
Epigastric & RUQ pain
Emesis & nausea
Knowledge Level 2, System: Alimentary
Anonymous Contributor

Cholangitis features

CHOLANGITITIS:
Charcot's triad/ Conjugated bilirubin increase
Hepatic abscesses/ Hepatic (intra/extra) bile ducts/ HLA B8, DR3
Obstruction
Leukocytosis
Alkaline phosphatase increase
Neoplasms
Gallstones
Inflammatory bowel disease (ulcerative colitis)
Transaminase increase
Infection
Sclerosing
Knowledge Level 3, System: Alimentary
Rinku S. Uberoi UNIBE

Cirrhosis: causes of hepatic cirrhosis

HEPATIC:
Hemochromatosis (primary)
Enzyme deficiency (alpha-1-anti-trypsin)
Post hepatic (infection + drug induced)
Alcoholic
Tyrosinosis
Indian childhood (galactosemia)
Cardiac/ Cholestatic (biliary)/ Cancer/ Copper (Wilson’s)
Knowledge Level 2, System: Alimentary
Dr. Chetan Wasekar

Crohn's disease: morphology, symptoms
CHRISTMAS:
Cobblestones
High temperature
Reduced lumen
Intestinal fistulae
Skip lesions
Transmural (all layers, may ulcerate)
Malabsorption
Abdominal pain
Submucosal fibrosis
Knowledge Level 2, System: Alimentary
Samuel Atom Baek-Kim

<table>
<thead>
<tr>
<th>Digestive disorders: pH level</th>
<th>[ID 316]</th>
</tr>
</thead>
<tbody>
<tr>
<td>With <strong>vomiting</strong> both the pH and food come up.</td>
<td></td>
</tr>
<tr>
<td>With <strong>diarrhea</strong> both the pH and food go down.</td>
<td></td>
</tr>
<tr>
<td>Knowledge Level 3, System: Alimentary</td>
<td></td>
</tr>
<tr>
<td>Joel Topf  Indiana University</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GIT symptoms</th>
<th>[ID 1111]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BAD ANAL S#!T:</strong></td>
<td></td>
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<tr>
<td>Bleeding</td>
<td></td>
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<tr>
<td>Abdominal pain</td>
<td></td>
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<tr>
<td>Dysphagia</td>
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<tr>
<td>Abdominal bloating</td>
<td></td>
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<tr>
<td>Nausea &amp; vomiting</td>
<td></td>
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<tr>
<td>Anorexia/ Appetite changes</td>
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<tr>
<td>Lethargy</td>
<td></td>
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<tr>
<td>S#!ts (diarrhea)</td>
<td></td>
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<tr>
<td>Heartburn</td>
<td></td>
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<tr>
<td>Increased bilirubin (jaundice)</td>
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<tr>
<td>Temperature (fever)</td>
<td></td>
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<tr>
<td>Knowledge Level 1, System: Alimentary</td>
<td></td>
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<tr>
<td>The Cashman  University of Queensland, Australia</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>H. Pylori treatment regimen (rough guidelines)</th>
<th>[ID 425]</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Please <strong>Make Tummy Better</strong>&quot;:</td>
<td></td>
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<tr>
<td>Proton pump inhibitor</td>
<td></td>
</tr>
<tr>
<td>Metronidazole</td>
<td></td>
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<tr>
<td>Tetracycline</td>
<td></td>
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<tr>
<td>Bismuth</td>
<td></td>
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<tr>
<td>Alternatively: <strong>TOMB</strong>:</td>
<td></td>
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<tr>
<td>Tetracycline</td>
<td></td>
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<tr>
<td>Omeprazole</td>
<td></td>
</tr>
<tr>
<td>Metronidazole</td>
<td></td>
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<tr>
<td>Bismuth</td>
<td></td>
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<tr>
<td>Knowledge Level 2, System: Alimentary</td>
<td></td>
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<tr>
<td>Steven Holsenback and Leena Alexander  COMP and Texas, USA</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Hepatic encephalopathy: precipitating factors</th>
<th>[ID 1645]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HEPATICS:</strong></td>
<td></td>
</tr>
<tr>
<td>Hemorrhage in GIT/ Hyperkalemia</td>
<td></td>
</tr>
<tr>
<td>Excess protein in diet</td>
<td></td>
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<tr>
<td>Paracentesis</td>
<td></td>
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<tr>
<td>Acidosis/ Anemia</td>
<td></td>
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<tr>
<td>Trauma</td>
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<tr>
<td>Infection</td>
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<tr>
<td>Colon surgery</td>
<td></td>
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<tr>
<td>Sedatives</td>
<td></td>
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<tr>
<td>Knowledge Level 4, System: Alimentary</td>
<td></td>
</tr>
</tbody>
</table>
### IBD: extraintestinal manifestations

**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

**"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

**CLAPS:**
- Clubbing
- Leukonychia
- Asterixis
- Palmar erythema
- Scratch marks

Knowledge Level 1, System: Alimentary
Jason

### Pancreatitis (acute): causes

**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

Knowledge Level 3, System: Alimentary
Chris Perry  Edinburgh Medical School
PANCREAS:
Pao2 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  

riminal
Leukocytes > 16.000
Enzyme AST > 250
Glucose > 200
Age > 55
LDH > 350
Knowledge Level 2, System: Alimentary
Pedro Tulio

Ulcerative colitis: complications
“PAST Colitis”:
Pyoderma gangrenosum
Ankylosing spondylitis
Sclerosing pericholangitis
Toxic megacolon
Colon carcinoma
Knowledge Level 4, System: Alimentary
Ritu Garg

Vomiting: extra GI differential

VOMITING:
Vestibular disturbance/ Vagal (reflex pain)
Opiates
Migrane/ 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

Haemachromatosis complications

“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

Diabetic ketoacidosis: precipitating factors
5 I's:
Infection
Ischaemia (cardiac, mesenteric)
Infarction
Ignorance (poor control)
Intoxication (alcohol)
Knowledge Level 4, System: Endocrine
James Thomas

GENETICS

Achondroplasia dwarfism: inheritance pattern
[Achondroplasia Dwarfism is Autosomal Dominant.]
Knowledge Level 6, System: Endocrine
Robert O'Connor University College Dublin

DiGeorge/ Velocardiofacial syndrome: features
[CATCH 22: Cardiac abnormalities Abnormal facies Thymic aplasia Cleft palate Hypocalcemia 22q11 deletion]
Knowledge Level 7, System: Lymphoid
Anonymous Contributor

Tay Sach's features
[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

Blots: function of Southern vs. Northern vs. Western
["SN0W DR0P": Match up the 1st word letter with 2nd word letter: Southern=DNA Northern=RNA Western=Protein The 0's in snow drop are zeros, since there is no Eastern blot.]
Knowledge Level 1, System: Other/Miscellaneous
Anonymous Contributor

Cell cycle stages

"Go Sally Go! Make Children!":

G1 phase (Growth phase 1)
S phase (DNA Synthesis)
G2 phase (Growth phase 2)
M phase (Mitosis)
C phase (Cytokinesis)

Knowledge Level 1, System: Other/Miscellaneous
Anonymous Contributor

Chromosome 15 diseases

Chromosome 15 has its own MAP:
Marfan syndrome
Angelman syndrome
Prader-Willi syndrome

Knowledge Level 3, System: Other/Miscellaneous
Christopher Jordan UAG

Codons: nonsense mutation

"Stop talking nonsense":
Nonsense mutation causes premature stop.

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

Cri-du-chat syndrome: chromosomal deletion causing it is 5p(-)

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

ZZZZ is sleeping (inactive).
B form is therefore active DNA.

Knowledge Level 2, System: Other/Miscellaneous
Robert O'Connor University College Dublin

Down syndrome pathology

DOWN:
Decreased alpha-fetoprotein and unconjugated estriol (maternal)
One extra chromosome twenty-one
Women of advanced age
Nondisjunction during maternal meiosis

Knowledge Level 4, System: Other/Miscellaneous
Rinku S. Uberoi UNIBE

Exon vs. intron function

Exons Expressed.
InTrons In Trash.

Knowledge Level 1, System: Other/Miscellaneous
Anonymous Contributor

Hurler syndrome features

Knowledge Level 4, System: Other/Miscellaneous
Rinku S. Uberoi UNIBE
HURLER'S:
- Hепtosplenomegaly
- Ugly facies
- Recessive (AR inheritance)
- L-iduronidase deficiency (alpha)
- Eyes clouded
- Retarded
- Short/Stubby fingers

Knowledge Level 3, System: Other/Miscellaneous
Robert O'Connor  University College Dublin

Imprinting diseases: Prader-Willi and Angelman

"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

Marfan syndrome features

MARFAN'S:
- Mitral valve prolapse
- Aortic Aneurysm
- Retinal detachment
- Fibrillin
- Arachnodactyly
- Negative Nitroprusside test (differentiates from homocystinuria)
- Subluxated 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

"Pyrimidines are CUT from purines"
Pyrimidines are:
- Cytosine
- Uracil
- Thiamine

They are cut from purines so the pyrimidines must be smaller (one ring).
Knowledge Level 1, System: Other/Miscellaneous
Anonymous Contributor

Nucleotides: double vs. triple bonded basepairs

"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: which are purines

"Pure Silver";
Chemical formula of Pure silver is Ag.

Therefore, Purines are Adenine and Guanine.
Knowledge Level 1, System: Other/Miscellaneous
Jason Mounts  Medical College of Georgia

Pedigree symbols: gender and affected
Gender: The cIRcle is a gIRle [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

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**HISTOLOGY**

<table>
<thead>
<tr>
<th>Taste buds: vallate vs. fungiform distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross sectional shape of the top of the bud tells their distribution.</td>
</tr>
<tr>
<td>Vallate: has a shallow 'V' at the top, so has a 'V' distribution at the back of the tongue.</td>
</tr>
<tr>
<td>Fungiform: top is round so it is towards the round end of the tongue.</td>
</tr>
<tr>
<td>See diagram.</td>
</tr>
<tr>
<td>Note vallate is also sometimes called circumvallate.</td>
</tr>
<tr>
<td>Knowledge Level 6, System: Alimentary</td>
</tr>
<tr>
<td>Robert O'Connor  University College Dublin</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Vascular endothelium: simplified cross-section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hi Yield [ID 2165]</td>
</tr>
<tr>
<td>LIMA:</td>
</tr>
<tr>
<td>Lumen</td>
</tr>
<tr>
<td>Intima</td>
</tr>
<tr>
<td>Media</td>
</tr>
<tr>
<td>Adventitia</td>
</tr>
<tr>
<td>Knowledge Level 1, System: Cardiovascular</td>
</tr>
<tr>
<td>Anonymous Contributor</td>
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</tbody>
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<table>
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<tr>
<th>Leukocytes: granulated and agranulated</th>
</tr>
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<tbody>
<tr>
<td>&quot;BEN Loves Money&quot;:</td>
</tr>
<tr>
<td>Granulocytes:</td>
</tr>
<tr>
<td>Basophil</td>
</tr>
<tr>
<td>Eosinophil</td>
</tr>
<tr>
<td>Neutrophil</td>
</tr>
<tr>
<td>Agranulocytes:</td>
</tr>
<tr>
<td>Lymphocytes</td>
</tr>
<tr>
<td>Monocytes</td>
</tr>
<tr>
<td>Alternatively: Grampa BEN...&quot; to keep the granulated group straight.</td>
</tr>
<tr>
<td>Knowledge Level 2, System: Lymphoid</td>
</tr>
<tr>
<td>Priya and Abe  UNIBE</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Mast cell primary granule contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Master. His Hepes Causes Choking &amp; Gagging!&quot;</td>
</tr>
<tr>
<td>Mast = Mast cell</td>
</tr>
<tr>
<td>His = Histamine</td>
</tr>
<tr>
<td>He= Heparin</td>
</tr>
<tr>
<td>C = Chymase</td>
</tr>
<tr>
<td>Ch = Chemotactic factor for eosinophils</td>
</tr>
<tr>
<td>Gag = GAGase</td>
</tr>
<tr>
<td>Knowledge Level 5, System: Lymphoid</td>
</tr>
<tr>
<td>Ms Sushi  UCLA Medicine</td>
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<tr>
<th>Neutrophil's 2 distinctive physical features</th>
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<tr>
<td>[ID 119]</td>
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</tbody>
</table>
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.

**Muscle cells: cardiac vs. skeletal’s nuclei location/number**

<table>
<thead>
<tr>
<th>Knowledge Level 2, System: Lymphoid</th>
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<tr>
<td>Robert O’Connor University College Dublin</td>
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</table>

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.

**Muscle sarcomere: A vs. I as light or dark**

<table>
<thead>
<tr>
<th>Knowledge Level 2, System: Muscle</th>
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<tbody>
<tr>
<td>Robert O’Connor University College Dublin</td>
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</tbody>
</table>

There is only one vowel in "dark" and one vowel in "light". These one vowels match up to their one letter names: Dark band is the A band. Light band is the I band.

