## ANATOMY

Bowel components
"Dow Jones Industrial Average Closing Stock Report":
From proximal to distal:
Duodenum
Jejunum
Ileum
Appendix
Colon
Sigmoid
Rectum
Alternatively: to include the cecum, "Dow Jones Industrial Climbing Average Closing Stock Report".
Knowledge Level 1, System: Alimentary
Anonymous Contributor

Bowel components
"Dublin Sisters Ceramic Red Colored Jewelry Apparently Illegal":
2-4 letters of each component:
Duodenum
Sigmoid
Cecum
Rectum
Colon
Jejunum
Appendix
Ileum
Knowledge Level 1, System: Alimentary
Frank Hopkins

Diaphragm apertures
" 3 holes, each with 3 things going through it":
Aortic hiatus: aorta, thoracic duct, azygous vein.
Esophageal hiatus: esophagus, vagal trunks, left gastric vessels.
Caval foramen: inferior vena cava, right phrenic nerve, lymph nodes.
Knowledge Level 1, System: Alimentary
Anonymous Contributor

Diaphragm apertures: spinal levels
Aortic hiatus $=12$ letters $=\mathrm{T} 12$
Oesophagus $=10$ letters $=\mathrm{T} 10$
Vena cava $=8$ letters $=\mathrm{T} 8$
Knowledge Level 1, System: Alimentary
Oriade Adeoye Dept. of Medicine, College of Health Sciences, OAU, Ile-Ife
Duodenum: lengths of parts
"Counting 1 to 4 but staggered":
1st part: 2 inches
2nd part: $\mathbf{3}$ inches
3rd part: 4 inches
4th part: 1 inch
Knowledge Level 5, System: Alimentary
Anonymous Contributor
| Liver inferior markings showing right/left lobe vs. vascular divisions

There's a Hepatic "H" on inferior of liver. One vertical stick of the H is the dividing line for anatomical right/left lobe and the other vertical stick is the divider for vascular halves. Stick that divides the liver into vascular halves is the one with vena cava impression (since vena cava carries blood, it's fortunate that it's the divider for blood halves).
Knowledge Level 5, System: Alimentary
Robert O'Connor University College Dublin


## Meckel's diverticulum details

Hi Yield [ID 72]
2 inches long.
2 feet from end of ileum.
2 times more common in men.
$\mathbf{2} \%$ occurrence in population.
2 types of tissues may be present.
Note: "di-" means "two", so diverticulum is the thing with all the twos.
Knowledge Level 2, System: Alimentary
Robert O'Connor University College Dublin

Murphy's point organ [for Irish]
[ID 61]
"Murphy was an Irishman (and Murphy is a classic Irish surname), and Ireland=green":
Green organ in body is gallbladder, so Murphy's point is the gall bladder.
Knowledge Level 3, System: Alimentary
Robert O'Connor University College Dublin

Aorta vs. vena cava: right vs. left
Hi Yield [ID 2516]
Aorta and right each have 5 letters, so aorta is on the right.
Vena and cava and left each have 4 letters, so vena cava is on the left.
Knowledge Level 1, System: Cardiovascular
Robert O'Connor University College Dublin
Aortic arch: major branch order
"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
[ID 663]
"Send The Lord to Say A Prayer":
From proximal to distal:
Superior thoracic
Thoracacromial
Lateral thoracic
Subscapular
Anterior circumflex humeral
Posterior circumflex humeral
Knowledge Level 3, System: Cardiovascular
Michael A. Chaplin SUNY-HSCB Downstate College of Medicine
"Suzy Thompkins Loves Sex, Alcohol, and Pot":
From proximal to distal:
Superior thoracic
Thoracacromial
Lateral thoracic
Subscapular
Anterior circumflex humeral
Posterior circumflex humeral
Knowledge Level 3, System: Cardiovascular
Karl Boston U. School of Medicine

Axillary artery branches
"Screw The Lawyer S ave A Patient":
Superior thoracic
Thoracoacromiol
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 is medial to biceps tendon
[ID 1577]

## "BAMBI":

Brachial Artery is Medial to Biceps In elbow.
Knowledge Level 1, System: Cardiovascular
Christopher Jordan UAG-EDU

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 $\mathbf{S}$ uperior ulnar collateral artery.
Alternatively: "I Am Pretty S mart".
Knowledge Level 5, System: Cardiovascular
Paul's Boutique Western University College of Osteopathic Medicine of the Pacific
Branches of Internal Iliac Artery
[ID 3160]
"I Love Going Places In My Very Own Underwear":
Ileolumbar
Lateral sacral
Gluteal (superior and inferior)
Pudendal (internal)
Inferior vesicle (uterine in females)
Middle rectal
Vaginal
Obturator
Umbilical
Knowledge Level 5, System: Cardiovascular
Joe and Betsy Sophie Davis School of Medicine

Cardiac valves: order in circuit
[ID 2895]
"TRI berore you BI":
Tricuspid valve is located in left heart and Bicuspid valve is located in right heart. Blood flows through the tricuspid before bicuspid.
Knowledge Level 1, System: Cardiovascular
Chris Gilbreth Cleveland Chiropractic College, Kansas City
Carotid sheath contents

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"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
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## Cavernous sinus contents

Hi Yield [ID 1094]

## O TOM CAT:

O TOM are lateral wall components, in order from superior to inferior.
CA are the components within the sinus, from medial to lateral. CA ends at the level of T from O TOM.
See diagram.
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
Hi Yield [ID 1833]
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 Cause $\mathbf{S}$ agging $\mathbf{S}$ wollen Red Testicles [in men] Living In Sin":
Phrenic [inferior]
Celiac
Superior mesenteric
Suprarenal [middle]
Renal
Testicular ["in men" only]
Lumbars
Inferior mesenteric
Sacral
Knowledge Level 2, System: Cardiovascular
Josser Mt. Sinai Medical School

Descending abdominal aorta: seven divisions
"S ometimes Intestines Get Really Stretched Causing Leakage":
Suprarenals [paired]
Inferior mesenteric
Gonadal [paired]
Renals [paired]
Superior mesenteric
Celiac
Lumbar [paired]
Knowledge Level 2, System: Cardiovascular
Anonymous Contributor

External carotid artery branches

[^0]External carotid artery branches
"S ister Lucy's Powdered Face Often Attracts Silly Medicos":
Before entering the parotid gland:
Superior thyroid
Lingual
Posterior auricular
Facial
Occipital
Ascending pharyngeal
Ends as:
Superficial temporal and
Maxillary bifurcating in the in the parotid gland
Knowledge Level 2, System: Cardiovascular
Dr. Deepu Sudhakaran Dept of Surgery, Royal Adelaide Hospital

External carotid artery branches
"S ome Angry Lady Figured Out PMS":
Superior thyroid
Ascending pharyngeal
Lingual
Facial
Occipital
Posterior auricular
Maxillary
Superificial temporal
Knowledge Level 2, System: Cardiovascular
Anonymous Contributor

External carotid artery branches

## StApLE OPIS

Superior thyroid
Ascending pharyngeal
Lingual
External maxillary (facial)
Occipital
Posterior auricular
Internal maxillary
Superficial temporal
Knowledge Level 2, System: Cardiovascular
Michael S. Florencio, DMD University of Perpetual College of Medicine, Las Pinas, Philippines

[^1]External carotid artery branches
[ID 1030]
"So Long For Acting Old Parenting Means Stability":
Superior thyroid
Lingual
Facial
Ascending pharyngeal
Occiptal
Posterior auricular
Maxillary
Superficial temporal
Knowledge Level 2, System: Cardiovascular
Anonymous Contributor

External carotid artery branches
[ID 1033]
"Some Aggressive Lovers Find Odd Positions More Stimulating":
Superior thyroid
Ascending pharyngeal
Lingual
Facial
Occiptal
Posterior auricular
Maxillary
Superficial temporal
Knowledge Level 2, System: Cardiovascular
Anonymous Contributor

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

External carotid artery branches

[^2]External carotid artery branches
[ID 1799]
"Suzy Always Lays Flat On Pillows Making Sex Terrific":
Superior thyroid
Ascending pharyngeal
Lingual
Facial
Occipital
Posterior auricular
Maxillary
Superificial Temporal
Knowledge Level 2, System: Cardiovascular
Ally-Khan Somani University of Toronto, Faculty of Medicine

External jugular vein: tributaries
PAST:
Posterior external jugular vein
Anterior jugular vein
Suprascapular vein
Transverse cervical vein
Knowledge Level 3, System: Cardiovascular
Dalia Rashdan Ain Shams University School of Dentistry

Female pelvic organs' blood supply
[ID 267]
"3 organs, each get 2 blood supplies":
Uterus: uterine, vaginal.
Rectum: middle rectal, inferior rectal [inferior rectal is the end of pudendal].
Bladder: superior vesical, inferior vesical.
Knowledge Level 2, System: Cardiovascular
Anonymous Contributor

Femoral artery deep branches
[ID 2415]
"Put My Leg Down Please":
Profundus femoris (deep femoral artery)
Medial circumflex femoral artery
Lateral circumflex femoral artery
Descending genicular arteries
Perforating arteries
Knowledge Level 2, System: Cardiovascular
Gene Lee Emory School of Medicine

Femoral hernia: epidemiology
FEMoral hernias are more common in FEMales.
Knowledge Level 1, 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

Femoral triangle: arrangement of nerve, artery, vein
VAN:
From medial to lateral:
Vein
Artery
Nerve
Nerve/Artery/Vein are all called Femoral.
Knowledge Level 1, System: Cardiovascular
Anonymous Contributor

Femoral triangle: contents

## NAVY:

In order from lateral to medial:
Nerve
Artery
Vein
$\mathbf{Y}$ of the groin
Alternatively: Y = Y-fronts [male underwear].
Knowledge Level 1, System: Cardiovascular
Anonymous Contributor

| Heart valve sequence | [ID 1938] |
| :--- | :--- |

## "Try Pulling My Aorta":

Tricuspid
Pulmonary
Mitral
Aorta
Knowledge Level 1, System: Cardiovascular
Michael Franco Melbourne University, Australia

Heart valves
"Toilet Paper My A\$\$":
From right to left:
Tricuspid
Pulmonic
Mitral
Aortic
Knowledge Level 1, System: Cardiovascular
Jim Colburn Indiana University Medical Center
Heart valves: order in circuit
[ID 3053]
"First learn a Tricycle, then learn a Bicycle":
Flow through Tricuspid first, then Bicuspid.
Knowledge Level 1, System: Cardiovascular
Anonymous Contributor
"I Like To Rise So High":
Illiacs
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
[ID 1169]
What Bill admitted to Hilary: "I Milked Our Insatiable Intern's Udders Under the Desk":
Inferior gluteal
Middle rectal
Obturator
Inferior vesical artery
Internal pudendal artery
Umbilical
$\mathbf{U} / \mathbf{D}=$ Uterine artery (female)/ Deferential artery (male)
Knowledge Level 4, System: Cardiovascular
Anonymous Contributor