**Muscle sarcomere: H line vs. Z disc location**

<table>
<thead>
<tr>
<th>Knowledge Level 1, System: Muscle</th>
</tr>
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<tbody>
<tr>
<td>Sujay Patel University College Dublin</td>
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</table>

HAZI (Hazy):
- H line is in A-band.
- Z disc is in the I band.

**IMMUNOLOGY**

**Graves disease: etiology**

<table>
<thead>
<tr>
<th>Knowledge Level 5, System: Endocrine</th>
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<tbody>
<tr>
<td>Anonymous Contributor</td>
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</table>

In Graves disease, the thyroid-stimulating immunoglobulins are of the IgG class.

**Lupus signs and symptoms**

<table>
<thead>
<tr>
<th>Knowledge Level 4, System: Integumental</th>
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<tbody>
<tr>
<td>Ken Evans Saskatchewan Health, Acute and Emergency Services</td>
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</table>

**Celiac sprue features**

<table>
<thead>
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<th>Knowledge Level 3, System: Integumental</th>
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<tbody>
<tr>
<td>Ken Evans Saskatchewan Health, Acute and Emergency Services</td>
</tr>
</tbody>
</table>
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-xylene 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

**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

**Complement: function of C3a versus C3b**

**Hi Yield  [ID 485]**

C3a: Activates Acute [inflammation].
C3b: Bonds Bacteria [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

**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

**Goodpasture's Syndrome components**

**Hi Yield  [ID 467]**

GoodPasture is Glomerulonephritis and Pnuemonitis.
  From autoantibodies attacking Glomerular and Pulmonary basement membranes.
Knowledge Level 3, System: Lymphoid
Robert O'Connor  University College Dublin

**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**

**Hi Yield  [ID 838]**

Poison IVy 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]**
MAGDElaine (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**ediate.

Knowledge Level 1, System: Lymphoid
Magdelaine Deeby and Anonymous Contributor  University College Dublin and University of Aberdeen

**Immunoglobulins, and order B cells present them**

**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**

**IgG** crosses the placenta during **G**estation.

Knowledge Level 2, System: Lymphoid
Anonymous Contributor

**Interferon gamma: action on macrophages**

"Th1nk BIG Mac Attack":

Th1 and NK cells **Build** Interferon Gamma.

Causes **M**acrophages to have an augmented **Attack** [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. MHC II properties**

"Immunity helps to exterminate fun for bacteria"

See attached chart.

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

**Sjogren syndrome: morphology**

"Jog through the MAPLES":

Sjogren is:

Mouth dry
Arthritis
Parotid enlarged
Lymphoma
Eyes dry
Sicca (primary) or **Secondary**

See diagram.

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

Knowledge Level 2, System: Lymphoid
Anonymous Contributor
When bacteria enter body, T-cell says to B: "Help Me Catch Some!" B-cell replies: "My Pleasure!":

**T-cell types:**
- Helper
- Memory
- Cytotoxic
- Suppressor

**B-cell types:**
- Memory cell
- Plasma cell

Knowledge Level 1, System: Lymphoid
Dr. Harsh Sharma  BJMC, Pune, India

---

**INTERNAL MEDICINE / FAMILY PRACTICE**

**ACEI: contraindications**

PARK:
- Pregnancy
- Allergy
- Renal artery stenosis
- K increase (hyperkalemia)

Knowledge Level 4, System: Cardiovascular
Anthony Chan

**Anion gap metabolic acidosis: causes**

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

**Haematology: key numbers**

3 and 4 are key in haematology:
- 1.34 cm$^3$ of oxygen is carried by a gram of hemoglobin.
- There's 3.4 mg of iron in each gram of hemoglobin.
- There's an average of 3.4 lobes per neutrophil.
- There's 34 mg bilirubin from each gram of hemoglobin.

Knowledge Level 5, System: Cardiovascular
Anonymous Contributor

**Macrocytic anemia: causes**

ABCDEF:
- Alcohol + liver disease
- B12 deficiency
- Compensatory reticulocytosis (blood loss and hemolysis)
- Drug (cytotoxic and AZT)/ Dysplasia (marrow problems)
- Endocrine (hypothyroidism)
- Folate deficiency/ Fetus (pregnancy)

Knowledge Level 2, System: Cardiovascular
Anthony Chan
Metabolic acidosis: causes

**KUSSMAL:**
- Ketoacidosis
- Uraemia
- Sepsis
- Salicylates
- Methanol
- Alcohol
- Lactic acidosis

Knowledge Level 6, System: Cardiovascular
Steve Gust  Gove District Hospital, NT Australia

Non-gap acidosis: causes

**HARD UP:**
- Hyperalimentation
- Acetazolamide (carbonic anhydrase inhibitors)
- RTA
- Diarrhea
- Ureterosigmoidostomy
- Pancreatic fistula

Knowledge Level 5, System: Cardiovascular
James Reeves  Emory University School of Medicine

Pancytopenia differential

"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

Raynaud's disease: causes

**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

Ulcers: types

**VAN:**
- Venous/ Vasculitic
- Arterial
- Neuropathic

Knowledge Level 1, System: Cardiovascular
Anonymous Contributor  University of Sydney, Australia

Acromegaly symptoms
**Gynecomastia: common causes**

**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.

**Hypercalcemia causes**

**MD PIMPS ME:**
- Malignancy
- Diuretics (thiazide the main culprit)
- Parathyroid (hyperparathyroidism)
- Immobility/ Idiopathic
- Megadoses of vitamins A,D
- Paget's disease
- Sarcoidosis
- Milk alkali syndrome
- Endocrine (Addison's disease, thyrotoxicosis)

**Hypercalcemia: causes**

**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

**Hypercalcemia: differential**
VITAMIN TRAPS:
Vitamin A and D intoxication
Immobilization
Thyrotoxicosis
Addison's disease/Acidoses
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

Pressure Sore: Norton Score

MAGIC:
Mobility
ADL
General condition
Incontinence
Conscious level
Knowledge Level 4, System: Integumental
Anthony Chan

Pruritus without rash: DDx

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

"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 & 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

"Al-K-loss, Al-Ca-loss":
There is loss of K+ (hypokalemia) and Ca++ (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

HAVE PEE:
- Hyperkalemia (refractory)
- Acidosis (refractory)
- Volume overload
- Elevated BUN (> 36 mM)
- Pericarditis
- Encephalopathy
- Edema (pulmonary)

Knowledge Level 1, System: Kidney/Urine
Tim Welke and Darren Yuen  University of Toronto Medical School

Renal failure (acute): management

Manage AEIOU:
- Anemia/Acidosis
- Electrolyte and fluids
- Infections
- Other measures (eg nutrition, nausea, vomiting
- Uremia

Knowledge Level 2, System: Kidney/Urine
Malik Tariq Rahim  King Edward Medical College, Lahore, Pakistan

SIADH: causes

SIADH:
- Surgery
- Intracranial: infection, head injury, CVA
- Alveolar: Ca, pus
- Drugs: opiates, antiepileptics, cytotoxics, anti-psychotics
- Hormonal: hypothyroid, low corticosteroid level

Knowledge Level 5, System: Kidney/Urine
Steve Gust  Gove District Hospital, NT, Australia

SIADH: diagnostic sign

Syndrome of INAPPropriate Anti-Diuretic Hormone:
- Increased
- 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
SIADH:
S pasms
Isn't any pitting edema (key DDx)
Anorexia
Disorientation (and other psychoses)
Hyponatremia
Knowledge Level 5, System: Kidney/Urine
Dr. Harsh Sharma  BJMC

Eosinophilia: differential

NAACP:
Neoplasm
Allergy/ Asthma
Addison's disease
Collagen vascular diseases
Parasites
Knowledge Level 5, System: Lymphoid
Anonymous Contributor

Polycythemia Rubra Vera (PRV): common symptoms

PRV:
Plethora/ Pruritis
Ringing in ears
Visual blurriness
Knowledge Level 4, System: Lymphoid
Rinku S. Uberoi UNIBE

SLE: factors that make SLE active

UV PRISM:
UV (sunshine)
Pregnancy
Reduced drug (eg steroid)
Infection
Stress
More drug
Knowledge Level 2, System: Lymphoid
Anonymous Contributor

Splenomegaly: causes

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

Horner's syndrome: components

SAMPLE:
Sympathetic chain injury
Anhidrosis
Miosis
Ptosis
Loss of ciliospinal reflex
Enopthalmos
Knowledge Level 5, System: Nervous
Harsh Sharma  BJMC, Pune, India
**Lethargy, malaise causes**

**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

**Back pain causes**

**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 spondyloarthopathies 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**

**PROSE:**
- Pathergy test (i/d saline injection)
- Recurrent genital ulceration
- Oral ulceration (recurrent)
- Skin lesions
  - Oral ulceration is central criteria, plus any 2 others.
- Eye lesions

**Knowledge Level 7, System: Other/Miscellaneous**
Dr. Harsh Sharma  BJMC, Pune, India

**ICU management: A to Z**

**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

**Knowledge Level 3, System: Other/Miscellaneous**
Anonymous Contributor
Left iliac fossa: causes of pain

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

Acute stridor: differential

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

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
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

Hemoptysis: causes

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

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

LMNOP:
- Lasix
- Morphine
- Nitrates (NTG)
- Oxygen
- Position (upright vs. flat)

Knowledge Level 3, System: Pulmonary
Jeff Gilfor, M.D.

Pulmonary edema: treatments

Knowledge Level 3, System: Pulmonary
Jeff Gilfor, M.D.
MAD DOG:
- Morphine
- Aminophylline
- Digitalis
- Diuretics
- Oxygen
- Gases in blood (ABG’s)

Knowledge Level 4, System: Pulmonary
Anonymous Contributor

Pulmonary fibrosis: causes

SCAR:
- Upper lobe:
  - Silicosis/Sarcoidosis
  - Coal worker pneumonconiosis
  - Ankylosing spondylitis
  - Radiation
- Lower lobe:
  - Systemic sclerosis
  - Cyptogenic fibrosing alveolitis
  - Asbestosis
  - Rheumatoid arthritis

Knowledge Level 4, System: Pulmonary
Anthony Chan

Wheezing: causes

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

O, VERSALIUS (Versalius was the name of a famous physician):
- Osteomyelitis
- Vertebral fracture
- Extrapinal tumour
- Spondylolisthesis
- Ankylosing spondylitis
- Lumbar disk increase
- Intraspinal tumor
- Unhappiness
- Stress

Knowledge Level 5, System: Skeletal
Anonymous Contributor

INTERVIEWING / PHYSICAL EXAM

Abdomen assessment

Knowledge Level 5, System: Skeletal
Anonymous Contributor
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

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**Vomiting: non-GIT differential**

**ABCDEFHI**:

Acute renal failure

Brain [increased ICP]

Cardiac [inferior MI]

DKA

Ears [labyrinthitis]

Foreign substances [Tylenol, theo, etc.]

Glaucoma

Hypermecesis gravidarum

Infection [pyelonephritis, meningitis]

Knowledge Level 3, System: Alimentary

Ken Evans  Saskatchewan Health, Acute and Emergency Services

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**Heart valve auscultation sites**

"All Patients Take Meds":

Reading from top left:

Aortic

Pulmonary

Tricuspid

Mitrail

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

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**Glasgow coma scale: components and numbers**

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 withdrawl)

Knowledge Level 1, System: Nervous

Rinku Uberoi and Robert O'Connor

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**Mental state examination: stages in order**

"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
**Pain history checklist**

SOCRATES:
- Site
- Onset
- Character
- Radiation
- Alleviating factors/Associated symptoms
- Timing (duration, frequency)
- Exacerbating factors
- Severity
  - Alternatively, Signs and Symptoms with the ‘S’.

Knowledge Level 1, System: Nervous

Piyush and Shirish Toshniwal and Jonathan Round and Neil McKeon Cambridge and Smt. NHL Medical College, Ahmedabad and RFUCMS

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**Abdominal swelling causes**

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

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**Clinical examination: initial Inspection of patient from end of bed**

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

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**Differential diagnosis checklist**

"A VITAMIN C"
- A and C stand for Acquired and Congenital
- VITAMIN stands for:
  - Vascular
  - Inflammatory (Infectious and non-Infectious)
  - Trauma/Toxins
  - Autoimmune
  - Metabolic
  - Idiopathic
  - Neoplastic

  Example usage: List causes of decreased vision: Central retinal artery occlusion, Retinitis pigmentosa, Perforation to gobe, Chronic Gentamycin use, Rhuematoid arthritis, Diabetes, Idiopathic, Any eye tumor, Myopia.