Internal iliac artery: posterior branch

## PILS:

Posterior branch
Iliolumbar
Lateral sacral
Superior gluteal
Knowledge Level 5, 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
[ID 270]
"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
"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
"MAGdelaine has varicose veins" [The saphenous veins are important for varicose veins]:
Medial maleolus, Anterior to maleolus, and Great saphenous go together.
Then the opposites of these go together: Small saphenous is posterior to the lateral maleolus.
Knowledge Level 3, System: Cardiovascular
Robert O'Connor University College Dublin

Subclavian artery branches
[ID 2451]
"Very Tired Individuals Sip Strong Coffee Served Daily":
Vertebral artery
Thyrocervical trunk
---Inferior thyroid
---Superficial cervical
---Suprascapular
Costocervical
---Superior intercostal
---Deep cervical
Knowledge Level 1, System: Cardiovascular
Gene Lee Emory School of Medicine
Superior thyroid artery branches
"May I S oftly Squeeze Charlie's Girl?":
Muscular
Infrahyoid
Superior laryngeal
Sternomastoid
Cricothyroid
Glandular
Knowledge Level 7, System: Cardiovascular
Anonymous Contributor

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
[ID 662]
"CAlifornia Police Department":
Clavicular
Acromial
Pectoral
Deltoid
Knowledge Level 6, System: Cardiovascular
Michael A. Chaplin SUNY-HSCB Downstate College of Medicine

| Thoracoacromial artery branches | [ID 1207] |
| :--- | :--- |

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

Ulnar nerve to ulnar artery and radial nerve to radial artery relations
Think "peripheral nerves":
The ulnar nerve is "ulnar" to the ulnar artery.
Radial nerve is "radial" to the radial artery.
Knowledge Level 7, System: Cardiovascular
Anonymous Contributor

Thyroid: isthmus location
Hi Yield [ID 97]
"Rings 2,3,4 make the isthmus floor":
Isthmus overlies tracheal rings 2,3,4
Knowledge Level 3, System: Endocrine
Robert O'Connor University College Dublin
Thyroids: relative sizes
[ID 275]
Thyroid looks like a bra (see picture).
Breasts are bigger in women, so thyroid bigger in women.
Pregnant women have biggest breasts of all, so they have the biggest thyroids.
Knowledge Level 7, System: Endocrine
Robert O'Connor University College Dublin


Scalp layers

## SCALP:

From superficial to deep:
Skin
Connective tissue
Aponeurosis
Loose areolar tissue
Pericranium
Knowledge Level 1, System: Integumental
Anonymous Contributor

L- $\mathbf{1}$ goes through hilum of only $\mathbf{1}$ kidney, and it's the Left one.
Knowledge Level 8, System: Kidney/Urine
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

Leino- definition
"Leino" rhymes with "spleen-o":
Therefore leino- means something to do with the spleen.
Knowledge Level 1, System: Lymphoid
Anonymous Contributor

Spleen: dimensions, weight, surface anatomy
"1,3,5,7,9,11":
Spleen dimensions are $\mathbf{1}$ inch $\times \mathbf{3}$ inches $\times \mathbf{5}$ inches.
Weight is $\mathbf{7}$ 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

Thoracic duct: which half of upper body does it drain
[ID 98]
Know drains all of lower body, but was it the right or the left part of the upper body?
Answer: its Lymph from the Left of the upper body.
Knowledge Level 3, System: Lymphoid
Robert O'Connor University College Dublin


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

Adductor magnus innervation
"AM SO!":
Adductor Magnus innervated by $\mathbf{S c}$ ciatic and $\mathbf{O b}$ turator.
Knowledge Level 3, System: Muscle
Robert O'Connor University College Dublin

Anterior forearm muscles: superficial group

There are five, like five digits of your hand.
Place your thumb into your palm, then lay that hand palm down on your other arm, as shown in diagram.
Your 4 fingers now show distribution: spells PFPF [pass/fail, pass/fail]:
Pronator teres
Flexor carpi radialis
Palmaris longus
Flexor carpi ulnaris
Your thumb below your 4 fingers shows the muscle which is deep to the other four: Flexor digitorum
 superficialis.
Knowledge Level 3, System: Muscle
Robert O'Connor University College Dublin

Anterior forearm muscles: superficial group
"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

Biceps brachii muscle: origins
"You walk shorter to a street corner. You ride longer on a superhighway.":
Short head originates from coracoid process.
Long head originates from the supraglenoid cavity.
Knowledge Level 1, System: Muscle
Rommel L. de los Reyes College of Physical Therapy - Pamantasan ng Lungsod ng Maynila (University of the City of Manila)
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
[ID 94]
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
"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

Erector spinae muscles
"I Like S tanding":
From lateral to medial
Illiocostalis
Longissimus
Spinalis
Knowledge Level 7, System: Muscle
Wayne Feder

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

Extensor expansion location in the hand
The eXtensor eXpansion is on the proXimal phalynX.
Knowledge Level 6, System: Muscle
Robert O'Connor University College Dublin

Extrinsic muscles of tongue [for pro soccer fans]
"Paris St. Germain's Hour":
Palatoglossus
Styloglossus
Genioglossus
Hy oglossus
PSG is a French soccer team (foreign), hence extrinsic comes to mind.
Knowledge Level 3, System: Muscle
Evren Tufan Istanbul University Medical Student

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

Femoral triangle: boundaries
[ID 2776]
"So I May Always Love Sally":
Superiorly: Inguinal ligament
Medially: Adductor longus
Laterally: S artorius
Knowledge Level 3, System: Muscle
Anonymous Contributor

## A little rhyme

Superficialis $\mathbf{S}$ plits in two,
To Permit Profundus Passing through.
Knowledge Level 7, System: Muscle
Anonymous Contributor

Hip: lateral rotators
[ID 657]
"Piece Goods Often Go On Quilts":
Piriformis
Gemellus superior
Obturator internus
Gemellus inferior
Obturator externus
Quadratus femoris
Knowledge Level 4, System: Muscle
Anonymous Contributor

Hip: lateral rotators
"Play Golf Or Go On Quaaludes":
From top to bottom:
Piriformis
Gemellus superior
Obturator internus
Gemellus inferior
Obturator externus
Quadratus femoris
Alternatively: "P-GO-GO-Q".
Knowledge Level 4, System: Muscle
Lior Greenberg Technion Faculty of Medicine, Haifa, Israel

Interossei muscles: actions of dorsal vs. palmar in hand
"PAd and DAb":
The Palmar Adduct and the Dorsal Abduct.
Use your hand to dab with a pad.
Knowledge Level 5, System: Muscle
Dr. Atif Farooq and Anonymous Contributor Rawalpindi Medical College, Pakistan and Not Specified

Interossei muscles: number of palmars vs. dorsals
" $\mathbf{3}$ on the $\mathbf{P}, \mathbf{4}$ on the Dor":
There are $\mathbf{3}$ Palmar, and $\mathbf{4}$ Dorsal interossei.
Knowledge Level 7, System: Muscle
Robert O'Connor University College Dublin

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 digiti minimi
Flexor digiti minimi
Abductor digiti minimi
Knowledge Level 4, System: Muscle
Anonymous Contributor

Second letter rule for inversion/eversion:
Eversion muscles:
pErineus longus
pErineus brevis
pErineus terius
Inversion muscles:
tIbialis anterior
tIbialis posterior
Knowledge Level 6, System: Muscle
Robert O'Connor University College Dublin

Leg: anterior muscles of leg
"Tom's Hairy ANd Dirty Penis":
T: Tibialis anterior
H: extensor Hollicis longus
AN: anterior tibial Artery \& deep fibular Nerve
D: extensor Digitorum longus
P: Peronius tertius [aka fibularis tertius]
Knowledge Level 1, System: Muscle
Anonymous Contributor

Leg: anterior muscles of leg
"The Hospitals Are Not Dirty Places":
T: Tibialis anterior
H: extensor Hallucis longus
A: anterior tibial Artery
N: deep fibular Nerve
D: extensor Digitorum longus
P: Peronius tertius [aka fibularis tertius]
Knowledge Level 1, System: Muscle
Hemant Ekbote/Amit Dixit Mgm's medical college India
Lower limb peripheral nerve injurys
Hi Yield [ID 2175]
"Drop into a DEeP PIT and shuffle your way out":
Foot Drop results from Dorsiflexors and Evertors paralysis, due to common Peroneal nerve lesion.
Plantarflexion and Inversion impairment due to Tibial nerve lesion, results in a shuffling gait.
Knowledge Level 1, System: Muscle
Monica Therese Cating University of the Philippines College of Medicine

Lumbricals action
[ID 5]
Lumbrical action is to hold a pea, that is to flex the metacarpophalangeal joint and extend the interphalangeal joints. When look at hand in this position, can see this makes an "L" shape, since $\mathbf{L}$ is for $\mathbf{L u m b r i c a l}$.
Knowledge Level 4, System: Muscle
Robert O'Connor University College Dublin

Muscles: potentially absent ones
[ID 1291]

Muscles which may be absent but may be important:
5 P's:
Palmaris longus [upper limb]
Plantaris [lower limb]
Peroneus tertius [lower limb]
Pyramidalis [anterior abdominal wall]
Psoas minor [posterior abdominal wall]
Knowledge Level 3, System: Muscle
Shebrain Cairo University

Oblique muscles: direction of externals vs. internals
[ID 57]
"Hands in your pockets":
When put hands in your pockets, fingers now lie on top of external obliques and fingers point their direction of fibers: down and towards midline.

Note: "oblique" tells that must be going at an angle.
Internal obliques are at right angles to external.
Knowledge Level 1, System: Muscle
Anonymous Contributor

Plantarflexion vs. dorsiflexion
Plantar flexion occurs when you squish a Plant with your foot.
Knowledge Level 1, System: Muscle
Anonymous Contributor

Popliteal fossa: medial to lateral arrangment
[ID 2747]
"Serve And Volley Next Ball":
Semimembranosus/ Semitendonosus
Artery
Vein
Nerve
Biceps femoris
Lateral and medial heads of Gastrocnemius are inferior borders.
Knowledge Level 3, System: Muscle
Tympany W. Quintosh Saba University School of Medicine
Popliteal fossa: muscles arrangement
The two Semi's go together, Semimembranosus and Semitendonosus.
The Membranosus is Medial and since the two semis go together, Semitendonosus 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
Psoas major: innervation
[ID 1090]
If you hit L2, 3, 4
Psoas gets sore!
Knowledge Level 2, System: Muscle
Usman Ahmad KMC

Pterygoid muscles: function of lateral vs. medial
"Look at how your jaw ends up when saying first syllable of 'Lateral' or 'Medial' ":
"La": your jaw is now open, so Lateral opens mouth.
"Me": your jaw is still closed, so medial closes the mandible.
Knowledge Level 4, System: Muscle
Robert O'Connor University College Dublin
"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.