Knowledge Level 1, System: Other/Miscellaneous

Nizaar Lilla University Of Cape Town Medical School

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**Differential diagnosis checklist**

Knowledge Level 1, System: Other/Miscellaneous

Nizaar Lilla University Of Cape Town Medical School
I VINDICATE AID:
Idiopathic
Vascular
Infectious
Neoplastic
Degenerative
Inflammatory
Congenital
Autoimmune
Traumatic
Endocrinial and metabolic
Allergic
Iatrogenic
Drugs
Knowledge Level 1, System: Other/Miscellaneous
Michael A. Chaplin  SUNY-HSCB Downstate College of Medicine

Family history (FH)

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

Four point physical assessment of a disease

"I'm A People Person":
Inspection
Auscultation
Percussion
Palpation
Knowledge Level 1, System: Other/Miscellaneous
Anonymous Contributor

Medical history: disease checklist

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)

Knowledge Level 1, System: Other/Miscellaneous
Anonymous Contributor
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

Patient examination organization

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)

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

Physical exam for 'lumps and bumps'

"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

"I Palpate People's Abdomens":
Inspection
Palpation
Percussion
Auscultation
Knowledge Level 1, System: Other/Miscellaneous
Jim McHugh  St George's, London

Short statue causes
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
Sign: something I can detect even if patient is unconscious.
Symptom is something only the patient knows about.
Knowledge Level 1, System: Other/Miscellaneous
Anonymous Contributor

Surgical sieve for diagnostic categories
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

Breast history checklist
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
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

**Entameoba histolytica: disease caused, action**

EntAmoeba causes Amoebic dysEntery.
Action: histo (cell) lytic (burst), so it bursts cells.
Knowledge Level 2, System: Alimentary
Robert O’Connor  University College Dublin

**Hepatitis: oral-fecal transmitted types**

"A$S Eaters":
- Types A and E by oral-fecal route.
Knowledge Level 4, System: Alimentary
Anonymous Contributor

**Vibrio: motility**

"Vibrio Vibrates":
Vibrio is a genus of actively motile bacteria.
Knowledge Level 5, System: Alimentary
Anonymous Contributor

**Endocarditis: indications for surgery**

PUS RIVER:
- Prosthetic valve endocarditis (most cases)
- Uncontrolled infection
- Suppurative 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**

"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

**Psedomonas aeruginosa: features**
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

"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

Proteus: disease caused

Firstly, "PROTeus hates PROTons":
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

UTI-causing microorganisms

KEEPS:
Klebsiella
Enterococcus faecalis/ Enterobacter cloacae
E. coli
Pseudomonas aeroginosa/ Proteus mirabilis
Staphylococcus saprophyticus/ Serratia marcescens
Knowledge Level 2, System: Kidney/Urine
Kok Fai Kong  University of Auckland

Endotoxin features

ENDOTOXIN:
Endothelial cells/ Edema
Negative (gram- bacteria)
DIC/ Death
Outer membrane
TNF
O-antigen
X-tremely heat stable
IL-1
Nitric oxide/ Neutrophil chemotaxis
Knowledge Level 3, System: Lymphoid
Rinku Uberoi  UNIBE

IgA protease-producing bacteria

[IDs: 856, 377, 1956, 638, 1337]
"Nice Strip of Ham":
Neisseria
Streptococcus pneumonia
Haemophilus influenza
Knowledge Level 7, System: Lymphoid
Marc Miller  Sackler School of Medicine

Meningitis: risk factors
"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

Chlamydia: elementary vs. initial body location
Elementary: Extracellular
Initial: Intracellular
Knowledge Level 2, System: Other/Miscellaneous
Anonymous Contributor

Common cold: viral causes
"Common cold (acute infectious rhinitis, coryza) is PRIMarily caused by":
Paramyxoviruses
Rhinoviruses
Influenza viruses
Myxoviruses
Adenoviruses
Knowledge Level 3, System: Other/Miscellaneous
Anonymous Contributor

DNA viruses: morphology rule of thumb
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+: bacterial cell wall
Gram+ has:
+thick peptidoglycan layer.
+choic acid in wall.
Knowledge Level 1, System: Other/Miscellaneous
Gilvano Amorim Oliveira  Universidade de santo Amaro- São Paulo Brasil.

Neisseria: fermentation of N. gonorrhoeae vs. N. meningitidis

"Can Induce Severe Attacks Of Head PAINS":
Cancer
Immunocompromised state
Sinusitis
Age extremes
Otitis
Head trauma
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Knowledge Level 1, System: Other/Miscellaneous
Gilvano Amorim Oliveira  Universidade de santo Amaro- São Paulo Brasil.

Neisseria: fermentation of N. gonorrhoeae vs. N. meningitidis
Gonorrhoeae: Glucose fermenter only.
MeninGitidis: Maltose and Glucose fermenter.
Maltose fermentation is a useful property to know, since it's the classic test to distinguish the Neisseria types.

Obligate anaerobes: members worth knowing

ABC:
Actinomyces
Bacteroides
Clostridium

Knowledge Level 1, System: Other/Miscellaneous
Sung Hoon Kim El Paso, TX

Picornavirus: features

PICORNAvirus:
Positive sense
ICOsaedral
RNA virus

Knowledge Level 2, System: Other/Miscellaneous
Dr. Khawaja Atif Farooq Rawalpindi Medical College, Pakistan, Gujranwala

RNA viruses: negative stranded

"Orthodox Rhabbi's Party Around Fine Bunnies":
Orthomyxo
Rhabdo
Paramyxox
Arena
Filox
Bunyax

Knowledge Level 1, System: Other/Miscellaneous
Rodolfo Chirinos Universidad Central del Caribe, PR

RNA viruses: positive stranded

"Pico Called Flavio To Return Renzo's Corona":
Picorna
Calici
Flavi
Togav
Retro
Reov
Coronav

Knowledge Level 1, System: Other/Miscellaneous
Rodolfo Chirinos Universidad Central del Caribe, PR

Staphylococcus aureus: diseases caused

SOFT PAINS:
Skin infections
Osteomyelitis
Food poisoning
Toxic shock syndrome
Pneumonia
Acute endocarditis
Infective arthritis
Necrotizing fasciitis
Sepsis

Knowledge Level 7, System: Other/Miscellaneous
Marc Miller Sackler School of Medicine

Streptococci: classification by hemolytic ability
Streptococcus pyogenes: diseases caused

**NIPPLES:**
Necrotising fasciitis and myositis
Impetigo
Pharyngitis
Pneumonia
Lymphangitis
Erysipelas and cellulitis
Scarlet fever/ Streptococcal TSS

Knowledge Level 2, System: Other/Miscellaneous
Dr. Harsh Sharma

Streptococcus pyogenes: virulence factors

**SMASHED:**
Streptolysins
M protein
Anti-C5a peptidase
Streptokinase
Hyaluronidase
Exotoxin
DNAses

Knowledge Level 4, System: Other/Miscellaneous
Anonymous Contributor

Urease positive organisms

**PUNCH:**
Proteus (leads to alkaline urine)
Ureaplasm (renal calculi)
Nocardia
Cryptococcus (the fungus)
Helicobacter pylori

Knowledge Level 8, System: Other/Miscellaneous
Dr. Enrique Cifuentes  Universidad Autonoma de Guadalajara

Influenza infection: clinical manifestations

"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

Klebsiella details

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

**Pneumonia: acute pneumonia infiltrates from different causes**

"Pyrogenic=PMN, Miscellaneous=Mononuclear":
Acute pneumonia caused by **Pyogenic bacteria: PMN infiltrate**.
Acute pneumonia caused by **Miscellaneous microbes: Mononuclear infiltrate**.
Knowledge Level 6, System: Pulmonary
Anonymous Contributor

**Streptococci: Quellung reaction: positive sign, Strep type confirmed**

"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

**Gardnerella and Vaginalis vaginal infection diagnosis**

"Take a whiff and get a clue for fishy bacteria":
Smells like fish (whiff test); clue cells seen under microscope.
**Gardnerellae**= Gram negative.
**Vaginalis**= Variable.
Knowledge Level 3, System: Reproductive
Rinku S Uberoi UNIBE

**Teratogens: placenta-crossing organisms**

**TORCHes**:
**Toxoplasma**
**Rubella**
**CMV**
**Herpes simplex**, **Herpes zoster** (varicella), **Hepatitis B,C,E**
**Syphilis**
Alternatively: **TORCHES; with Others** (parvo, listeria), add **HIV** to H's, **Enteroviruses**.
Knowledge Level 1, System: Reproductive
Andrew J. Vasil UMD School of Medicine, Duluth, MN

**Trichomaniasis: features**

5 F's:
**Flagella**
**Frothy discharge**
**Fishy odor** (sometimes)
**Fornication** (STD)
**Flagyl** (metronidazole) Rx
Knowledge Level 4, System: Reproductive
Rinku Uberoi

**NEUROLOGY**

**Stroke risk factors**
HEADS:
Hypertension/ Hyperlipidemia
Elderly
Atrial fib
Diabetes mellitus/ Drugs (cocaine)
Smoking/ Sex (male)
Knowledge Level 3, System: Cardiovascular
Rinku S. Uberoi UNIBE

Chorea: common causes
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
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
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

Dementia: some common causes
DEMENTIA:
Diabetes
Ethanol
Medication
Environmental (eg CO poisoning)
Nutritional
Trauma
Infection
Alzheimer’s
**Dementia: treatable causes**

**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**

**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**

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 Boiselier, MD and Sung Kim Attending physician, ISSSTE, Juarez, Mexico
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
Bairaj Jhawar  The University of Western Ontario

[Neuropathy: diagnosis confirmation]
Neuropathy:
Nerve conduction velocity
Electromyography
Knowledge Level 6, System: Nervous
Rinku S. Uberoi

[Ocular bobbing vs. dipping]
"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

[Peripheral neuropathies: differential]
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

[Ramsay-Hunt syndrome: cause and common feature]
"Ramsay Hunt":
Etiology:
Reactivated
Herpes zoster
Complication:
Reduced
Hearing
Knowledge Level 4, System: Nervous
Rinku S. Uberoi  UNIBE

[Status epilepticus: treatment]
"Thank Goodness All Cerebral Bursts Dissipate":
Thiamine
Glucose
Ativan
Cerebyx
Barbiturate
Diprivan
Knowledge Level 2, System: Nervous
J.D. Broughton, MD

Vertigo: differential

VOMITS:
Vestibulitis
Otoxic drugs
Meniere's disease
Injury
Tumor
Spin (benign positional vertigo)
Knowledge Level 6, System: Nervous
Dr. J.G. Norris

NEUROSCIENCES

Argyll-Robertson Pupil features

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

Auditory pathway: mandatory stops

"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: indirect vs. direct pathway

The Indirect pathway Inhibits.
Direct pathway is hence the excitatory one.
Knowledge Level 1, System: Nervous
Robert O'Connor  University College Dublin

Branchial arches: cranial nerve innervation

In Sensory/Motor/Both mnemonic 'Some Say Marry Money But My Brother Says Big Boobs Matter More', the B's also give Brancial arch nerves in order:
But (CN 5): 1st arch
Brother (CN7): 2nd arch
Big (CN9): 3rd arch
Boobs (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

"Broca": your speech machinery is Broken.
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.

Cerebellar damage symptoms

<table>
<thead>
<tr>
<th>VANISHED:</th>
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<tbody>
<tr>
<td>Vertigo</td>
</tr>
<tr>
<td>Ataxia</td>
</tr>
<tr>
<td>Nystagmus</td>
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<tr>
<td>Intention tremor</td>
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<tr>
<td>Slurred speech</td>
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<tr>
<td>Hypotonic reflexes</td>
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<tr>
<td>Dysdiadochokinesia</td>
</tr>
</tbody>
</table>

Knowledge Level 3, System: Nervous
Anonymous Contributor

Cerebellar deep nuclei

"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 functional areas

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

Coronal section of brain: structures

"In Extreme Conditions Eat People’s Guts Instead of Their Hearts": From insula to midline:
- Insula
- Extreme: capsule
- Claustrum
- External capsule
- Putamen
- Globis pallidus
- Internal capsule
- Thalamus
- Hypothalamus

Knowledge Level 4, System: Nervous
Anonymous Contributor

Cranial nerves
"On Old Olympus Towering Tops, A Finn And German Viewed Some Hops":
   In order from 1 to 12:
   Olfactory
   Optic
   Occulomotor
   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: olfactory and optic numbers
"You have two eyes and one nose":
Optic nerve is cranial nerve two.
Olfactory nerve is cranial nerve one.
   Alternatively, note alphabetical order: oLfactory, and oPtic.
Knowledge Level 1, System: Nervous
Rajael Somaskanthan  Medical student, Royal Free and UCL Medical School

Cranial nerves: sensory, motor or both
"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

CSF circulation: function of choroid vs. arachnoid granules
Choroid Creates CSF.
Arachnoid granules Absorb CSF.
Knowledge Level 1, System: Nervous
Jason Galarneau  Flinders University, Australia

Dysphagia vs. dysphasia
DysphaSia is for Speech
DysphaGia is for your Gut [swallowing].
Knowledge Level 6, System: Nervous
Anonymous Contributor

GABA vs. Glu: the excitatory vs. inhibitory transmitter in brain (eg in basal ganglia)
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**

**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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**Hypothalamus: feeding vs. satiety center**

"Stim the **lat**, get **fat**":

- Stimulating lateral increases hunger.

"Stim the **ven**, get **thin**":

- Stimulating ventromedial increases satiety.

**Knowledge Level 1, System: Nervous**

Ryan Hendren  University of Arkansas for Medical Sciences

---

**Lower vs. upper motor neuron lesion effects**

1. "**STORM, Baby**"

2. In a **Lower** motor neuron lesion, everything goes **Down**:

   - STORM Baby tells you effects:
     - **Strength**
     - **Tone**
     - **Other**
     - **Reflexes**
     - **Muscle mass**
     - **Babinski'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 = UMNL).

      See attached chart.

   **Knowledge Level 1, System: Nervous**

   Robert O'Connor  University College Dublin

---

**Meninges: layers in order**

**PAD:**

- Piamater
- Arachnoid
- Dura

**Knowledge Level 1, System: Nervous**

Mohammed Azizuddin Ahmed  Indian Medical Council

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**Olivary nuclei: ear vs. eye roles**

Superior **Olivary nucleus:** SOund 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

---

**Precentral vs. postcentral gyrus: motor vs. sensory**

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

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**Purkinje cells in cerebellum are inhibitory to deep nuclei**
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

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: Gracilus vs. Cuneatus: origin from upper vs. lower limbs

Gracilus is the name of a muscle in the legs, so Fasciculus Gracilus 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

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:
Knowledge Level 3, System: Nervous
Robert O’Connor  University College Dublin

Thirst/water balance control centre: location in hypothalamus

"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 aperatures: converting the two nomenclature types

Magenie 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]
**PREclampsia:**
Proteinuria
Rising blood pressure
Edema

Knowledge Level 4, System: Cardiovascular
Anonymous Contributor

**RLQ pain: brief female differential**

**AEIOU:**
Appendicitis/ Abscess
Ectopic pregnancy/ Endometriosis
Inflammatory disease (pelvic)/ IBD
Ovarian cyst (rupture, torsion)
Uterus colic/ Urinary stones

Knowledge Level 1, System: Other/Miscellaneous
Sushant Varma  University of Sheffield, UK

**Abdominal pain: causes during pregnancy**

**LARA CROFT:**
Labour
Abruptio 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**

"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

**APGAR score components**

**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**
ASHERMAN:
Acquired Anomaly
Secondary to Surgery
Hysterosalpingography confirms diagnosis
Endometrial damage/ Egonadotropic
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)

ABCDE:
Angina (Heart disease)
BP high
Chorioamnionitis
Diabetes
Excessive bleeding
Knowledge Level 2, System: Reproductive
Lum

CVS and amniocentesis: when performed
"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

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

DUB:
Don't ovulate (anovulation: 90% of cases)
Unusual corpus leuteum 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 1113]

Hi Yield [ID 2215]

Hi Yield [ID 1908]

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

**Forceps: indications for delivery**

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**

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

**IUD: side effects**

PAINS:
Period that is late
Abdominal cramps
Increase in body temperature
Noticeable vaginal discharge
Spotting
Knowledge Level 3, System: Reproductive
Anonymous Contributor

**IUGR: causes**

IUGR:
Inherited: chromosomal and genetic disorders
Uterus: placental insufficiency
General: maternal malnutrition, smoking
Rubella and other congenital infecton
Knowledge Level 4, System: Reproductive
Anthony Chan

**Labour: preterm labor causes**
DISEASE:
Dehydration
Infection
Sex
Exercise (strenuous)
Activities
Stress
Environmental factor (job, etc)
Knowledge Level 4, System: Reproductive
Alycia Ernst  Banner Health AZ

<table>
<thead>
<tr>
<th>Multiple pregnancy complications</th>
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<tbody>
<tr>
<td>HI, PAPA:</td>
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<tr>
<td>Hydramnios (Poly)</td>
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<tr>
<td>IUGR</td>
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<tr>
<td>Preterm labour</td>
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<tr>
<td>Antepartum haemorrhage</td>
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<tr>
<td>Pre-eclampsia</td>
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<tr>
<td>Abortion</td>
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<tr>
<td>Knowledge Level 3, System: Reproductive</td>
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<tr>
<td>Ashley Liew  University of Glasgow, UK</td>
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<table>
<thead>
<tr>
<th>Omental caking: likeliest cause</th>
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<tbody>
<tr>
<td>Omental Caking = Ovarian CA</td>
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<tr>
<td>“Omental caking” is term for ascities, plus a fixed upper abdominal and pelvic mass. Almost always signifies ovarian cancer.</td>
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<tr>
<td>Knowledge Level 2, System: Reproductive</td>
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<td>Anonymous Contributor</td>
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<table>
<thead>
<tr>
<th>Oral contraceptive complications: warning signs</th>
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<tbody>
<tr>
<td>ACHES:</td>
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<tr>
<td>Abdominal pain</td>
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<tr>
<td>Chest pain</td>
</tr>
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<td>Headache (severe)</td>
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<tr>
<td>Eye (blurred vision)</td>
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<tr>
<td>Sharp leg pain</td>
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<tr>
<td>Knowledge Level 4, System: Reproductive</td>
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<tr>
<td>Carrie Davis, RNC, MSN, WHNP  Obici Health System</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Oral contraceptives: side effects</th>
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<tbody>
<tr>
<td>CONTRACEPTIVES:</td>
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<tr>
<td>Cholestatic jaundice</td>
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<tr>
<td>Oedema (corneal)</td>
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<tr>
<td>Nasal congestion</td>
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<tr>
<td>Thyroid dysfunction</td>
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<tr>
<td>Raised BP</td>
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<tr>
<td>Acne/ Alopecia/ Anaemia</td>
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<tr>
<td>Cerebrovascular disease</td>
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<tr>
<td>Elevated blood sugar</td>
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<tr>
<td>Porphyria/ Pigmentation/ Pancreatitis</td>
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<tr>
<td>Thromboembolism</td>
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<tr>
<td>Intracranial hypertension</td>
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<tr>
<td>Vomiting (progesterone only)</td>
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<tr>
<td>Erythema nodosum/ Extrapyramidal effects</td>
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<tr>
<td>Sensitivity to light</td>
</tr>
<tr>
<td>Knowledge Level 6, System: Reproductive</td>
</tr>
<tr>
<td>Dr. Harsh Sharma  BJMC, Pune, India</td>
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</tbody>
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| Parity abbreviations (ie: G 3, P 2012)         |

| Knowledge Level 6, System: Reproductive        |
| Dr. Harsh Sharma  BJMC, Pune, India            |
"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

"PID CAN be EPIC":
Causes:
Chlamydia trachomatis
Actinomycetes
Neisseria gonorrhoeae

Effects:
Ectopic
Pregnancy
Infertility
Chronic pain

Knowledge Level 2, System: Reproductive
Scott Alexander  Loma Linda University SOM

Pelvic Inflammatory Disease (PID): complications

I FACE PID:
Infertility
Fitz-Hugh-Curitis syndrome
Abscesses
Chronic pelvic pain
Ectopic pregnancy
Peritonitis
Intestinal obstruction
Disseminated: sepsis, endocarditis, arthritis, meningitis

Knowledge Level 2, System: Reproductive
Lum

Postpartum collapse: causes

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

PARTUM:
Polyhydroamnios/ 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
**Prenatal care questions**

ABCD:
- Amniotic fluid leakage?
- Bleeding vaginally?
- Contractions?
- Dysuria?
- Edema?
- Fetal movement?

Knowledge Level 3, System: Reproductive
Jason Bermak  UC Irvine

**Secondary amenorrhea: causes**

SOAP:
- Stress
- OCP
- Anorexia
- Pregnancy

Knowledge Level 2, System: Reproductive
Nathan Sachdev  University of New South Wales, Sydney

**Female pelvis: shapes**

GAP:
- In order from most to least common:
  - Gynecoid
  - Android / Anthropoid
  - Platypelloid

Knowledge Level 4, System: Skeletal
Anonymous Contributor

**OPHTHAMOLOGY / OPTOMETRY**

**Red eye causes**

GO SUCK:
- Glaucoma
- Orbital disease
- Scleritis
- Uveitis
- Conjunctivitis
- Keratitis

Knowledge Level 2, System: Cardiovascular
Anonymous Contributor

**Cataracts: causes**

ABCDE:
- Aging
- Bang: trauma, other injuries (eg infrared)
- Congenital
- Diabetes and other metabolic disturbances (eg steroids)
- Eye diseases: glaucoma, uveitis

Knowledge Level 4, System: Nervous
Anthony Chan

**Cataracts: causes**

Knowledge Level 4, System: Nervous
Anonymous Contributor
Cataracts: differential

CATARA ct:
- Congenital
- Aging
- Toxicity (steroids, etc)
- Accidents
- Radiation
- Abnormal metabolism (diabetes mellitus, Wilson's)

Knowledge Level 2, System: Nervous
Anonymous Contributor

Diplopia (uniocular): causes

ABCD:
- Astigmatism
- Behavioral: psychogenic
- Cataract
- Dislocated lens

Knowledge Level 4, System: Nervous
Anthony Chan

Optic atrophy causes

ICING:
- Ischaemia
- Compressed nerve
- Intracranial pressure [raised]
- Neuritis history
- Glaucoma

Knowledge Level 4, System: Nervous
Anonymous Contributor

Periorbital cellulitis: etiology

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

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
PLASTER OF PARIS:
  Plane
  Location
  Articular cartilage involvement
  Simple or comminuted
  Type (eg Colles')
  Extent
  Reason
  Open or closed
  Foreign bodies
  Dislocation
  Angulation
  Rotation
  Impaction
  Shortening
Knowledge Level 3, System: Other/Miscellaneous
Fletcher Davies  Adelaide Medical School

Bone fracture types [for Star Wars fans]
GO C3PO:
  Greenstick
  Open
  Complete/ Closed/ Comminuted
  Partial
  Others
    Note: C3P0 is droid in the Star-Wars movies.
Knowledge Level 1, System: Skeletal
Anonymous Contributor

Bryant's traction: position
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

Monoarthritis differential
GHOST:
  Gout
  Haemarthrosis
  Osteoarthritis
  Sepsis
  Trauma
Knowledge Level 1, System: Skeletal
Polly Weston  Bristol University Med School

Osteosarcoma: risk factors

Paget’s disease of bone: signs and symptoms

**PANICS:**
- Pain
- Arthralgia
- Nerve compression / Neural deafness
- Increased bone density
- Cardiac failure
- Skull / Sclerotic vertebrae

Knowledge Level 3, System: Skeletal
Andrew Young  UMDS

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PATHOLOGY

**Achalasia: 1 possible cause, 1 treatment**

Achalasia:
- 1 possible cause: CHAgas' disease
- 1 treatment: Ca++ CHAannel blockers

Knowledge Level 5, System: Alimentary
Anonymous Contributor

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**Carcinoid syndrome: components**

Carcinoid:
- 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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**Gallstones: risk factors**

5 F's:
- Fat
- Female
- Family history
- Fertile
- Forty

Knowledge Level 4, System: Alimentary
Anonymous Contributor

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**Haemochromatosis definition, classic triad**

Knowledge Level 2, System: Alimentary
Anonymous Contributor
"Iron man triathlon":
Iron man: deposition of iron in many body tissues.
Triathlon has 3 components, which match triad:
Swimming: Skin pigmentation
Biking: Bronze diabetes
Marathon: Micronodular pigment cirrhosis
See diagram for visual equivalent.

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

**Hepatomegaly: 3 common causes, 3 rarer causes**

Common are 3 C's:
- Cirrhosis
- Carcinoma
- Cardiac failure
Rarer are 3 C's:
- Cholestasis
- Cysts
- Cellular infiltration

Knowledge Level 3, System: Alimentary
Anonymous Contributor and Jamal Khan Not Specified and Birmingham University Medical Student

**IBD: extraintestinal manifestations**

"Left intestine to sail the SEAS of the rest of the body":
Skin manifestations: erythema nodosum, pyoderma gangrenosum
Eye inflammation: iritis, episcleritis
Arthritis
Sclerosing cholangitis

Knowledge Level 3, System: Alimentary
Anonymous Contributor

**Inflammatory Bowel Disease: which has cobblestones**

Crohn's has Cobblestones on endoscopy.