Anne Conlin and Robert O'Connor University of Western Ontario Medical School, London, Canada and University College Dublin

Serratus anterior: innervation
[ID 547]
SALT:
Serratus Anterior = Long Thoracic.
Knowledge Level 2, System: Muscle
Erin B. Dominiak Loyola University Chicago Stritch School of Medicine

Serratus anterior: innervation and action
Hi Yield [ID 25]
"C5-6-7 raise your arms up to heaven":
Long thoracic nerve roots (567) innervate Serratus anterior.
Test C567 roots clinically by ability to raise arm past 90 degrees.
Knowledge Level 2, System: Muscle
Anonymous Contributor

Soleus vs. gastrocnemius muscle function
"Stand on your Soles. Explosive gas":
You stand on soles of your shoes, so Soleus is for posture.
Gasoline is explosive, so Gastrocnemius is for explosive movement.
Knowledge Level 3, System: Muscle
Robert O'Connor University College Dublin

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

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

Ansa cervicalis nerves
"GHost THought SO meone STupid SHot Irene":
Geniohyoid
Thyrohyoid
Superior Omohyoid
Sternothyroid
Sternohyoid
Inferior omohyoid
Knowledge Level 6, System: Nervous
Anonymous Contributor

Autonomics to the gut
"The PARAsympathetics follow a rule of TWO" [pair = two]:
The vagus does the top, the sacral splanchnics the outflow tract.
"The sympathetics follow a rule of threes":
Greater, lesser, least splanchnic nerves go to the celiac,superior and inferior mesenteric ganglion.
Knowledge Level 2, System: Nervous
Anonymous Contributor

Bell's palsy: symptoms
Hi Yield [ID 1943]

## BELL'S Palsy:

Blink reflex abnormal
Earache
Lacrimation [deficient, excess]
Loss of taste
Sudden onset
Palsy of VII nerve muscles
All symptoms are unilateral.
Knowledge Level 4, System: Nervous
Robert O'Connor University College Dublin

Brachial plexus branches
Hi Yield [ID 135]
"My Aunt Raped My Uncle": From lateral to medial:
Musculocutaneous
Axillary
Radial
Median
Ulnar
Knowledge Level 1, System: Nervous
Anonymous Contributor

Brachial plexus organization
Hi Yield [ID 580]
"The Castrated Dog Turns Rabid":
From lateral to medial:
Terminal branches
Cords
Divisions
Trunks
Roots
Knowledge Level 1, System: Nervous
Chip Louisiana State University Medical Center
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
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

Brachial plexus: numbers of each section
Hi Yield [ID 2741]
It is the same backwards and forwards:
5-3-2-3-5:
5 Rami
3 Trunks
2 Divisions
3 Cords
5 Terminal nerves
Knowledge Level 1, System: Nervous
Melissa L. Toth UMDNJ School of Osteopathic Medicine, Stratford, NJ

Buttock quadrant safest for needle insertion
Hi Yield [ID 14]
"Shut up and butt out":
The Upper Outer quadrant of the Buttock safely avoids hitting sciatic nerve.
Knowledge Level 2, System: Nervous
Anonymous Contributor

Carpal tunnel syndrome causes
Hi Yield [ID 126]
MEDIAN TRAP:
Myxoedema
Edema premenstrually
Diabetes
Idiopathic
Agromegaly
Neoplasm
Trauma
Rheumatoid arthritis
Amyloidosis
Pregnancy
Mnemonic fits nicely since median nerve is trapped.
Knowledge Level 4, System: Nervous
Anonymous Contributor

Carpal tunnel syndrome: causes
TRAMP:
Trauma (occupational)
Rheumatiod arthritis
Acromegaly
Myxoedema
Pregnancy
Alternatively: ARMPIT to include Idiopathic.
Knowledge Level 3, System: Nervous
Isae Kilonzo University College Cork, Ireland
"GLAST":
4 compass points: clockwise from north on the right side of neck:
Great auricular
Lesser occipital
Accessory nerve pops out between L and S
Supraclavicular
Transverse cervical See diagram.


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

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

"Imagine someone making the facial expression to say 'PSS...' ":
Facial expression muscles
Posterior belly of digastric
Stapedius
Stylohyoid
Knowledge Level 3, System: Nervous
Christian Erickson Duke University

Deep tendon reflexes: root supply
Hi Yield [ID 185]
"1,2,3,4,5,6,7,8":
S1-2: ankle
L3-4: knee
C5-6: biceps, supinator
C7-8: triceps
Knowledge Level 2, System: Nervous
Anonymous Contributor

## Deep tendon reflexes: root supply

Hi Yield [ID 550]
God designed body reflexes according to a nursery rhyme:
One, two-- buckle my shoe. Three, four-- kick the door. Five, six-- pick up sticks. Seven, eight-- shut the gate.
S1,2 = ankle jerk
L3,4 = knee jerk
C5,6 $=$ biceps and brachioradialis
C7,8 $=$ triceps
Knowledge Level 2, System: Nervous
Bryan Traynor Massachussetts General Hospital and Brigham and Women's Hospital, Boston, USA

Dermatome C6 location
Hi Yield [ID 91]
Stick arm out like crucifixion stance. Curl your thumb and forefinger into an "OK" symbol while keeping your other fingers straight.
Your hand should now look like a 6 shape.
So C6 dermatome is your thumb and top of arm (reason for crucifix stance).
See diagram.
Knowledge Level 5, System: Nervous
Anonymous Contributor


Dermatome C7 location
Hi Yield [ID 568]
C7 gives the finger to heaven (as in middle finger).
Knowledge Level 5, System: Nervous
Jules Bristol University

Diaphragm innervation
Hi Yield [ID 23]
"3, 4, 5 keeps the diaphragm alive":
Diaphragm innervation is cervical roots $\mathbf{3}, \mathbf{4}$, and 5 .
Knowledge Level 1, System: Nervous
Michael Nawfal

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


Extraocular muscles cranial nerve innervation
Hi Yield [ID 572]

## "LR6SO4 rest 3":

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

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

Face muscles: large muscle groups' cranial innervation
Mandibular nerve: Mastication.
Facial nerve: Facial expression.
Knowledge Level 1, System: Nervous
Anonymous Contributor

Facial nerve branches
[ID 825]
"Two Zombies Buggered My Cat":
From superior to inferior:
Temporal branch
Zygomatic branch
Buccal branch
Mandibular branch
Cervical branch
Alternatively: "Two Zulus Bit My Cat".
Alternatively: "Two Zebras Bit My Coccyx".
Alternatively: "To Zanzibar By Motor Car".
Alternatively: "Tall Zulus Bear Many Children".
Knowledge Level 1, System: Nervous
Anonymous Contributor and Rohan hall Universtiy of Otago, NZ and Anatomist

## Facial nerve: branches after Stylomastoid foramen

[ID 863]
"Ten Zulus Buggered My Cat (Painfully)":
From superior to inferior:
Temporal branch
Zygomatic branch
Buccal branch
Mandibular branch
Cervical branch
(Posterior auricular nerve)
Alternatively: "PAssing Through Zanzibar By Motor Car" (PA for Posterior Auricular).


Knowledge Level 1, System: Nervous
Stephan Sanders and Kris Downing Nottingham Medical School, UK and UCR/UCLA Biomedical Sciences Program, USA

SPAM:
Sunken eyeballs/ Symphathetic plexus (cervical) affected
Ptosis
Anhydrosis
Miosis
Knowledge Level 1, System: Nervous
Samuel Atom Baek-Kim

Horner's syndrome components
"HORNy PAM"
Horner's is:
Ptosis
Anhidrosis
Miosis
Knowledge Level 1, System: Nervous
Ocean University of Texas Medical Branch
Lacrimal nerve course
[ID 757]
"Lacrimal's story of 8 L's":
Lacrimal nerve runs on Lateral wall of orbit above Lateral rectus, then Lets communicating branch join in, then supplies Lacrimal gland, then
Leaves it and supplies Lateral upper eye Lid!
Knowledge Level 4, System: Nervous
Usman Ahmad KMC

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 Get Laid On Fridays":
Iliohypogastric [L1]
Ilioinguinal [L1]
Genitofemoral [L1, L2]
Lateral femoral cutaneous [L2, L3]
Obtruator [L2, L3, L4]
Femoral [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 $\mathbf{2}$ 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

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

## Median nerve: hand muscles innervated

"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
[ID 86]
The Median nerve is the Middle of a giant capital "M" formed by the musculocutaneous and ulnar nerves. Knowledge Level 2, System: Nervous
Robert O'Connor University College Dublin


Palmaris longus: location, relative to wrist nerves
[ID 125]
"The Palmaris between two Palmars":
Palmaris longus is between the Palmar cutaneous branch of Ulnar nerve and Palmar cutaneous branch of Median nerve.
Knowledge Level 7, System: Nervous
Robert O'Connor University College Dublin


Pectoral nerves: path of lateral vs. medial
"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 sphicter, 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 Puts it up. Sympathetic Spurts it out".
Alternatively: "Point and $\mathbf{S}$ hoot": Parasympathetic Points it, $\mathbf{S}$ ympathetic $\mathbf{S}$ hoots out the semen.
Erection and Ejaculation (Emission).
Knowledge Level 2, System: Nervous
Andrew J. Vasil and John Nguyen University of Minnesota School of Medicine and University of Texas Medical Branch at Galveston

Radial nerve: muscles innervated
[ID 1184]
"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.Digiti minimi
ext. Carpi ulnaris
Abductor poll. longus
ext. 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)
Knowledge Level 6, System: Nervous
Anonymous Contributor Medical College of Ohio

Radial nerve: muscles supplied (simplified)
"BEST muscles":
Brachioradialis
Extensors
Supinator
Triceps
Knowledge Level 1, System: Nervous
Anonymous Contributor

Scalp: nerve supply
GLASS:
Greater occipital/ Greater auricular
Lesser occipital
Auriculotemporal
Supratrochlear
Supraorbital
Knowledge Level 5, System: Nervous
Anonymous Contributor

Spinal cord: length in vertebral column
Hi Yield [ID 1040]

## SCULL:

Spinal Cord Until L2 (LL).
Knowledge Level 3, System: Nervous
Lior Greenberg Technion Faculty of Medicine, Haifa, Israel
Thigh: innervation by compartment

[^3]Trigeminal nerve: where branches exit skull
Hi Yield [ID 38]
"Standing Room Only":
Superior orbital fissure is V1
foramen Rotundum is V2
foramen $\mathbf{O}$ vale is V3
Knowledge Level 1, System: Nervous
Anonymous Contributor

## V3 innervated muscles

"My A\$\$ Meets The Toilet":
Mylohyoid
Anterior digastric
Muscles of Mastication
Tensor veli palatini
Tensor tympani
Knowledge Level 2, System: Nervous
Anonymous Contributor

V3 innervated muscles (branchial arch 1 derivatives)
Hi Yield [ID 304]
"M.D. My TV":
Mastication [masseter, temporalis, pterygoids]
Digastric [anterior belly]
Mylohyoid
tensor Tympani
tensor Veli palatini
Knowledge Level 2, System: Nervous
Christian Erickson Duke University

## V3: sensory branches

"Buccaneers Are Inferior Linguists":
Buccal
Auriculotemporal
Inferior alveolar
Lingual
Knowledge Level 5, System: Nervous
Jennifer Chuang University of Vermont School of Medicine

Vagal nerve: path into thorax
Vagus nerve, unlike phrenic, continues through diaphragm with esophagus--it is "Not Left Behind":
The left vagus is anterior, right is posterior [behind].
Knowledge Level 4, System: Nervous
Anonymous Contributor University of Arizona College of Medicine

Vagus nerve: path into thorax
"I Left my Aunt in Vegas":
Left Vagus nerve goes Anterior descending into the thorax.
Knowledge Level 4, System: Nervous
Anonymous Contributor

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


Ankle: anterior compartment of leg contents
[ID 1257]
"The Hamptons Are Never Dull Parties":
From medial malleolus:
Tibialis anterior tendon
(Extensor) Hallacus longus
Artery (anterior tibial)
Nerve (deep peroneal)
(Extensor) Digitorum
Peroneus tertius
Knowledge Level 3, System: Other/Miscellaneous
Jonhs Hopkins Class of 2004

Cubital fossa contents

## "N-MAN":

From lateral to medial:
Nerve
Muscle
Artery
Nerve
Specifics are radial Nerve, biceps Muscle tendon, brachial Artery, median Nerve.
Knowledge Level 2, System: Other/Miscellaneous
Peter Stefanides University College Dublin
Cubital fossa contents
"My Bottoms Turned Red":
From medial to lateral:
Median nerve
Brachial artery
Tendon of biceps
Radial nerve
Knowledge Level 2, System: Other/Miscellaneous
Dell Piero University Malaya Medical School, Malaysia
Cubital fossa contents
[ID 1271]
"Really Need Booze To Be At My Nicest":
From lateral to medial:
Radial Nerve
Biceps Tendon
Brachial Artery
Median Nerve
Knowledge Level 2, System: Other/Miscellaneous
Anonymous Contributor


Cubital fossa contents

## MBBR:

From medial to lateral:
Median nerve
Brachial artery
Biceps tendon
Radial nerve
Knowledge Level 2, System: Other/Miscellaneous
Dr. Atif Farooq Rawalpindi Medical College, Pakistan

Diaphram aperatures: spinal levels
Hi Yield [ID 2657]
"Come Enter the Abdomen:
Vena Cava [8]
Esophagus [10]
Aorta [12]
Knowledge Level 2, System: Other/Miscellaneous
Phillip Snider (originally by Sherry Roles) Med student: Arizona College of Osteopathic Med

Hand: nerve lesions
Hi Yield [ID 3262]

## DR CUMA:

Drop=Radial nerve
Claw=Ulnar nerve
Median nerve=Ape hand (or Apostol [preacher] hand)
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: $2 \mathbf{T s}$ :
Transversalis fascia
conjoint Tendon
Knowledge Level 1, System: Other/Miscellaneous
Miruna Segarceanu UMF Carol Davila, Bucharest, Romania

Internal pudendal branches
"I Pee Pee But Don't Dump!":
Inferior rectal
Posterior scrotal (or labial)
Perineal
Bulb
Deep artery
Dorsal artery
Knowledge Level 4, System: Other/Miscellaneous
Anonymous Contributor

Little INtroVERted boys roll their feet in when talking to girls.
Also, can just watch which way the sole of the foot goes: does it face in or out? See diagram.
Knowledge Level 2, System: Other/Miscellaneous
Robert O'Connor University College Dublin

L4 landmark: 2 items
[ID 186]
"B4U" [before you]:
Bifurcation of aorta
L4
Umbilicus
Knowledge Level 2, System: Other/Miscellaneous
Anonymous Contributor

Mediastinums: posterior mediastinum structures
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

Obturator canal: relations of structures
"Who's flying in the top of Obturator canal? Obviously Not A Vein!":
Obturator
Nerve
Artery
Vein
Knowledge Level 2, System: Other/Miscellaneous
Usman Ahmad KMC

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

Retroperitoneal organs (major)
[ID 1676]
"AC/DC Rocker Kids Party Down":
Ascending Colon
Descending Colon
Rectum
Kidneys
Pancreas
Duodenum
Knowledge Level 1, System: Other/Miscellaneous
Anonymous Contributor

## SAD PUCKER:

Suprarenal glands
Aorta \& IVC
Duodenum (half)
Pancreas
Ureters
Colon (ascending \& descending)
Kidneys
Esophagus (anterior \& left covered)
Rectum
Knowledge Level 2, System: Other/Miscellaneous
Ron Norman AECC

Superior mediastinum contents
"BATS \& TENT":
Brachiocephalic veins
Arch of aorta
Thymus
Superior vena cava
Trachea
Esophagus
Nerves (vagus \& phrenic)
Thoracic duct
Knowledge Level 2, System: Other/Miscellaneous
Sumeet Verma East Carolina University SOM

Superior mediastinum: contents

## 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

Know SUPination is your hand while carrying a bowl of SOUP. Your face follows where your palm is facing [i.e. up]. Put a handpuppet on your hand while hand is in supination and the puppet will be the supine position.
See diagram.
Knowledge Level 1, System: Other/Miscellaneous
Robert O'Connor University College Dublin


Supine vs. prone body position
"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

[^4]
## Bronchi: which one is more vertical

Hi Yield [ID 12]
"Inhale a bite, goes down the right":
Inhaled objects more likely to lodge in right bronchus, since it is the one that is more vertical.
Knowledge Level 4, System: Pulmonary
Robert O'Connor University College Dublin


Bronchopulmonary segments of right lung
[ID 1049]
"A PALM Seed Makes Another Little Palm":
In order from superior to inferior:
Apical
Posterior
Anterior
Lateral
Medial
Superior
Medial basal
Anterior basal
Lateral basal
Posterior basal
Knowledge Level 7, System: Pulmonary
Derek Bell University of Queensland
Bronchopulmonary segments of the left lung
[ID 1782]
"Astute Anatomists Share Inside Secrets About Lungs":
Apicoposterior (S1+2)
Anterior (S3)
Superior (S4)
Inferior (S5)
Superior (S6)
Anteromedial basal (S7+8)
Lateral basal (S9)
Knowledge Level 7, System: Pulmonary
Gregory Allen Loma Linda University

Cricoarytenoids: abductor vs. adductor
Hi Yield [ID 2610]
When aliens abduct you, they Probe you.
Posterior cricoarytenoids abduct. Lateral therefore is adduct by default.
Knowledge Level 1, System: Pulmonary
Anonymous Contributor

Horner's syndrome: components
Hi Yield [ID 2829]
PAM:
Ptosis
Anhydrosis
Miosis
Knowledge Level 1, System: Pulmonary
C. Lu University of Glasgow

## Lingula is on Left.

The lingula is like an atrophied lobe, so the left lung must have 2 "other" lobes, and therefore right lung has 3 lobes.
Knowledge Level 1, System: Pulmonary
Teresa Myers Student, UNC

Lung lobes: segments of right middle lobe
"ML=ML":
Segments of Middle Lobe are Medial \& Lateral.
Knowledge Level 8, System: Pulmonary
Anonymous Contributor

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

Pleura surface markings
Hi Yield [ID 123]
"All the even ribs, in order: $\mathbf{2 , 4 , 6 , 8 , 1 0 , 1 2}$ show its route":
Rib2: sharp angle inferiorly
Rib4: the left pleura does a lateral shift to accommodate heart
Rib6: both diverge laterally
Rib8: midclavicular line
Rib10: midaxillary line
Rib12: the back
See diagram.
Knowledge Level 2, System: Pulmonary
Anonymous Contributor

Tonsils: The three types
"PPL (people) have tonsils":
Pharyngeal
Palatine
Lingual
Knowledge Level 3, System: Pulmonary
Anonymous Contributor

Voicebox: names of parts in sagittal cross-section
[ID 117]
"There's 3 V's in your Voicebox":
Vestibular fold
Ventricle
Vocal fold
Note: Vestibular and Vocal cord also known as false and true cords respectively. Knowledge Level 5, System: Pulmonary
Robert O'Connor University College Dublin


Anteflexed vs. anteverted: what bodypart each describes

[^5]Broad ligament: contents

## BROAD:

Bundle (ovarian neurovascular bundle)
Round ligament
Ovarian ligament
Artefacts (vestigial structures)
Duct (oviduct)
Knowledge Level 1, System: Reproductive
David Colbert UWA Medicine

Scrotum layers
[ID 666]
"Some Damn Englishman Called It The Testis":
From superficial to deep:
Skin
Dartos
External spermatic fascia
Cremaster
Internal spermatic fascia
Tunica vaginalis
Testis
Knowledge Level 2, System: Reproductive
Anonymous Contributor

Scrotum layers
[ID 1227]
"S ome Days Eddie Can Irritate People Very Thourougly":
Skin
Dartos layer
External spermatic fascia
Cremaster muscle
Internal spermatic fascia
Parietal tunica vaginalis
Visceral tunica vaginalis
Tunica albuginea
Knowledge Level 2, System: Reproductive
Eddie Amores Columbia University
Sperm pathway through male reproductive tract

## SEVEN UP:

Seminiferous tubules
Epididymis
Vas deferens
Ejaculatory duct
Nothing
Urethra
Penis
Knowledge Level 2, System: Reproductive
Ken Evans Saskatchewan Health, Acute and Emergency Services

Sperm pathway through male reproductive tract

## "STaRT DEEP--VD!":

Sperm duct system progression, from smallest to largest:
ST: Seminiferous Tubules
RT: Rete Testes
DE: Ductus Efferentes
EP: Epididymis
VD: Vas Deferens
Knowledge Level 2, System: Reproductive
Lior Greenberg and Tomer Maoz Technion Faculty of Medicine, Haifa, Israel
"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
" $\mathbf{3}$ arteries, $\mathbf{3}$ nerves, $\mathbf{3}$ other things":
$\mathbf{3}$ arteries: testicular, ductus deferens, cremasteric.
3 nerves: genital branch of the genitofemoral, cremasteric, autonomics.
3 other things: ductus deferens, pampiniform plexus, lymphatics.
Note some argument about this: Moore doesn't put in cremasteric nerve, Lumley puts in inguinal...
Knowledge Level 2, System: Reproductive
Anonymous Contributor

Spermatic cord contents
[ID 926]
"Piles Don't Contribute To A Good Sex Life":
Pampiniform plexus
Ductus deferens
Cremasteric artery
Testicular artery
Artery of the ductus deferens
Genital branch of the genitofemoral nerve
Sympathetic nerve fibers
Lymphatic vessels
Knowledge Level 2, System: Reproductive
TR Columbia PandS

Arm fractures: nerves affected by humerus fracture location
ARM fracture:
From superior to inferior:
Axillary: head of humerus
Radial: mid shaft
Median: supracondular
Knowledge Level 1, System: Skeletal
Ritesh Patel M.D.