Knowledge Level 1, System: Alimentary
Anonymous Contributor

**Kwashiorkor: distinguishing from Marasmus**

FLAME:
- Fatty Liver
- Anemia
- Malabsorption
- Edema

Knowledge Level 2, System: Alimentary
Chris UMF Bucharest

**Pancreatitis: causes**

PANCREATITIS:
- Posterior
- Alcohol
- Neoplasm
- Cholelithiasis
- Rs (lasix, AZT)
- ERCP
- Abdominal surgery
- Trauma
- Infection (mumps)
- Triglycerides elevated
- Idiopathic
- Scorpion bite

Knowledge Level 4, System: Alimentary
**PKU findings**

PKU:
- Pale hair, skin
- Krazy (neurological abnormalities)
- Unpleasant smell

Knowledge Level 1, System: Alimentary
Robert O'Connor and Lior Greenberg

**Ulcerative colitis: features**

**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

**Acute ischemia: signs [especially limbs]**

6 P's:
- Pain
- Pallor
- Pulselessness
- Paralysis
- Paraesthesia
- Perishingly cold

Knowledge Level 5, System: Cardiovascular
Shebrain Cairo University

**Anemia (normocytic): causes**

ABCD:
- Acute blood loss
- Bone marrow failure
- Chronic disease
- Destruction (hemolysis)

Knowledge Level 2, System: Cardiovascular
Anthony Chan

**Anemia causes (simplified)**

ANEMIA:
- Anemia of chronic disease
- No folate or B12
- Ethanol
- Marrow failure & hemoglobinopathies
- Iron deficient
- Acute & chronic blood loss

Knowledge Level 2, System: Cardiovascular
The Cashman University of Queensland, Australia

**Aneurysm types**

Hi Yield [ID 1642]
MAD SCAB:
Mycotic
Atherosclerotic
Dissecting
Syphilitic
Capillary microaneurysm
Arteriovenous fistula
Berry
Knowledge Level 3, System: Cardiovascular
Sushant Varma  Medical student, University of Sheffield, UK

Atherosclerosis risk factors
"You're a SAD BET with these risk factors":
Sex: male
Age: middle-aged, elderly
Diabetes mellitus
BP high: hypertension
Elevated cholesterol
Tobacco
Knowledge Level 2, System: Cardiovascular
HBV  Morehouse School of Medicine

Blood disorders: commoner sex
HE (male) gets:
HEmophilia (X-linked)
HEinz bodies (G6PD deficiency, causing HEmolytic anemia: X-linked)
HEmochromatosis (male predominance)
HEart attacks (male predominance)
HEnoch-Schonlein purpura (male predominance)
SHE (female) gets:
SHEchan's syndrome
Knowledge Level 5, System: Cardiovascular
Anonymous Contributor

Buerger's disease features
"burger SCRAPs":
Segmenting thrombosing vasculitis
Claudication (intermittent)
Raynaud's phenomenon
Associated with smoking
Pain, even at rest
Superficial nodular phlebitis
Alternatively, if hungry for more detail [sic], "CRISP PIG burgers":
Chronic ulceration
Raynaud's phenomenon
Intermittent claudication
Segmenting, thrombosing vasculitis
Pain, even at rest
Phlebitis (superficial nodular)
Idiopathic
Gangrene
Knowledge Level 2, System: Cardiovascular
Robert O'Connor  University College Dublin

Cardiovascular risk factors
Knowledge Level 2, System: Cardiovascular
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

Deep venous thrombosis: diagnosis

DVT:
Dilated superficial veins/ Discoloration/ Doppler ultrasound
Venography is gold standard
Tenderness of Thigh and calf
Knowledge Level 3, System: Cardiovascular
Rinku Uberoi  UNIBE

Disseminated Intravascular Cogulation: causes

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)

Fat embolism: findings

"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

Heart failure causes

"HEART MAY DIE":
Hypertension
Embolism
Anemia
Rheumatic heart disease
Thyrotoxicosis (incl. pregnancy)
Myocardial infarct
Arrythmia
Y
Diet & lifestyle
Infection
Endocarditis
Knowledge Level 3, System: Cardiovascular
The Cashman  University of Queensland, Australia
Hypertension: secondary hypertension causes

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

Kawasaki disease: diagnostic criteria

CHILD:
- 5 letters=5 days, >5 years old, 5 out 6 criteria for diagnosis:
  - Conjunctivitis (bilateral)
  - Hyperthermia (fever) >5 days
  - Idiopathic polymorphic rash
  - Lymphadenopathy (cervical)
  - Dryness & redness of (i)lips & month (ii)palms & soles [2 separate criteria]

Knowledge Level 3, System: Cardiovascular
Wen Sun Lum University of Calgary, Canada

Kawasaki disease: features

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

MI: complications

HAS CRAPPED:
- Heart failure/ Hypertension
- Arrhythmia
- Shock
- Cardiac Rupture
- Aneurysm
- Pericarditis
- Pulmonary Emboli
- DVT

Knowledge Level 5, System: Cardiovascular
Leo University College London

MI: post-MI complications
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

"Time to CALL 911":
From first to appear to last:
- Troponin
- CK-MB
- AST
- LDH

Knowledge Level 2, System: Cardiovascular
Marco Foramiglio Centro de Ciências Médicas e Biológicas - PUC/SP- Sorocaba/SP - Brazil

Pericarditis: findings

PERICarditis:
- 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

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

Takayasu's disease is Pulseless disease

"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

FAT RN:
- Fever
- Anemia
- Thrombocytopenia
- Renal problems
- Neurologic dysfunction

Knowledge Level 3, System: Cardiovascular
Anonymous Contributor

TTP: clinical features
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)**

"VIRchow":
- Vascular trauma
- Increased coagulability
- Reduced blood flow (stasis)

Knowledge Level 2, System: Cardiovascular
Rinku Uberoi UNIBE

**Von Hippel-Lindau: signs and symptoms**

**HIPPEL**:
- Hemangioblastomas
- 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

**Addison's disease: features**

**ADDISON**:
- Autoimmune
- DIC (meningococcus)
- Destruction by cancer, infection, vascular insufficiency
- Iatrogenic
- Sarcoidosis, granulomatous such as TB histiomyocosis
- hypOtension/ hypOnatermia
- Nelson's syndrome [post adrelectomy, increased ACTH]

Knowledge Level 3, System: Endocrine
Samuel Atom Baek-Kim

**Cushing syndrome**

**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

**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

Hirsutism vs. virilism
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

Hypercalcemia: symptoms of elevated serum levels
"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

Multiple endocrine neoplasia III: components
MEN III is a disease of 3 M's:
Medullary thyroid carcinoma
Medulla of adrenal (pheochromocytoma)
Mucosal neuroma
Knowledge Level 4, System: Endocrine
Anonymous Contributor

Pheochromocytoma: 3 most common symptoms
"PHEochromocytoma":
Palpitations
Headache
Edisodic sweating (diaphoresis)
Knowledge Level 4, System: Endocrine
Anonymous Contributor

Thyroid carcinoma: features, prognosis of most popular
Most Popular is Papillary.
Clinical features:
Papillae (branching)
Palpable lymph nodes
"Pupil" nuclei (Orphan Annie)
Psammoma bodies within lesion (often)
Also, has a Positive Prognosis (10 year survival rate: 98%).
Knowledge Level 4, System: Endocrine
Anonymous Contributor

Thyroid storm characteristics
"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

**Baldness risk factors**

"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**

ketONE bodies are seen in type ONE diabetes.

Knowledge Level 2, System: Integumental
Anonymous Contributor

**Lichen planus characteristics**

Planus has 4 P's:
- Peripheral
- Polygonal
- Pruritus
- Purple

Knowledge Level 3, System: Integumental
Anonymous Contributor

**APKD: signs, complications, accelerators**

11 B's:
- Signs:
  - Bloody urine
  - Bilateral pain [vs. stones, which are usually unilateral pain]
  - Blood pressure up
  - Bigger kidneys
  - Bumps palpable
- Complications:
  - Berry aneurysm
  - Biliary cysts
  - Bicuspid valve [prolapse and other problems]
- Accelerators:
  - Boys
  - Blacks
  - Blood pressure high

Knowledge Level 5, System: Kidney/Urine
Robert O'Connor University College Dublin

**Gout vs. pseudogout: crystal lab findings**
Pseudo-gout crystals are:
Positive birefringent
Polygon shaped
Gout therefore is the negative needle shaped crystals.
Also, gout classically strikes great Toe, and its hallmark is Tophi.
Knowledge Level 1, System: Kidney/Urine
Robert O'Connor  University College Dublin

Gout: factors that can precipitate an attack of acute gouty arthritis

DARK:
Diuretics
Alcohol
Renal disease
Kicked (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

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

Hematuria: urethral causes

NUTS:
Neoplasm
Urethritis
Tumour
Stone
Knowledge Level 2, System: Kidney/Urine
Sushant Varma  University of Sheffield, UK

Nephritic syndrome: glomerular diseases commonly presenting as nephritic syndrome

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

"Protein LEAC":
Proteinuria
Lipid up
Edema
Albumin down
Cholesterol up
In nephrotic, the proteins leak out.
Knowledge Level 2, System: Kidney/Urine
Anonymous Contributor
Renal failure (chronic): consequences

ABCDEF:  
- 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

AVID GUT:  
- Acute tubular necrosis  
- Vascular obstruction  
- Infection  
- Diffuse intravascular coagulation  
- Glomerular disease  
- Urinary obstruction  
- Tubulointerstitial nephritis

Knowledge Level 3, System: Kidney/Urine

Anemia: TIBC finding to differentiate iron deficiency vs. chronic disease

TIBC levels at the:  
Top= Iron deficiency.  
Bottom= Chronic disease.  

Knowledge Level 3, System: Lymphoid

Hemophilia: type A factor

Hemophilia A: problems with VIII factor (number V as an inverted A).  

Knowledge Level 2, System: Lymphoid

Leukemias: acute vs. chronic rules of thumb
**ABCD E:**
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

**Megaloblastic anemia: vitamin B12 deficiency vs. folate deficiency**
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

**Sarcoidosis summarized**
SARCOIDOISIS:
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

**Wiskott-Aldrich syndrome: symptom triad**
"PET WASP":
Pyrogenic infections
Eczema
Thrombocytopenia
   WASP is the name of the causitive agent: Wiskott-Aldrich Syndrome Protein.
   Alternatively: Wiskott=Hot, Aldrich=Itch, Syndrom=Throm.
Knowledge Level 2, System: Lymphoid
Robert O'Connor  University College Dublin

**Duchenne vs. Becker Muscular Dystrophy**
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

**McArdle's syndrome**
Knowledge Level 4, System: Muscle
Rinku Uberoi  UNIBE
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

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

Cerebral palsy: general features

PALSY:
- Paresis
- Ataxia
- Lagging motor development
- Spasticity
- Young

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

Lou Gehrig's is both upper and lower motor neuron signs

LoU = Lower & Upper.

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

Parkinsonism: essential features

TRAPS:
- Tremor (resting tremor)
- Rigidity
- Akinesia
- Postural changes (stooped)
- Stare (serpentine stare)

To remember what kind of tremor and postural change, can look at letter that follows in TRAPS: Tremor is Resting. Posture is Stooped.

Knowledge Level 1, System: Nervous
Anonymous Contributor

Pyrogenic meningitis: likeliest bug in age group

Hi Yield [ID 1950]

Hi Yield [ID 1059]

Hi Yield [ID 539]

Hi Yield [ID 1014]
"Explaining Hot Neck Stiffness":
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

Tabs Dorsalis morphology

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

Tuberous sclerosis: presenting features

"Zits, Fits, Deficits":
 Fits: seizures
 Deficits: neurological deficits
Knowledge Level 4, System: Nervous
Lior Greenberg  Technion Faculty of Medicine, Haifa, Israel

Wernicke-Korsakoff's psychosis: findings

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

Edwards' syndrome: characteristics

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

Fragile X syndrome: features

Knowledge Level 4, System: Nervous
Lior Greenberg  Technion Faculty of Medicine, Haifa, Israel
FEMALES
FMRI 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

**Fragile-X syndrome: features**

**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

**Turner syndrome: components**

**CLOWNS:**
- Cardiac abnormalities (specifically Coarctation)
- Lymphoedema
- Ovaries underdeveloped (causing sterility, amenorrhea)
- Webbed neck
- Nipples widely spaced
- Short

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

**Bronchial obstruction: consequences**

**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**

**ABCDE:**
- Asthma
- Bronchiectasis
- 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**
Emphysema has letter P (and not B) so Pink Puffer.
chronic Bronchitis 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**

"Cigarettes Is Primary Problem":
- Types:
  - Centrilobular
  - Irregular
  - Pancinar
  - Paraseptal
  - Most important feature for each type (in order as above):
  - Cigaretttes
  - 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 antitrypsin.
Knowledge Level 4, System: Pulmonary
Robert O'Connor  University College Dublin

**Interstitial lung disease: causes**

SARCOID:
- Sarcoidosis
- Allergic reaction
- Radiation
- Connective tissue disease
- Occupational exposure
- Infection
- Drugs
- Idiopathic
Knowledge Level 6, System: Pulmonary
Will Herrington  UCL Hospital