Carpal bone having the hook
The Hamate has the Hook.
Knowledge Level 3, System: Skeletal
Anonymous Contributor

Carpal bones
"Scottish Lads Take Prostitutes To The Caledonian Hotel":
Proximal row, then distal row:
Scaphoid
Lunate
Triquetrium
Pisiform
Trapezium
Trapezoid
Capate
Hamate
Alternatively: "Students Like Taking Prostitutes To The Carelton Hotel".
Knowledge Level 1, System: Skeletal
Fred Reid Undergrad at St-Andrews, UK
"She Looks Too Pretty; Try To Catch Her":
Proximal row then distal row, both lateral-to-medial:
Scaphoid
Lunate
Triquetrium
Pisiform
Trapezium
Trapezoid
Capate
Hamate
Alternatively: "She Likes To Play; Try To Catch Her".
Knowledge Level 1, System: Skeletal
Anurag Gupta Dept of Surgery, Royal Adelaide Hospital, Australia
Carpal bones
[ID 384]
"She Licks Toms Prick; Her Cu*t's Too Tight":
Scaphoid
Lunate
Triquetrum
Pisiform
Hamate
Capitate
Trapezoid
Trapezium
Knowledge Level 1, System: Skeletal
Anonymous Contributor

Carpal bones
[ID 414]
"Some Lovers Try Positions That They Can't Handle":
Proximal row then distal row, both lateral-to-medial:
Scaphoid
Lunate
Triquetrium
Pisiform
Trapezium
Trapezoid
Capate
Hamate
Alternatively: "S cared Lovers..."
Alternatively: "Senior Lecturers...".
Knowledge Level 1, System: Skeletal
Jason Mounts and Anonymous Contributor Medical College of Georgia and Cambridge
Carpal bones
"Her C\#nt's Too Tight So Lubricate The Penis": Anticlockwise:
Hamate
Capate
Trapezoid
Trapezium
Scaphoid
Lunate
Triquetral
Pisiform
Knowledge Level 1, System: Skeletal
Dr. Smirkenheimer Viewbank University
"Happy Cat Tom Took Pie To Little Sister":
Hamate
Capitate
Trapezoid
Trapezium
Pisiform
Triquital
Lunate
Scaphoid
Knowledge Level 1, System: Skeletal
Nirab Kayastha Chuvash State University Medical Institute, Russia
Carpal bones ..... [ID 552]
"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
[ID 1162]
"The boat sailed to the moon with $\mathbf{3} \mathbf{p E a s}$ in a rOw, at the wheel was Captain Hook":
Carpal bones in order of occurrence:
Boat is scaphoid. Moon is lunate. 3 is triquetrum. Peas is pisiform (stressing the E sound for trapezium). Row is trapezoid (stressing the O for trapezOid). Captain is capitate. Hook is hamate (hamate has the hook).
Knowledge Level 1, System: Skeletal
Caoimhín P. Connell Industrial Hygienist

Carpal bones (multangular names)
[ID 1791]
"Never Lower Tillie's Pants. Mother May Come Home.":
Navicular
Lunate
Triquetrium
Pisiform
greater Multangular (trapezium)
lesser Multangular (trapezoid)
Capitate
Hamate
Knowledge Level 1, System: Skeletal
Martin Herman Le Bonheur Children's Medical Center

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
"So Long To Pinky, Here Comes The Thumb":
Proximal row, lateral-to-medial, then distal row, medial-to-medial:
Scaphoid
Lunate
Triquetrium
Pisiform
Hamate
Capate
Trapezoid
Trapezium
Knowledge Level 1, System: Skeletal
Anonymous Contributor
Carpum and tarsum
[ID 567]
"SCIT":
(Artum) S uperior Carpum
(Artum) Inferior Tarsum
Knowledge Level 1, System: Skeletal
Michelangelo Penzo Cardiology Dept, Vicenza Hospital - Italy
Cartilage derivatives of 1st pharyngeal arch (mandibular)
"I'M 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
"Old Pygmies From Thailand Eat Skulls":
Occipital
Parietal
Frontal
Temporal
Ethmoid
Sphenoid
Note: 'skull-eating pygmies' helps remind that mnemonic is for the skull.
Alternatively: "Old People From Texas Eat Spiders".
Alternatively: "Prostitutes Offer Free Sex To Everyone".
Knowledge Level 1, System: Skeletal
Anonymous Contributor

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
Cranial bones

[^6]Frontal
Parietal
Occipital
Temporal
Sphenoid
Ethmoid
Knowledge Level 1, System: Skeletal
Frank Hopkins
$\begin{array}{ll}\text { Cruciate ligaments: insertions } & \text { Hi Yield [ID 2081] }\end{array}$

## PAMS APPLES:

Posterior [passes] Anterior [inserts] Medially.
Anterior [passes] Posteriorly [inserts] Laterally.
Knowledge Level 1, System: Skeletal
Anonymous Contributor

Elbow joint: capitulum vs. trochlea
[ID 3259]
CUTER:
Capitulum: Ulnar
Trochlea: Radial
Knowledge Level 1, System: Skeletal
Anonymous Contributor

Elbow joint: radius vs. ulna ends
[ID 2936]
CRAzy TULips:
Capitalum = ULnar
Trochlear = RAdius
Knowledge Level 1, System: Skeletal
Borum Suh

Facial bones
[ID 535]
"Virgil Can Not Make My Pet Zebra Laugh!":
Vomer
Conchae
Nasal
Maxilla
Mandible
Palatine
Zygomatic
Lacrimal
Knowledge Level 3, System: Skeletal
Rita Warren State University of New York

Fibula vs. tibia: which is the bigger one
People talk of telling just a "little white lie", or a "little fib":
Therefore, the fibula is smaller.
Alternatively: TIBia is the Thicker Inner Bone.
Alternatively: "Little lat FIB, big fat TIB".
Knowledge Level 1, System: Skeletal
Dr. Rabiddrashikys and Robert O'Connor UWCM and University College Dublin

Foramen ovale contents

## MALE:

Mandibular nerve
Accessory meningeal artery
Lesser petrosal nerve
Emissary veins
Alternatively: also include Motor root of Trigeminal and Middle meningeal vein under ' $\mathbf{M}$ '.
Knowledge Level 6, System: Skeletal
Dr. Rajesh Gadhiya and Dalia Rashdan Not Specified and Ain Shams University School of Dentistry

Foramen ovale contents
[ID 1743]
OVALE:
Otic ganglion (just inferior)
V3 cranial nerve
Accessory meningeal artery
Lesser petrosal nerve
Emissary veins
Knowledge Level 6, System: Skeletal
Syukree UKM

Foramen spinosum: location on base of skull
[ID 66]
Foramen spinosum is adjacent to the spine of sphenoid.
Knowledge Level 4, System: Skeletal
Robert O'Connor University College Dublin

Genu valgum vs. genu vargum
Hi Yield [ID 2187]
Genu 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
Hi Yield [ID 2771]
Colle's fracture: arm in fall position makes a ' $\mathbf{C}$ ' shape.
$\mathbf{S}$ mith's fracture: arm in fall position makes a ' $\mathbf{S}$ ' shape.
See diagram.
Knowledge Level 1, System: Skeletal
Soichiro Fushimi Okayama University Medical School, Japan


Hip posterior dislocation: most likely arrangement for one
"Hitting the brake pedal before the accident":
You are sitting, so hip is flexed, and adducted and medially rotated so can move your foot away from the gas pedal over to the brake pedal. Note: car accidents are most likely cause of posterior dislocation because in this position.
Knowledge Level 8, System: Skeletal
Anonymous Contributor

Hyoid bone: muscle attachments
"Christ, He Didn't Screw Girls Much. That's Obvious, Stupid":
The first sentence is for 6 muscles attaching superiorly, the second sentence is for 3 muscles attaching inferiorly.
Both sentences are in order from lateral to medial:
Constricter (middle)
Hyoglossus
Digastric
Stylohyoid
Geniohyoid
Myloyoid
Thyrohyoid
Omohyoid

Sternohyoid
Knowledge Level 5, System: Skeletal
Anonymous Contributor

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-sternal.
Knowledge Level 1, System: Skeletal
Anonymous Contributor

Lordosis vs. kyphosis
[ID 395]
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
"Tom, Dick, And Nervous Harry":
From anterior to posterior:
Tibialis
Digitorum
Artery
Nerve
Hallicus
Full names for these are: Tibialis Posterior, Flexor Digitorum Longus, Posterior Tibial Artery, Posterior Tibial Nerve, Flexor Hallicus Longus. Alternatively: "Tom, Dick ANd Harry".
Alternatively: "Tom, Dick And Not Harry".
Knowledge Level 3, System: Skeletal
Deepa S. and LCK Medical student and University of Ottawa

Menisci attachments in knee
[ID 279]
"Each meniscus has something attached to it":
The medial meniscus has the medial collateral ligament.
The lateral meniscus is attached to the popliteal muscle.
Knowledge Level 6, System: Skeletal
Anonymous Contributor
Navicular contacts 3 of 5 cuneiform bones
[ID 30]
"Navicular is like the Navigator logo":
There are 3 things coming off each.
See diagram.
Therefore, cuboid has to contact 2 of the 5 .
Knowledge Level 6, System: Skeletal
Robert O'Connor University College Dublin


Orbit: bones of medial wall
[ID 655]
"My Little Eye Sits in the orbit":
Maxilla (frontal process)
Lacrimal
Ethmoid
Sphenoid (body)
Knowledge Level 7, System: Skeletal
Usman Ahmad
"Every Potential Anatomist Should Know When"
When they ossify, in order of increasing year:
Elbow: 16 years
Pelvis, Ankle: 17 years
Shoulder, Knee: 18 years
Wrist: 19 years
Knowledge Level 4, System: Skeletal
Saurabh Sikka

Rib costal groove: order of intercostal blood vessels and nerve
VAN:
From superior to inferior:
Vein
Artery
Nerve
Knowledge Level 2, System: Skeletal
Anonymous Contributor

Superior orbital fissure: structures passing through
[ID 42]
"Lazy French Tarts Lie Naked In Anticipation Of Sex":
Lacrimal nerve
Frontal nerve
Trochlear nerve
Lateral nerve
Nasociliary nerve
Internal nerve
Abducens nerve
Ophthalmic veins
Sympathetic nerves
Knowledge Level 4, System: Skeletal
Anonymous Contributor

| Superior orbital fissure: structures passing through | [ID 454] |
| :--- | :--- |

"Lonely Fat Teenage Virgins Rarely Like $\mathbf{S}$ wallowing And Never Ingest":
Lacrimal nerve
Frontal nerve
Trochlear nerve
Vein: ophthalmic
Ring: tendinous
From the ring, arises:
Lateral rectus
Superior division III
Abducent nerve
Nasociliary nerve
Inferior divison III
Knowledge Level 4, System: Skeletal
Dr. Smirkenheimer Viewbank University
Superior orbital fissure: structures passing through
"Live Free To See Absolutely No Insult":
Lacrimal nerve
Frontal nerve
Trochlear nerve
Superior branch of oculomotor nerve
Abducent nerve
Nasociliary nerve
Inferior branch of oculomotor nerve
Knowledge Level 4, System: Skeletal
Anonymous Contributor
"Traverse City (is) Noted (for) MIchigan's Lovely Cherries":
Talus
Calcaneus
(new row)
Navicular
(new row)
Medial Intermediate cuneiforms
Lateral cuneiform
Cuboid
Knowledge Level 3, System: Skeletal
Scott Strom Michigan State University College of Osteopathic Medicine

Tarsal bones
[ID 1408]
"Tall Californian Navy Medcial Interns Lay Cuties":
In order (right foot, superior to inferior, medial to lateral):
Talus
Calcanous
Navicular
Medial cuneiform
Intermediate cuneiform
Lateral cuneifrom
Cuboid
Knowledge Level 3, System: Skeletal
Frank Hopkins

Tarsal tunnel: contents
[ID 1182]
"Tiny Dogs Are Not Hunters":
From superior to inferior:
T: Tibialis posterior
F: flexor Digitorum longus
A: posterior tibial Artery
$\mathbf{N}$ : tibial Nerve
$\mathbf{H}$ : flexor Hallucis longus
Knowledge Level 5, System: Skeletal
Anonymous Contributor Baylor College of Medicine

Tibia vs. fibula: which is lateral
The FibuLA is LAteral.
Knowledge Level 1, System: Skeletal
Anonymous Contributor

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

Ulna bone: quick recognition in oral exam
[ID 120]
The Ulnar bone has a "U" at the end where it goes over the trochlea. Knowledge Level 1, System: Skeletal
Robert O'Connor University College Dublin
(U)

Typical Thoracic has Ten facets.
Knowledge Level 7, System: Skeletal
Anonymous Contributor

Vertebrae: recognizing a thoracic from lumbar
[ID 80]
Examine 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.
See diagram.
Knowledge Level 3, System: Skeletal
Robert O'Connor University College Dublin


Vetebrae subtypes
"Certain Doctors Luv Saddling Coeds":
From superior to inferior:
Cervical
Dorsal
Lumbar
Sacrum
Coccyx
Knowledge Level 1, System: Skeletal
Frank Hopkins

Wrist: radial side vs. ulnar side
[ID 81]
Make a fist with your thumb up in the air and say "Rad!".
Your thumb is now pointing to your Radius.
Note: 'Rad!' was a late 80's catchphrase, short for 'Radical'. Things that were good were called 'Rad'. Knowledge Level 1, System: Skeletal
Patrick Esperanzate University College Dublin


## ANESTHESIOLOGY

Xylocaine: where not to use with epinephrine
Hi Yield [ID 1404]
"Nose, Hose, Fingers and Toes"
Vasoconstrictive effects of xylocaine with epinephrine are helpful in providing hemostasis while suturing. However, may cause local ischemic necrosis in distal structures such as the digits, tip of nose, penis, ears.
Knowledge Level 5, System: Integumental
Robert Lueken Eastern Virginia Medical School

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

[^7]Anesthesia: quick check
SOAP:
Suction
Oxygen
Airway
Pharmacology
Knowledge Level 1, System: Other/Miscellaneous
Anonymous Contributor

General anaesthesia: equipment check prior to inducing
MALES:
Masks
Airways
Laryngoscopes
Endotracheal tubes
Suction/ Stylette, bougie
Knowledge Level 2, System: Other/Miscellaneous
Steve Gust HMO, Gove District Hospital, NT Australia

Anesthetics equipment check

## MISMADE:

Machine check
IV supplies
Suction
Monitors
Airways
Drugs
Equipment
Knowledge Level 3, System: Pulmonary
Anonymous Contributor

Endotracheal intubation: diagnosis of poor bilateral breath sounds after intubation
DOPE:
Displaced (usually right mainstem, pyreform fossa, etc.)
Obstruction (kinked or bitten tube, mucuous plug, etc.)
Pneumothorax (collapsed lung)
Esophagus
Knowledge Level 5, System: Pulmonary
Marc Colbeck

## BEHAVIOURAL SCIENCE / PSYCHOLOGY

## AIDS:

Atrophy of cortex
Infection/ Inflammation
Demyelination
Six months death
Knowledge Level 8, System: Nervous
Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan, Gujranwala

Autistic disorder: features

## AUTISTICS:

Again and again (repetitive behavior)
Unusual Abilities
Talking (language) delay
IQ subnormal
Social development poor
Three years onset
Inherited component [35\% concordance]
Cognitive impairment
Self injury
Knowledge Level 5, System: Nervous
Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan, Gujranwala

Cluster personality disorders
Hi Yield [ID 697]
Cluster A Disorder = Atypical. Unusual and eccentric.
Cluster B Disorder = Beast. Uncontrolled wildness.
Cluster C Disorder = Coward [avoidant type], Compulsive [obsessive-compulsive type], or Clingy [dependent type].
Knowledge Level 1, System: Nervous
Robert O'Connor University College Dublin

Depression: major episode characteristics
Hi Yield [ID 767]

## SPACE DIGS:

Sleep disruption
Psychomotor retardation
Appetite change
Concentration loss
Energy loss
Depressed mood
Interest wanes
Guilt
Suicidal tendencies
Knowledge Level 2, System: Nervous
Robert O'Connor University College Dublin

Depression: symptoms

## BAD CRISES:

Behavioural change (slowing down or agitation)
Appetite change (weight loss or weight gain in the young)
Depressed look (looking down)
Concentration decrease (does not do serial 7s well)
Ruminations (constant negative thoughts, hopelessness good indicator of suicidality)
Interest (reduced interest in what is normally pleasurable)
Sleep change (insomnia or hypersomnia, sleeping early, waking up at night, waking up feeling tired)
Energy change (fatigue)
Suicide
Knowledge Level 2, System: Nervous
Peter Loa Medical Student at Adelaide University

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

HM: this classic patient's lesion
HM had Hippocampus Missing.
Hippocampus and surrounding areas were removed surgically: prevented formation of new memories.
Knowledge Level 7, System: Nervous
Anonymous Contributor

Middle adolescence (14-17 years): characteristics
[ID 1990]

## HERO:

Heterosexual crushes/ Homosexual Experience
Education regarding short term benefits
Risk taking
Omnipotence
And there is interest in being a Hero (popular).
Knowledge Level 5, System: Nervous
Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan, Gujranwala
Narcolepsy: symptoms, epidemiology

## 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

REM: features
[ID 1717]
REM:
Rapid pulse/ Respiratory rate
Erection
Mental activity increase/ Muscle paralysis
Knowledge Level 6, System: Nervous
Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan, Gujranwala
Sleep stages: features
Hi Yield [ID 1204]
DElta waves during DEepest sleep (stages $3 \& 4$, slow-wave).
d REaM 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

Reinforcement schedules: variable ratio

SLOT machines show SLOwesT extinction.
Knowledge Level 1, System: Other/Miscellaneous
Sung Hoon Kim El Paso, TX

Impotence causes
[ID 1088]

## PLANE:

Psychogenic: performance anxiety
Libido: decreased with androgen deficiency, drugs
Autonomic neuropathy: impede blood flow redirection
Nitric oxide deficiency: impaired synthesis, decreased blood pressure
Erectile reserve: can't maintain an erection
Knowledge Level 3, System: Reproductive
Ben Beckwith University of Queensland, Australia

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
Male Erectile Dysfunction (MED): drugs causing it
"STOP erection":
SSRI (fluoxtine)
Thioridazone
methyldOpa
Propranalol
Knowledge Level 1, System: Reproductive
Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan, Gujranwala
Premature ejaculation: treatment
[ID 2037]
2 S's:
SSRIs [eg: fluoxitime]
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

## BI OCHEMISTRY

B vitamin names
"The Rhythm Nearly Proved Contagious":
In increasing order:
Thiamine (B1)
Riboflavin (B2)
Niacin (B3)
Pyridoxine (B6)
Cobalamin (B12)
Knowledge Level 2, System: Alimentary
Anonymous Contributor
| Catabolism steps of branched chain amino acids
"Truck hit the Ox to Death":
Transamination
Oxidative decarboxylation
Dehydrogenation
Knowledge Level 6, System: Alimentary
Usman Ahmad
$\begin{array}{ll}\text { Essential amino acids } & \text { Hi Yield [ID 128] }\end{array}$

## PVT. TIM HALL:

Phe
Val
Thr
Trp
Ile
Met
His
Arg
Leu
Lys
Pvt. is short for Private in the military.
Arg and His are considered semiessential.
Alternatively: "MATT VIL PHLy".
Knowledge Level 3, System: Alimentary
Dr. Kishore Chandki MGM Medical College, Indore, India

Essential amino acids
Hi Yield [ID 442]
"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
[ID 1410]
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
Hi Yield [ID 2248]

## 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 $\quad$ Hi Yield [ID 2638]
"Viagra Pills Cause A Major Hardon":
Von Gierke's
Pompe's
Cori's
Anderson's
McArdle's
Her's
Knowledge Level 1, System: Alimentary
Chris Reed Medical College of Wisconsin

Glycolysis steps
Hi Yield [ID 317]
"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
Hi Yield [ID 755]
"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 | Hi Yield [ID 754] |
| :--- | :--- |

## 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

Niacin deficiency: signs and symptoms
Hi Yield [ID 1456]
The famous 4 D's:
Diarrhoea
Dermatitis
Dementia
Death (if untreated)
Knowledge Level 1, System: Alimentary
Dr. Atif Farooq Rawalpindi Medical College, Pakistan, Gujranwala

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
Hi Yield [ID 562]
Type $\mathbf{1}$ = one (Von), ie Von Giereke's disease
Knowledge Level 3, System: Alimentary
Dr. Waqas H. Sheikh BVI Co.