**Nasopharyngeal malignant cancers**

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**

"Horner has a MAP of the Coast":
A panCoast tumor is a cancer of the lung apex that compresses the cervical sympathetic plexus, causing Horner's syndrome, which is MAP:
- Miosis
- Anhidrosis
- Ptosis
Knowledge Level 1, System: Pulmonary
Derek Obayashi  Chicago Medical School

**Pneumothorax: presentation**

Knowledge Level 1, System: Pulmonary


**P-THORAX:**
Pleuretic pain
Trachea deviation
Hyperresonance
Onset sudden
Reduced breath sounds (& dypsnea)
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**

**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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**Respiratory distress syndrome in infants: major risk factors**

**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**

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**

"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

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**Endometrial carcinoma: risk factors**

Knowledge Level 3, System: Reproductive
Shebrain  Cairo University
ENDOMET:
Elderly
Nulliparity
Diabetes
Obesity
Menstrual irregularity
Estrogen therapy
hyperTension
Knowledge Level 5, System: Reproductive
Robert O'Connor University College Dublin

Polycystic ovary: morphology, presentation
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

Scrotum masses
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

Carcinomas having tendency to metastasize to bone
"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

Histiocytosis X: hallmark finding
Knowledge Level 3, System: Skeletal
Anonymous Contributor
"Birbeck's rackets is X":
Tennis rackets under electron microscope is Histiocystosis 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

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

Paget's disease of bone: signs and symptoms

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

PEDIATRICS

Duodenal atresia vs. Pyloric stenosis: site of obstruction

Duodenal Atresia: Distal to Ampulla of vater.
Pyloric stenosis: Proximal to it.
Knowledge Level 5, System: Alimentary
Rinku Uberoi

Pyloric stenosis (congenital): presentation

Pyloric stenosis is 3 P's:
- Palpable mass
- Parastalsis visible
- Projectile vomiting (2-4 weeks after birth)

Knowledge Level 3, System: Alimentary
Dr. Atif Farooq Khawaja  Rawalpindi Medical College, Pakistan

Vitamin toxicities: neonatal

Excess vitamin A: Anomalies (teratogenic)
Excess vitamin E: Enterocolitis (necrotizing enterocolitis)
Excess vitamin K: Kernicterus (hemolysis)
Knowledge Level 7, System: Alimentary
Anonymous Contributor

Cyanotic congenital heart diseases

Hi Yield  [ID 1746]
5 T's:
- Truncus arteriosus
- Transposition of the great arteries
- Tricuspid atresia
- Tetralogy of Fallot
- Total anomalous pulmonary venous return

Knowledge Level 5, System: Cardiovascular
Vince Yamashiroya

**Cyanotic heart diseases: 5 types**

- Use your five fingers:
  1. 1 finger up: Truncus Arteriosus (1 vessel)
  2. 2 fingers up: Dextroposition of the Great Arteries (2 vessels transposed)
  3. 3 fingers up: Tricuspid Atresia (3=Tri)
  4. 4 fingers up: Tetralogy of Fallot (4=Tetra)
  5. 5 fingers up: Total Anomalous Pulmonary Venous Return (5=5 words)

Knowledge Level 3, System: Cardiovascular
Jeff Simmons  University of Alabama School Of Medicine

**Hemolytic-Uremic Syndrome (HUS): components**

"Remember to decrease the RATE of IV fluids in these patients":
- Renal failure
- Anemia (microangiopathic, hemolytic)
- Thrombocytopenia
- Encephalopathy (TTP)

Knowledge Level 6, System: Cardiovascular
Vince Yamashiroya

**Haematuria: differential in children**

**ABCDEFGHIJK:**
- Anatomy (cysts, etc)
- Bladder (cystitis)
- Cancer (Wilm's tumour)
- Drug related (cyclophosphamide)
- Exercise induced
- Factitious (Munchausen by proxy)
- Glomerulonephritis
- Haematology (bleeding disorder, sickle cell)
- Infection (UTI)
- In Jury (trauma)
- Kidney stones (hypercalciuria)

Knowledge Level 4, System: Kidney/Urine
S. Jibodh  University College Dublin

**Perez reflex**

Eliciting the PEzE reflex will make the baby PEE.

Knowledge Level 7, System: Kidney/Urine
Anonymous Contributor

**Cerebral palsy (CP): most likely cause**

CP: Cerebral Palsy
Child Premature
- The premature brain is more prone to all the possible insults.

Knowledge Level 1, System: Nervous
Anonymous Contributor

**Pediatric milestones in development**
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**

Sturge-Weber:
1. Seizures
2. *Port*Wine stain

Knowledge Level 4, System: Nervous
Ramon Salazar

**Guthrie card: diseases identified with it**

“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

**Measles: complications**

“**MEASLES COMP**” (complications):
- Myocarditis
- Encephalitis
- Appendicitis
- Subacute sclerosing panencephalitis
- Laryngitis
- Early death
- Shl'ts (diarrhoea)
- Corneal ulcer
- Otis media
- Mesenteric lymphadenitis
- Pneumonia and related (bronchiolitis-bronchitis-croup)

Knowledge Level 4, System: Other/Miscellaneous
Joshua Goh  Unimas: Universiti Malaysia Sarawak

**Russell Silver syndrome: features**

**ABCDEF:**
- Asymmetric limb (hemihypertrophy)
- Bossing (frontal)
- Clinodactyly/ *Cafe au lait* spots
- Dwarf (short stature)
- Excretion (GU malformation)
- Face (triangular face, micrognathia)

Knowledge Level 6, System: Other/Miscellaneous
Anthony Chan  Chinese University of Hong Kong
Williams syndrome: features

WILLIAMS:
- Weight (low at birth, slow to gain)
- Iris (stellate iris)
- Long philtrum
- Large mouth
- Increased Ca++
- 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

Cough (chronic): differential

When cough in nursery, rock the "CRADLE":
- Cystic fibrosis
- Rings, slings, and airway things (tracheal rings)/ Respiratory infections
- Aspiration (swallowing dysfunction, TE fistula, gastroesophageal reflux)
- Dyskinetic cilia
- Lung, airway, and vascular malformations (tracheomalacia, vocal cord dysfunction)
- Edema (heart failure)

Knowledge Level 6, System: Pulmonary
Vince Yamashiroya

Croup: symptoms

3 S's:
- Stridor
- Subglottic swelling
- Seal-bark cough

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

Cystic fibrosis: exacerbation of pulmonary infection

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

Cystic fibrosis: presenting signs

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)
**Breast feeding: benefits**

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

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**Septic Arthritis: most common cause**

Staphylococcus Aureus is the most common cause of Septic Arthritis in the pediatric population.

Knowledge Level 5, System: Reproductive
Anthony Chan

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**PHARMACOLOGY**

**Hepatic necrosis: drugs causing focal to massive necrosis**

"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**

ABC:
- Alpha = Constrict.
- Beta = Dilate.

Knowledge Level 1, System: Cardiovascular
Anonymous Contributor

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**Antiarrhythmics: class III members**

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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**Beta blockers with intrinsic sympathomimetic activity**

Knowledge Level 1, System: Cardiovascular
Dr. Harsh Sharma and Robert O’Connor BJMC, Pune, India and University College Dublin

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Picture **diabetic** and **asthmatic** kids riding away on a **cart** that rolls on **pinwheels**.

**Pin**adolol and **Cart**eolol 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

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**Beta-blockers: main contraindications, cautions**

<table>
<thead>
<tr>
<th>ABCDE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma</td>
</tr>
<tr>
<td>Block (heart block)</td>
</tr>
<tr>
<td>COPD</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
</tr>
<tr>
<td>Electrolyte (hyperkalemia)</td>
</tr>
</tbody>
</table>

**Knowledge Level 4, System: Cardiovascular**

Anonymous Contributor

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**Beta-blockers: nonselective beta-blockers**

"**Tim Pinches His Nasal Problem**" (because he has a runny nose...):

- **Timolol**
- **Pindolol**
- **Hismolol**
- **Nalidolol**
- **Propranolol**

**Knowledge Level 2, System: Cardiovascular**

Hugo M. Rodriguez, MD  University of Virginia Roanoke-Salem Program

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**Captopril (an ACE inhibitor): side effects**

**CAPTOPRIL:**

- Cough
- Angioedema/ Agranulocystosis
- Proteinuria/ Potassium excess
- Taste changes
- Orthostatic hypotension
- Pregnancy contraindication/ Pancreatitis/ Pressure drop (first dose hypotension)
- 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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**Enoxaprin (prototype low molecular weight heparin): action, monitoring**

**Enoxaprin** 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**

**HMG-CoA:**

- Side effects:
  - Hepatotoxicity
  - Myositis [aka rhabdomyolysis]
- Contraindications:
  - Girl during pregnancy/ Growing children
- Interactions:
  - Coumarin/ Cyclosporine

**Knowledge Level 4, System: Cardiovascular**

Dr. Atif Farooq Khawaja  Rawalpindi Medical College, Pakistan, Gujranwala
Hypertension: treatment

ABCD:
- ACE inhibitors/ AngII antagonists (sometimes Alpha agonists also)
- Beta blockers
- Calcium antagonists
- Diuretics

Knowledge Level 1, System: Cardiovascular
Mr. LW Mason  4th Year Medical Student

Patent ductus arteriosus: treatment

"Come In and Close the door": INdomethacin is used to Close PDA.

Knowledge Level 2, System: Cardiovascular
Milixa Fortuna  UAG Medical Student

Propranolol and related ‘-olol’ drugs: usage

"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

Thrombolytic agents

USA:
- Urokinase
- Streptokinase
- Alteplase (tPA)

Knowledge Level 2, System: Cardiovascular
Dr. Harsh Sharma  BJMC, Pune, India

Warfarin: action, monitoring

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

Warfarin: metabolism

SLOW:
- Has a slow onset of action.
  A quick Vitamin K antagonist, though.
- Small lipid-soluble molecule
- Liver: site of action
- Oral route of administration.

Knowledge Level 2, System: Cardiovascular
Samuel Atom Baek-Kim

Gynaecomastia-causing drugs

DISCOS:
- Digoxin
- Isoniazid
- Spironolactone
- Cimetidine
- Oestrogens
- stilboestrol

Knowledge Level 4, System: Endocrine
Nasseri  University of Sheffield
**K+ increasing agents**

**K-BANK:**
- K-sparing diuretic
- Beta blocker
- ACEI
- NSAID
- K supplement

Knowledge Level 3, System: Endocrine

Anthony Chan

**Propythiouracil (PTU): mechanism**

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

**Steroid side effects**

**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

**Steroids: side effects**

**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**

**HIP:**
- Hydralazine
- INH
- Procanimide

Knowledge Level 6, System: Integumental

Hodge/Gupta, LSU Medicine Firm
### Diuretics: thiazides: indications

"CHIC to use thiazides":
- CHF (Congestive Heart Failure)
- Hypertension
- Insipidus
- Calcium calculi

Knowledge Level 3, System: Kidney/Urine
Anonymous Contributor

### Nitrofurantoin: major side effects

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

GUM:
- Glycerol
- Urea
- Mannitol

Knowledge Level 4, System: Kidney/Urine
Robert O'Connor  University College Dublin

### SIADH-inducing drugs

ABCD:
- Analgesics: opioids, NSAIDs
- Barbiturates
- Cyclophosphamide/ Chlorpromazine/ Carbamazepine
- Diuretic (thiazide)

Knowledge Level 3, System: Kidney/Urine
Anthony Chan

### Sulfonamide: major 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

"vir at start, middle or end means for virus":

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

### 4-Aminopyradine (4-AP) use

"4-AP is For AP":
- For AP (action potential) propagation in Multiple Sclerosis.

Knowledge Level 7, System: Nervous
Robert O'Connor  University College Dublin

### Anticholinergic side effects

Knowledge Level 1, System: Nervous
Robert O'Connor  University College Dublin
"Know the ABCD'S of anticholinergic side effects":

- Anorexia
- Blurry vision
- Constipation/Confusion
- Dry Mouth
- Sedation/Stasis of urine

Knowledge Level 1, System: Nervous
Youngrin Kim University of Rochester School of Medicine and Dentistry

### Antimuscarinics: members, action

"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

ASPIRIN:

- Asthma
- Salicyalism
- Peptic ulcer disease/Phosphorylation-oxidation uncoupling/PPH/Platelet disaggregation/Premature closure of PDA
- Intestinal blood loss
- Reye's syndrome
- Idiosyncracy
- Noise (tinnitus)

Knowledge Level 4, System: Nervous
Dr. Chetan Wasekar KEM Hospital

### Benzodiazepines: ones not metabolized by the liver (safe to use in liver failure)

LOT:

- Lorazepam
- Oxazepam
- Temazepam

Knowledge Level 3, System: Nervous
Lorne Basskin Butler University College of Pharmacy and Health Sciences

### Benzodiazepenes: antidote

"Ben is off with the flu":

Benzodiazepine effects off with Flumazenil.