Van den Bergh reaction (Jaundice test)
Hi Yield [ID 559]
"Indirect reacting bilirubin = Unconjugated bilirubin":
Both start with vowels, so they go together: Indirect \& Unconjugated.
Knowledge Level 2, System: Alimentary
Dr. Waqas H. Sheikh BVI Co.

Vitamin B3 (niacin, nicotinic acid) deficiency: pellagra
Hi Yield [ID 2234]
The 3 D's of pellagra:
Dermatitis
Diarrhea
Dementia
Note vitamin B3 is the $\mathbf{3}$ 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

Vitamins: which are fat soluble
"The FAT cat is in the ADEK (attic)":
Fat soluble vitamins are A,D,E,K.
Knowledge Level 2, System: Alimentary
Presley Ross Medicine

Coagulation common pathway: factors in order
Hi Yield [ID 3014]
$\mathbf{1 0}+\mathbf{5 - 2}=13$
Coagulation common pathway:
Factor $\mathbf{X}$ to Factor $\mathbf{V}$ to Factor II to Factor XIII
Knowledge Level 1, System: Cardiovascular
John Chung University of Hawaii John A. Burns School of Medicine

Fabry's disease
Hi Yield [ID 574]

## FABRY'S:

Foam cells found in glomeruli and tubules/ Febrile episodes
Alpha galactosidase A deficiency/ Angiokeratomas
Burning pain in extremities/BUN increased in serum/ Boys
Renal failure
YX genotype (male, X linked recessive)
Sphingolipidoses
Knowledge Level 3, System: Cardiovascular
Rinku Uberoi UNIBE

Heme synthesis: amino acid precursors to basic unit of porphyrins, heme (pyrrole ring)
[ID 2051]
"Dracula wants to Suck a Co-ed's blood [think heme] with his Glystening teeth!":
Succinyl CoA and Glycine are precursor amino acids to pyrrole rings, which is the basic unit of porphyrins and heme.
Knowledge Level 5, System: Cardiovascular
Christian Garaycochea Medical student

Hemoglobin binding curve: causes of shift to right
Hi Yield [ID 2561]
"CADET, face right!":
CO2
Acid
2,3-DPG (aka 2,3 BPG)
Exercise
Temperature
Knowledge Level 1, System: Cardiovascular
Anonymous Contributor
Porphyrias: acute intermittent porphyria symptoms
Hi Yield [ID 2062]
5 P's:
Pain in abdomen
Polyneuropathy
Psychologial abnormalities
Pink urine
Precipitated by drugs (eg barbiturates, oral contraceptives, sulpha drugs)
Knowledge Level 3, System: Cardiovascular
Anuradha

Sickle cell anemia: mutation
"HbS isn't Very Good":
At $\mathbf{S}$ ixth position of HB beta chain, Valine is present instead of Glutamic acid.
Knowledge Level 5, System: Cardiovascular
Dr. Khawaja Atif Farooq Rawalpindi Medical College, Islamabad, Pakistan

SICKle cell disease is due to a Substitution of the SICKsth amino acid of the B chain.
Knowledge Level 4, System: Cardiovascular
Anonymous Contributor

Vitamin K dependent cofactors
Hi Yield [ID 3143]
"Several Tend To Nicely Stop Clots":
Factor Seven, Ten, Two, Nine.
Protein S, Protein C.
Knowledge Level 1, System: Cardiovascular
Medical Student Class 2004 University of Western Ontario
Adrenaline mechanism
[ID 654]
"ABC of Adrenaline":
Adrenaline--> activates Beta receptors--> increases Cyclic AMP
Knowledge Level 1, System: Endocrine
Usman Ahmad

Galactosaemia: enzyme deficiency

## GALIPUT:

Galactose 1 Phosphate Uridyl Transferase.
There is an assay called the Galiput test for this.
Knowledge Level 2, System: Endocrine
Anonymous Contributor

Glucagon function
"Mr. Gluca has Gone to the cAMP to bring out some Glucose":
Glucagon elevates glucose by cAMP mechanism.
Knowledge Level 1, System: Endocrine
Usman Ahmad KMC

Hyperglycemia: 3 classic signs and symptoms
[ID 2712]
DKA:
Dehydrated
Ketoacidosis
Acetone breath
Knowledge Level 1, System: Endocrine
Chris B.

Insulin: function
Hi Yield [ID 172]
INsulIN stimulates 2 things to go
IN 2 cells: Potassium and Glucose.
Knowledge Level 1, System: Endocrine
Anonymous Contributor

Collagen concisely covered
[ID 600]
COLLAGEN:
C-terminal propeptide (procollagen)/ Covalent Cross links/ C vitamin/ Connective tissue/ Cartilage/ Chondroblasts/ Copper Cofactor (Covalent Cross linking)
Outside the cell is where collagen normally functions/ Osteoblasts/ Osteogenesis imperfecta
Lysyl hydroxylase/ Lysyl oxidase (oxidatively deaminates lysyl and hydroxylysyl residues to form collagen cross links, last biosynthesis step)
Long triple helical fibers/ Ligaments
Alpha chains/ Attached by H bonds form triple helix/ Ascorbate for hydroxylation of lysyl and prolyl residues of pro-Alpha chains (postranslational modification)
Gly in every third position/ Glycosylation of hydroxyl group of hydroxylysine with Glucose and Galactose; GOlgi allows procollagen to GO outside of cell
Extracellular matrix/ Eye (cornea, sclera)/ Ehlers-Danlos Syndrome
$\mathbf{N}$-terminal propeptide (procollagen)/ Nonhelical terminal extensions
Note: Procollagen LEAVEs the cell to be cLEAVEd by procollagen peptidases
Knowledge Level 7, System: Integumental

BUN:creatinine elevation: causes
Hi Yield [ID 2159]

## ABCD:

Azotremia (pre-renal)
Bleeding (GI)
Catabolic status
Diet (high protein parenteral nutrition)
Knowledge Level 3, System: Kidney/Urine
Anthony Chan

G6PD: oxidant drugs inducing hemolytic anemia
Hi Yield [ID 2208]

## AAA:

Antibiotic (eg: sufamethoxazole)
Antimalarial (eg: primaquine)
Antipyretics (eg: acetanilid, but not aspirin or acetaminophen)
Knowledge Level 3, System: Lymphoid
Andrew J. Vasil UMD School of Medicine, Duluth, MN

Creatine phosphate: amino acid precursors
"Nice GAMs!":
Glycine
Arginine
Methionine
Gam is slang for a person's leg, especiallay an attractive female's leg: "Nice gams = nice legs!"
Creatine phosphate is a muscle energy store, and spontaneously converts to creatinine which is excreted in the urine in direct proportion to muscle mass: clinically useful, such as in MS Dx.
Knowledge Level 5, System: Muscle
Christian Garaycochea medical student

AcetyICoA and acetacetyICoA: amino acids forming them
"A Lighter Lease" (A LyTr LeIs):
$\mathbf{A}=$ AcetylCoA or Acetoacetyl CoA
$\mathbf{L y}=\mathbf{L y s i n e}$
$\mathbf{T r}=\mathbf{T r y p t o p h a n}$
Le=Leucine
Is=Isoleucine
Knowledge Level 6, System: Other/Miscellaneous
Dr. Waqas H. Sheikh BVI Co.

Carbon monoxide: electron transport chain target
"CO blocks CO":
Carbon monoxide (CO) blocks Cytochrome Oxidase (CO)
Knowledge Level 3, System: Other/Miscellaneous
Anonymous Contributor

Citric acid cycle compounds
Hi Yield [ID 318]
"Oh Citric Acid Is Of (course) A SiLly STupid Funny Molecule":
Oxaloacetate
Citrate
Aconitate
Isocitrate
Oxalosuccinate
Alpha-ketoglutarate
SuccinyL-CoA
SuccinaTe
Fumarate
Malate
SilLy and sTupid used to differentiate succinyL and succinaTe Knowledge Level 1, System: Other/Miscellaneous

## Citric acid cycle compounds

Hi Yield [ID 656]
"Can I Keep Selling Sex For Money, Officer?":

## Citrate

Isocitrate
alpha Ketogluterate
Succinyl CoA
Succinate
Fumerate
Malate
Oxaloacetate
Knowledge Level 1, System: Other/Miscellaneous
Ramon Ter-Oganesyan and Rebecca University of California Irvine
Citric acid cycle compounds
Hi Yield [ID 1368]
"Oh! Can I Keep S ome Succinate For Myself?":
Oxaloacetate
Citrate
Isocitrate
Ketoglutarate
Succinyl coA
Succinate
Fumarate
Malate
Knowledge Level 1, System: Other/Miscellaneous
Serene NUS, Singapore

Citric acid cycle compounds
Hi Yield [ID 1929]
"Our City Is Kept S afe And Sound From Malice":
Oxaloacetate
Citrate
Isocitrate
alpha-Ketoglutarate
Succinyl-CoA
Succinate
Fumarate
Malate
Knowledge Level 1, System: Other/Miscellaneous
Borels

Citric acid cycle compounds
Hi Yield [ID 1962]
"Can I Ask Sharon Stone For My Orgasm?":
Citrate
Isocitrate
Alpha-Ketoglutarate
Succinyl CoA
Succinate
Fumerate
Maleate
Oxaloacetate
Knowledge Level 1, System: Other/Miscellaneous
Arun Mathews The Royal College of Surgeons in Ireland

[^8]DNA bond strength (nucleotides)
"Crazy Glue":
Strongest bonds are between Cytosine and Guanine, strong like Crazy Glue ( 3 H -bonds), whereas the $\mathrm{A}=\mathrm{T}$ only have 2 H -bonds.
This is relevant to DNA replication, as the weaker $\mathrm{A}=\mathrm{T}$ 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 Kompetitive inhibition: Km increases; no change in Vmax.
With Non-kompetitive inhibition: No change in $\mathbf{K m}$; Vmax decreases.
Knowledge Level 1, System: Other/Miscellaneous
Patricia Sanchez INTEC University, Santo Domingo, Dominican Republic

Enzymes: classification
Hi Yield [ID 2054]
"Over The HILL":
Oxidoreductases
Transferases
Hydrolases
Isomerases
Ligases
Lyases
Enzymes get reaction over the hill. See diagram.