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

### Benzodiazepenes: drugs which decrease their metabolism

"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
"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

### Beta 1 selective blockers

"**BEAM ONE** up, Scotty**:

**Beta 1** blockers:
- Esmolol
- Atenolol
- Metropolol

Knowledge Level 1, System: Nervous
Anonymous Contributor

### Botulism toxin: action, related bungarotoxin

**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

### Cholinergics (eg organophosphates): effects

If you know these, you will be "**LESS DUMB**":
- Lacrimation
- Excitation of nicotinic synapses
- Salivation
- Sweating
- Diarrhea
- Urination
- Micturition
- Bronchoconstriction

Knowledge Level 4, System: Nervous
Anonymous Contributor

### Delerium-causing drugs

**ACUTE CHANGE IN MS:**
- Antibiotics (biaxin, penicillin, ciprofloxacin)
- Cardiac drugs (digoxin, lidocaine)
- Urinary incontinence drugs (anticholinergics)
- Theophylline
- Ethanol
- Corticosteroids
- H2 blockers
- Antiparkinsonian drugs
- Narcotics (esp. mepridine)
- 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

### Direct sympathomimetic catecholamines

Hi Yield  [ID 769]
DINED:
- Dopamine
- Isoproterenol
- Norepinephrine
- Epinephrine
- Dobutamine

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

Inhalation anesthetics

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

Atropine is buried in the middle: iprAtro, so it behaves like Atropine.

Knowledge Level 4, System: Nervous
Robert O'Connor  University College Dublin

Lead poisoning: presentation

ABCDEFG:
- Anemia
- Basophilic stripping
- Colicky pain
- Diarrhea
- Encephalopathy
- Foot drop
- Gum (lead line)

Knowledge Level 8, System: Nervous
Anonymous Contributor

Lithium: side effects

LITH:
- Leukocytosis
- Insipidus [diabetes insipidus, tied to polyuria]
- Tremor/ Teratogenesis
- Hypothyroidism

Knowledge Level 3, System: Nervous
Robert O'Connor and Rinku Uberoi

MAOIs: indications

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 MelAnchOIC.
Knowledge Level 2, System: Nervous
Robert O'Connor  University College Dublin

Methyldopa: side effects
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

Monoamine oxidase inhibitors: members

"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

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

PEAR:
Physical dependence
Euphoria
Analgesia
Respiratory depression
Knowledge Level 2, System: Nervous
Robert Copeland  Howard University College of Medicine

Narcotic antagonists

The Narcotic Antagonists are NAloxone and NAltrexone.
Important clinically to treat narcotic overdose.
Knowledge Level 2, System: Nervous
Robert O'Connor  University College Dublin

Parkinsonism: drugs
SALAD:
Selegiline
Anticholinergics (trihexyphenidyl, benzhexol, ophenadrine)
L-Dopa + peripheral decarboxylase inhibitor (carbidopa, benzerazide)
Amantadine
Dopamine postsynaptic receptor agonists (bromocriptine, lisuride, pergolide)

Knowledge Level 3, System: Nervous
Dr. Harsh Sharma

<table>
<thead>
<tr>
<th>Phenytoin: adverse effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHENYTOIN:</td>
</tr>
<tr>
<td>P-450 interactions</td>
</tr>
<tr>
<td>Hirsutism</td>
</tr>
<tr>
<td>Enlarged gums</td>
</tr>
<tr>
<td>Nystagmus</td>
</tr>
<tr>
<td>Yellow-browning of skin</td>
</tr>
<tr>
<td>Teratogenicity</td>
</tr>
<tr>
<td>Osteomalacia</td>
</tr>
<tr>
<td>Interference with B12 metabolism (hence anemia)</td>
</tr>
<tr>
<td>Neuropathies: vertigo, ataxia, headache</td>
</tr>
</tbody>
</table>

Knowledge Level 6, System: Nervous
Ram Mohan SVRR Hospital Tirupathi, India

<table>
<thead>
<tr>
<th>Physostigmine vs. neostigmine</th>
</tr>
</thead>
<tbody>
<tr>
<td>LMNOP:</td>
</tr>
<tr>
<td>Lipid soluble</td>
</tr>
<tr>
<td>Miotic</td>
</tr>
<tr>
<td>Natural</td>
</tr>
<tr>
<td>Orally absorbed well</td>
</tr>
<tr>
<td>Physostigmine</td>
</tr>
<tr>
<td>Neostigmine, on the contrary, is:</td>
</tr>
<tr>
<td>Water soluble</td>
</tr>
<tr>
<td>Used in myesthenia gravis</td>
</tr>
<tr>
<td>Synthetic</td>
</tr>
<tr>
<td>Poor oral absorption</td>
</tr>
</tbody>
</table>

Knowledge Level 3, System: Nervous
Manpreet Saini GMC Amritsar

<table>
<thead>
<tr>
<th>Pupils in overdose: morphine vs. amphetamine</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;MorPHINE: Fine. AmPHETamine: Fat&quot;:</td>
</tr>
<tr>
<td>Morphine overdose: pupils constricted (fine).</td>
</tr>
<tr>
<td>Amphetamine overdose: pupils dilated (fat).</td>
</tr>
</tbody>
</table>

Knowledge Level 2, System: Nervous
Anonymous Contributor

<table>
<thead>
<tr>
<th>Serotonin syndrome: components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Causes HARM:</td>
</tr>
<tr>
<td>Hyperthermia</td>
</tr>
<tr>
<td>Autonomic instability (delirium)</td>
</tr>
<tr>
<td>R rigidity</td>
</tr>
<tr>
<td>Myoclonus</td>
</tr>
</tbody>
</table>

Knowledge Level 4, System: Nervous
Anonymous Contributor

<table>
<thead>
<tr>
<th>Sodium valproate: side effects</th>
</tr>
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</tbody>
</table>

Knowledge Level 3, System: Nervous
Anonymous Contributor

Hi Yield [ID 1796]
Hi Yield [ID 1434]
Hi Yield [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

SSRI:
- Serotonin syndrome
- Stimulate CNS
- Reproductive disfunctions in male
- Insomnia

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

Succinylcholine: action, use

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

Tricyclic antidepressants: members worth knowing

"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 antidepressents (TCA): side effects

TCA'S:
- Thrombocytopenia
- Cardiac (arrhythmia, MI, stroke)
- Anticholinergic (tachycardia, urinary retention, etc)
- Seizures

Knowledge Level 2, System: Nervous
Anonymous Contributor

Vigabatrin: mechanism

Vi-GABA-Tr-In:
- Via GABA Transferase Inhibition

Knowledge Level 2, System: Nervous
Anonymous Contributor

Antibiotics contraindicated during pregnancy

Hi Yield  [ID 532]
Hi Yield  [ID 248]
Hi Yield  [ID 2236]
Hi Yield  [ID 2878]
Hi Yield  [ID 1578]
Hi Yield  [ID 1250]
MCAT:
Metronidazole
Chloramphenicol
Aminoglycoside
Tetracycline
Knowledge Level 1, System: Other/Miscellaneous
Kyongbin Baek

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

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
Grisoefulvin
Phenytoin
Phenobarb
Smoking cigarettes
Knowledge Level 4, System: Other/Miscellaneous
Brad

Morphine: side-effects
Hi Yield [ID 2550]
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

Therapeutic index: formula

TILE:
TI = LD50 / ED50
Knowledge Level 1, System: Other/Miscellaneous
Robert O'Connor  University College Dublin

Torsades de Pointes: drugs causing

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)

“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

zAfirlukast: Antagonist of lipoxygenase
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

“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

Respiratory depression inducing drugs

Knowledge Level 1, System: Other/Miscellaneous
Tony Duffy  Medical Student Glasgow

Hi Yield  [ID 2032]

Hi Yield  [ID 462]

Hi Yield  [ID 2269]

Hi Yield  [ID 2241]

Hi Yield  [ID 34]

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
RIBAvin:
RSV
Influenza B
Arenaviruses (Lassa, Bolivian, etc.)
Knowledge Level 1, System: Pulmonary
Robert O'Connor  University College Dublin

TB: antibiotics used
STRIPE:
STreptomycin
Rifampicin
Isoniazid
Pyrizinamide
Ethambutol
Knowledge Level 2, System: Pulmonary
Sushant Varma  Medical student, University of Sheffield, UK

Zafirlukast, Montelukast, Cinalukast: mechanism, usage
"Zafir-luk-ast, Monte-luk-ast, Cina-luk-ast":
Anti-Lukotrienes for Asthma.
Dazzle your oral examiner: Zafirlukast antagonizes leukotriene-4.
Knowledge Level 3, System: Pulmonary
Oisin and Robert O'Connor  UCC and University College Dublin

Teratogenic drugs: major non-antibiotics
TAP CAP:
Thalidomide
Androgens
Progestins
Corticosteroids
Aspirin & indomethacin
Phenytoin
Knowledge Level 2, System: Reproductive
Manpreet  GMC Amritsar

Tetracycline: teratogenicity
TETracycline is a
TETratogen that causes staining of
TETeth in the newborn.
Knowledge Level 1, System: Reproductive

Antirheumatic agents (disease modifying): members
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 Rheumatoid.

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

PHYSICS

Ideal gas law
"Pure Virgins Never Really Tire":
PV=nRT
Knowledge Level 1, System: Other/Miscellaneous
Anonymous Contributor

Ohm's Law
"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

Work: formula
"Lots of Work gets me Mad!":
Work = Mad:
M=Mass
a=acceleration
d=distance
Knowledge Level 1, System: Other/Miscellaneous
Fox Man

PHYSIOLOGY

Carotid sinus vs. carotid body function
Hi Yield  [ID 2615]
carotid SinuS: measures preSSure.
carotid bO2dy measures O2.
Knowledge Level 2, System: Cardiovascular
Omar Boissard, MD  INTEC

Einthoven's Triangle: organization
[1D 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

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

"If patient's family are all having Heart attacks, you must SAVE HIS KIN!"
SA node --->
AV node --->
His (bundle of) -->
PurKINje fibers
Knowledge Level 1, System: Cardiovascular
Carlo Adan, MPH University of Michigan

Intrinsic vs. extrinsic pathway tests

"PeT PiTTbull":
PeT: PT is for extrinsic pathway.
PiTTbull: PTT is for intrinsic pathway.
Knowledge Level 3, System: Cardiovascular
Marcus James Fidel Medical Student, University of New Mexico

PGI2 vs. TxA2 coagulation function

TxA2 Aggregates platelets.
PGI2 Inhibits 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

Adrenal cortex layers and products

"Go Find Rex, Make Good Sex":
Layers:
Glomerulosa
Fasiculata
Reticulata
Respective products:
Mineralcorticoids
Glucocorticoids
Sex hormones
Alternatively for layers: GFR (Glomerular Filtration Rate, convenient since adrenal glands are atop kidney).
Knowledge Level 1, System: Endocrine
Anonymous Contributor

Adrenal gland: functions

ACTH:
Adrenergic functions
Catabolism of proteins/ Carbohydrate metabolism
T cell immunomodulation
Hyper/ Hypotension (blood pressure control)
The Cashman University of Queensland, Australia

Diabetes Insipidous: diagnosing subtypes

After a desmopression injection:
Concentrated urine = Cranial.
No effect = Nephrogenic.
Knowledge Level 5, System: Endocrine
Robert O'Connor University College Dublin
Hyperthyroidism: signs and symptoms

**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

Pituitary hormones

**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

Progesterone: actions

**PROGESTE:**
- Produce cervical mucous
- Relax uterine smooth muscle
- Oxytocin 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

Balance organs

Utricle and Saccule keep US balanced.
Knowledge Level 2, System: Nervous
Anonymous Contributor

Temperature control: cerebral regions

"High Power Air Conditioner":
- Heating = Posterior hypothalamus [hypothalamus].
- Anterior hypothalamus [hypothalamus] = Cooling.

Knowledge Level 5, System: Nervous
Gilvano Amorim Oliveira  Universidade de Santo Amaro São Paulo/Brasil

Urination: autonomic control

"When you pee, it's PISs":
Parasympathetic Inhibits Sympathetic.
Knowledge Level 1, System: Nervous
Muhammad Asif Iqbal  Resident, SLU, MO
Alkalosis vs. Acidosis: Directions of pH and HCO3

**ROME:**
- **Respiratory= Opposite:**
  - pH is high, PCO2 is down (Alkalosis).
  - pH is low, PCO2 is up (Acidosis).
- **Metabolic= Equal:**
  - pH is high, HCO3 is high (Alkalosis).
  - pH is low, HCO3 is low (Acidosis).

Knowledge Level 5, System: Pulmonary
Anonymous Contributor

Compliance of Lungs Factors

**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

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

Prolactin and Oxytocin: Functions

**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

**OsteoBlast** Builds bone.
**OsteoClast** Consumes bone.

Knowledge Level 1, System: Skeletal
Anonymous Contributor

Podiatry

Blue Toe (Microembolic Toe)
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

**TIA: internal carotid vs. vertebrobasilar**

**MD vs. DPM**
- Internal carotid:
  - Monocular blindness (amaurox fugax)
  - Dominant hemisphere (apahsia)
    - The weakness or numbness is still less in the legs.
- Vertebrobasilar:
  - Diplopia/Double blindness
  - Paralysis (quadriplesia)
  - Motor weakness (ipsilateral)
    - Ataxia is characteristic in vertebrobasilar lesions.

Knowledge Level 1, System: Cardiovascular
Samuel Atom Baek-Kim  Tuckahoe, New York

**Diabetic neuropathy types**

**DPM:**
- Distal, symmetric, polyneuropathy
- Proximal diabetic neuropathy
- Mononeuritis multiplex

Knowledge Level 1, System: Endocrine
Samuel Atom Baek-Kim  Tuckahoe, New York

**Arthritis: the six classifications**

"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**

"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

**PSYCHIATRY**

**Depression**
UNHAPPINESS:
Understandable (such as bereavement, major stresses)
Neurotic (high anxiety personalities, negative parental upbringing)
Hypochondriasis
Agitation (usually organic causes such as dementia)
Pseudodementia
Pain
Importuning (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

Mania: cardinal symptoms
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

Mania: diagnostic criteria
Must have 3 of MANIAC:
Mouth (pressure of speech)/ Mood
Activity increased
Naughty (disinhibition)
Insomnia
Attention (distractability)
Confidence (grandiose ideas)
Knowledge Level 1, System: Nervous
Waqar Ahmed Queens University, Belfast

Schizophrenia: negative features
4 A's:
Ambivalence
Affective incongruence
Associative loosening
Autism
Knowledge Level 1, System: Nervous
Anonymous Contributor

Substance dependence: features (DSM IV)
"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
Conduct disorder vs. Antisocial personality disorder

Conduct disorder is seen in Children.
Antisocial personality disorder is seen in Adults.
Knowledge Level 3, System: Other/Miscellaneous
Anonymous Contributor

Depression: symptoms and signs (DSM-IV criteria)

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

"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 the should have used de-spare!
Knowledge Level 1, System: Other/Miscellaneous
VTF SN, NHCC, Texas

Parasomnias: time of onset

SLEEP terrors and SLEEPwalking occur during SLOW-wave sleep (stages 3 & 4).
Nightmare occurs during REM sleep (and is REMembered).
Knowledge Level 4, System: Other/Miscellaneous
Anonymous Contributor

Psychiatric review of symptoms

"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

ABCDEF:
- Achalasia
- Barret's esophagus
- Corrosive esophagitis
- Diverticulitis
- Esophageal web
- Familial
Knowledge Level 6, System: Alimentary
Lau Yue Young Geoffrey  HKU
Pituitary endocrine functions often affected by pituitary-associated tumor

"Go Look For the Adenoma Please":
Tropic hormones affected by growth tumor are:
GNRH
LH
FSH
ACTH
Prolactin function
Knowledge Level 5, System: Endocrine
Anonymous Contributor

Anterior mediastinal masses

4 T's:
Teratoma
Thymoma
Testicular-type
T-cell / Hodgkin's lymphoma
Knowledge Level 4, System: Lymphoid
Anonymous Contributor

Head CT scan: evaluation checklist

"Blood Can Be Very Bad":
Blood
Cistern
Brain
Ventricles
Bone
Knowledge Level 2, System: Nervous
Anonymous Contributor

Dermatomyositis or polymyositis: risk of underlying malignancy

Risk is 30% at age 30.
Risk is 40% at age 40, and so on.
Knowledge Level 6, System: Other/Miscellaneous
Anonymous Contributor

Prognostic factors for cancer: general

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

"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

Knowledge Level 2, System: Other/Miscellaneous
Cashman, Reidy, Motty, BB  University of Queensland, Australia
"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

<table>
<thead>
<tr>
<th>Chest X-ray interpretation</th>
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<tbody>
<tr>
<td>Preliminary is ABCDEF:</td>
</tr>
<tr>
<td>AP or PA</td>
</tr>
<tr>
<td>Body position</td>
</tr>
<tr>
<td>Confirm name</td>
</tr>
<tr>
<td>Date</td>
</tr>
<tr>
<td>Exposure</td>
</tr>
<tr>
<td>Films for comparison</td>
</tr>
<tr>
<td>Analysis is ABCDEF:</td>
</tr>
<tr>
<td>Airways (hilar adenopathy or enlargement)</td>
</tr>
<tr>
<td>Breast shadows/ Bones (rib fractures, lytic bone lesions)</td>
</tr>
<tr>
<td>Cardiac silhouette (cardiac enlargement)/ Costophrenic angles (pleural effusions)</td>
</tr>
<tr>
<td>Diaphragm (evidence of free air)/ Digestive tract</td>
</tr>
<tr>
<td>Edges (apices for fibrosis, pneumothorax, pleural thickening or plaques)/ Extrathoracic tissues</td>
</tr>
<tr>
<td>Fields (evidence of alveolar filling)/ Failure (alveolar air space disease with prominent vascularity with or without pleural effusions)</td>
</tr>
<tr>
<td>Knowledge Level 6, System: Pulmonary</td>
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<thead>
<tr>
<th>Chest X-ray: cavitating lesions differential</th>
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<tr>
<td>&quot;If you see HOLES on chest X-ray, they are WEIRD&quot;:</td>
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<tr>
<td>Wegener's syndrome</td>
</tr>
<tr>
<td>Embolic (pulmonary, septic)</td>
</tr>
<tr>
<td>Infection (anaerobes, pneumocystis, TB)</td>
</tr>
<tr>
<td>Rheumatoid (necrobiotic nodules)</td>
</tr>
<tr>
<td>Developmental cysts (sequestration)</td>
</tr>
<tr>
<td>Histiocytosis</td>
</tr>
<tr>
<td>Oncological</td>
</tr>
<tr>
<td>Lymphangioleiomyomatosis</td>
</tr>
<tr>
<td>Environmental, occupational</td>
</tr>
<tr>
<td>Sarcoi</td>
</tr>
<tr>
<td>Alternatively: L=Left atrial myxoma</td>
</tr>
<tr>
<td>Knowledge Level 6, System: Pulmonary</td>
</tr>
<tr>
<td>LW Mason, and Anonymous Contributor 4th Year Medical Student and Not Specified</td>
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<tr>
<th>Lung cancer: main sites for distant metastases</th>
</tr>
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<tbody>
<tr>
<td>BLAB:</td>
</tr>
<tr>
<td>Bone</td>
</tr>
<tr>
<td>Liver</td>
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<tr>
<td>Adrenals</td>
</tr>
<tr>
<td>Brain</td>
</tr>
<tr>
<td>Knowledge Level 1, System: Pulmonary</td>
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<tr>
<td>Ian Silver Queen's University School of Medicine, Kingston, ON, Canada</td>
</tr>
</tbody>
</table>
**Lung cancer: notorious consequences**

**SPEECH:**
- Superior vena cava syndrome
- Paralysis of diaphragm (Phrenic nerve)
- Ectopic hormones
- Eaton-Lambert syndrome
- Clubbing
- Horner syndrome/ Hoarseness

Knowledge Level 1, System: Pulmonary
Rinku Uberoi

**Upper lobe shadowing: causes**

**BREASTS:**
- Beryllium
- Radiation
- Extrinsic allergic alveolitis
- Ankylosing spondylitis
- Sarcoïdosis
- TB
- Silicosis

Knowledge Level 4, System: Reproductive
A Bywaters

**Elbow ossification centers, in sequence**

**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**

**ABCDE:**
- Asymmetry
- Border irregular
- Colour irregular
- Diameter usually > 0.5cm
- Elevation irregular

Knowledge Level 3, System: Skeletal
Oisin University College Cork

**Neck sagittal x-ray: examination checklist**

**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**
LOSS:
Loss of joint space
Osteophtyes
Subcondral sclerosis
Subchondral cysts

Knowledge Level 1, System: Skeletal
Gajan Rajeswaran Final Year Medical Student, Imperial College School Of Medicine, London

RHEUMATOLOGY / ALLERGY

SLE (Systemic Lupus Erythematosus) diagnosis

"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

Felty's syndrome: components

SANTA:
Splenomegaly
Anaemia
Neutropenia
Thrombocytopenia
Arthritis (rheumatoid)
Knowledge Level 2, System: Lymphoid
Dr. Harsh Sharma BJMC, Pune, India

Carpal tunnel syndrome

TINel's sign:
TINgling sensation after
Tapping on
Traumatized nerve in carpal
Tunnel syndrome
Knowledge Level 5, System: Nervous
Anonymous Contributor

Henoch schonlein purpura: signs and symptoms

NAPA:
Nephritis
Arthritis, arthralgias
Purpura, palpable (especially on buttocks and lower extremities)
Abdominal pain (need to rule out intussusception)
Knowledge Level 4, System: Other/Miscellaneous
Vince Yamashiroya

Asthma: treatment
ASTHMA:
- Adrenergics
- Steroids
- Theophylline
- Hydration
- Mask [O2 at 24%]
- Antibiotics

Knowledge Level 4, System: Pulmonary
Anonymous Contributor

Arthritis: juvenile idiopathic: differential

ARTHRITIS:
- Anxiety
- Rickets and metabolic
- Tumor
- Hematological
- Reactive arthritis
- Immunological (SLE)
- Trauma
- Injury
- Sepsis

Knowledge Level 4, System: Skeletal
Malik Tariq Rahim  King Edward Medical College, Pakistan

Arthritis: seronegative spondyloarthropathies

PEAR:
- Psoriatic arthritis
- Enteropathic arthritis
- Ankylosing spondylitis
- Reiter's/ Reactive

Knowledge Level 1, System: Skeletal
Dave Hassan

Joint pain causes

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

Osteoporosis risk factors

ACCESS:
- Alcohol
- Corticosteroid
- Calcium low
- Estrogen low
- Smoking
- Sedentary lifestyle

Knowledge Level 1, System: Skeletal
Lum
# Fistulas: conditions preventing closure

**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

---

# Oesophageal cancer risk factors

**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

---

# GI bleeding: causes

**ABCDEFGHI:**
- Angiodysplasia
- Bowel cancer
- Colitis
- Diverticulitis/Duodenal ulcer
- Epitaxis/Esophageal (cancer, esophagitis, varices)
- Fistula (anal, aortaenteric)
- Gastric (cancer, ulcer, gastritis)
- Hemorrhoids
- Infectious diarrhoea/IBD/Ischemic bowel

Knowledge Level 9, System: Cardiovascular  
Lau Yue Young Geoffrey  HKU

---

# Varicose veins: symptoms

**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
"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

Post-operative fever causes

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

Appendicectomy: complications

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

Post-operative complications (immediate)

"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

Compartment syndrome: signs and symptoms

5 P's:
Pain
Palor
Pulseless
Paresthesia
Pressure (increased)

Knowledge Level 4, System: Skeletal
Michelle Zetoony  Medical Student 2003, Philadelphia College of Osteopathic Medicine

UROLOGY / NEPHROLOGY

Dialysis: indications
**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

**Enlarged kidneys: causes**  
SHAPE:  
Sclerderma  
HIV nephropathy  
Amyloidosis  
Polycystic kidney disease  
Endocrinopathy (diabetes)  
Knowledge Level 5, System: Kidney/Urine  
Dino Santoro  
University of Manitoba

**Hematuria: differential**  
"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

**Hydronephrosis: differential**  
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

**Nephrotic syndrome: causes for secondary nephrotic syndrome**  
DAVID:  
Diabetes mellitus  
Amyloidosis  
Vasculitis  
Infections  
Drugs  
Knowledge Level 3, System: Kidney/Urine  
Anonymous Contributor

**Polycystic kidney: genetic marker**  
"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

"Prostatism is initially **FUN**":
- Frequency
- Urgency
- Nocturia

Knowledge Level 1, System: Kidney/Urine
Peter L  University of Queensland Medical School

Pyelonephritis (acute): predisposing factors

**SCARRIN' UP:**
- Sex (females <40, males >40)
- Catheterization
- Age (infant, elderly)
- Renal lesions
- Reflux (vesciouteral)
- Immunodeficiency
- 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

Urinary incontinence: causes of acute and reversible

**DRIP:**
- Delirium
- Restricted mobility/ Retention
- Inflammation / Infection / Impaction [fetal]
- Pharmaceuticals / Polyuria

"Drip" is convenient since it is urinary incontinence, so urine only drips out.

Knowledge Level 3, System: Kidney/Urine
Anonymous Contributor

Testicular atrophy: differential

**TESTES SHRINK:**
- Trauma
- Exhaustional atrophy
- Sequelae
- Too little food
- Elderly
- Semen obstruction
- Sex hormone therapy
- Hypopituitarism
- Radiation
- Inflammatory orchitis
- Not descended
- Kleinfelter's

Knowledge Level 4, System: Reproductive
Robert O'Connor  University College Dublin