Knowledge Level 2, System: Other/Miscellaneous
Reaction coordinate
Kenny Livingstone St. Andrews medical student

Enzymes: competitive inhibitors
"Competition is hard because we have to travel more kilometers (Km) with the same velocity":
With competitive inhibitors, velocity remains same but $\mathbf{K m}$ increases
Knowledge Level 1, System: Other/Miscellaneous
Dr. Waqas H. Sheikh BVI Co.
G protein type for respective receptors
"KISS and KICK till you're SICK of SEX" (QISS and QIQ till you're SIQ of SQS):
This gives the G-protein type ( $\mathbf{G q}, \mathbf{G i}$, or $\mathbf{G s}$ ) for all the receptors. Receptors are in alphabetical order:
alpha1= $\mathbf{Q}$
alpha2 $=\mathbf{I}$
beta $1=\mathbf{S}$
beta3=S
M1 $=\mathbf{Q}$
M2 $=\mathbf{I}$
M3 $=\mathbf{Q}$

D1=S
D2 $=\mathbf{I}$
$\mathrm{H} 1=\mathbf{Q}$
$\mathrm{H} 2=\mathbf{S}$
V1 $=\mathbf{Q}$
V2=S
Knowledge Level 4, System: Other/Miscellaneous
Khawaja Atif Farooq and Julien Pham Rawalpindi Medical College, Horizon Medical Institute, Pakistan and University of Washington
Golgi complex: functions
[ID 890]
"Golgi Distributes A SPAM":
Distributes proteins and lipids from ER
Add mannose onto specific lysosome proteins
Sulfation of sugars and slected tyrosine
Proteoglycan assembly
Add O-oligosugars to serine and threnonine
Modify N-ologosugars on asparagine
Knowledge Level 3, System: Other/Miscellaneous
Samuel Atom Baek-Kim

Malate-aspartate shuttle
"MAD commute":
Malate in.
Alpha-ketoglutarate and D (Aspartate) out.
Knowledge Level 5, System: Other/Miscellaneous
Samuel

Metabolic acidosis (normal anion-gap): causes
With hyperkalemia: RAISE K+:
RTA type 4
Aldosterone or mineralocorticord deficiency
Iatrogenic: $\mathrm{NH} 4 \mathrm{Cl}, \mathrm{HCl}$
"Stenosis": obstructive uropathy
Early uremia
With hypokalemia: ReDUCE K+:
Renal TA type 1 and 2
Diarrhoea
Urine diversion into gut
Carbonate anhydrase inhibitor
Ex-hyperventilation
Knowledge Level 2, System: Other/Miscellaneous
Anthony Chan

Metabolism sites
"Use both arms to HUG":
Heme synthesis
Urea cycle
Gluconeogenesis
These reactions occur in both cytoplasm and mitochondria.
Knowledge Level 4, System: Other/Miscellaneous
Rinku Uberoi

Mitochondrial DNA (mt DNA) properties
"mt DNA".
mt stands for:
Maternal Transfer
Mutates Tremendously (high mutation rate)
Knowledge Level 4, System: Other/Miscellaneous
Anonymous Contributor
(Sing loudly to the chorus of "Kiss Him Goodbye"): "Na, Na, Na -- out! Na, Na, Na -- out! K, K goes...inside!"
Action of pump is 3 Na out and 2 K in
Knowledge Level 1, System: Other/Miscellaneous
Graham Austin University of Georgia, Cell Bio Dept
$\mathrm{Na} / \mathrm{K}$ pump: concentrations of Na vs. K on inside/outside of cell, pump action, number of molecules moved
Hi Yield [ID 160]

## HIKIN':

There is a HIgh K concentration INside the cell.
From this can deduce that the $\mathrm{Na} / \mathrm{K}$ pump pumps K into cell and Na out of cell.
Alternatively: When I was learning this pump (circa 1992), a band that was "in" was Kris Kross, and a band that was "out" was "Sha Na Na Na":
So pump moves KK (2 K) in and Na Na Na (3 Na) out.
Sadly, as infectious as their debut album was, Kris Kross can really no longer be classed as "in".
Knowledge Level 2, System: Other/Miscellaneous
Anonymous Contributor

Na+/K+ pump: movement of ions and quantity
Hi Yield [ID 2529]
$\mathbf{K}+$ and in each consist of $\mathbf{2}$ characters, so so $2 \mathrm{~K}+$ are pumped in.
Na+ and out each consist of $\mathbf{3}$ characters, so $3 \mathrm{Na}+$ are pumped out.
Knowledge Level 1, System: Other/Miscellaneous
Anonymous Contributor

Nitric oxide: amino acid precursor
[ID 2050]
When the dentist works on your teeth, you say, "AAArg! (Arginine)" before he administers Nitric Oxide (NO) to take the pain away.
Other players necessary for NO synthesis: NO synthase, Ca++, NADPH.
Knowledge Level 5, System: Other/Miscellaneous
Christian Garaycochea Medical student

Phenylketonuria: which enzyme is deficient
Hi Yield [ID 915]
PHenylketonuria is caused by a deficiency of:
Phenylalanine
Hydroxylase
Knowledge Level 3, System: Other/Miscellaneous
Anonymous Contributor

Pompe's disease: type
Hi Yield [ID 824]
"Police = Po + lys":
Pompe's disease is a lysosomal storage disease (alpha 1,4 glucosidase).
Knowledge Level 1, System: Other/Miscellaneous
Lior Greenberg Technion Faculty of Medicine, Haifa, Israel

Pyruvate: products of complete oxidation
Hi Yield [ID 1133]
" 4 Naked Fun 3 Coeds + 1 Guy":
Complete oxidation of pyruvate yields:
4 NADH
FADH2
3 CO 2
1 GTP
Knowledge Level 1, System: Other/Miscellaneous
Anonymous Columbia College of Physicians and Surgeons

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

Fortunately, tRNA (Transfer RNA) is shaped like a capital $\mathbf{T}$.
See diagram.
Knowledge Level 1, System: Other/Miscellaneous
Robert O'Connor University College Dublin


## BI OLOGY

Cell cycle
"George Sucked Gina's Mammary":
G1-S-G2-M.
Knowledge Level 1, System: Other/Miscellaneous
Josh Kunken Undergrad, Univ of Calif., Berkeley

Mitosis: events at 4 stages
Prophase, Metaphase, Anaphase, Telophase:
Prophase: Chromosomes and spindles are Produced.
Metaphase: chromosomes MetAlign themselves.
Anaphase: [Ana] divorced or separated.
Telophase: Tell-O'Brien his daughter cells are ready.
Knowledge Level 1, System: Other/Miscellaneous
Josh Kunken Undergrad, Univ of Calif, Berkeley

## CARDIOLOGY

Anti-arrythmics: for AV nodes
"Do Block AV":
Digoxin
B-blockers
Adenosine
Verapamil
Knowledge Level 1, System: Cardiovascular
Azira Azmi University of Otago

Aortic regurgitation: causes

## CREAM:

Congenital
Rheumatic damage
Endocarditis
Aortic dissection/ Aortic root dilatation
Marfan's
Knowledge Level 3, System: Cardiovascular
Jamal Khan Birmingham University Medical Student

Aortic stenosis characteristics

## SAD:

Syncope
Angina
Dyspnoea
Knowledge Level 1, System: Cardiovascular
Anonymous Contributor

## HILT:

Heaving
Impalpable
Laterally displaced
Thrusting/ Tapping
If it is impalpable, causes are COPD:
COPD
Obesity
Pleural, Pericardial effusion
Dextrocardia
Knowledge Level 2, System: Cardiovascular
Sushant Varma Medical student, University of Sheffield, UK

Apex beat: differential for impalpable apex beat
[ID 2798]

## DOPES:

Dextrocardia
Obesity
Pericarditis/ Pericardial tamponade/ Pneumothorax
Emphysema
Sinus inversus/Student incompetence/Scoliosis/Skeletal abnormalities (eg pectus excavatum)
Knowledge Level 2, System: Cardiovascular
Fiona Hayes and Moses Lee Tong Chsia and Dalton Boyo UWCM, Cardiff, UK and Not Specified and Medical Student

| Atrial fibrillation: causes | Hi Yield [ID 1092] |
| :--- | :--- |

A S\#! T :
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: mirtral regurgitation
Atherosclerotic: MI, CAD
Thyroid: hyperthyroid
Endocarditis
Sick sinus syndrome
Knowledge Level 1, System: Cardiovascular
Anonymous Contributor

Atrial fibrillation: management
Hi Yield [ID 2469]

## ABCD:

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

3 D's:
Distant heart sounds
Distended jugular veins
Decreased arterial pressure
Knowledge Level 3, System: Cardiovascular
Anonymous Contributor
Betablockers: cardioselective betablockers
Hi Yield [ID 1537]
"Betablockers Acting Exclusively At Myocardium"
Cardioselective betablockers are:

## Betaxolol

Acebutelol
Esmolol
Atenolol
Metoprolol
Knowledge Level 5, System: Cardiovascular
Diljot Singh Bedi GMCH Chandigarh, India

CHF: causes of exacerbation
Hi Yield [ID 919]
FAILURE:
Forgot medication
Arrhythmia/ Anaemia
Ischemia/ Infarction/ Infection
Lifestyle: taken too much salt
Upregulation of CO: pregnancy, hyperthyroidism
Renal failure
Embolism: pulmonary
Knowledge Level 6, System: Cardiovascular
Lau Yue Young Geoffrey
CHF: causes of exacerbation

## A SMITH PEAR:

## Anemia

Salt/Stress/ Stopping meds
MI
Infection/ Ischemia
Thyroid (high/low)

## HTN

Pericarditis
Endocarditis (valve disease)
Arrhythmia
Rx (beta blocker, etc)
Knowledge Level 6, System: Cardiovascular
Andrew Mackie, PA Rhode Island Hospital

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 Medical student, University of Sheffield, UK

Coronary artery bypass graft: indications
Hi Yield [ID 2067]

## DUST:

Depressed ventricular function
Unstable angina
Stenosis of the left main stem
Triple vessel disease
Knowledge Level 1, System: Cardiovascular
Sushant Varma University of Sheffield, UK

Depressed ST-segment: causes

## DEPRESSED ST:

Drooping valve (MVP)
Enlargement of LV with strain
Potassium loss (hypokalemia)
Reciprocal ST- depression (in I/W AMI)
Embolism in lungs (pulmonary embolism)
Subendocardial ischemia
Subendocardial infarct
Encephalon haemorrhage (intracranial haemorrhage)
Dilated cardiomyopathy
Shock
Toxicity of digitalis, quinidine
Knowledge Level 8, System: Cardiovascular
Dr. Sonali V.

ECG: left vs. right bundle block
"WiLLiaM MaRRoW":
$\mathbf{W}$ pattern in V1-V2 and $\mathbf{M}$ pattern in V3-V6 is Left bundle block.
$\mathbf{M}$ pattern in V1-V2 and $\mathbf{W}$ in V3-V6 is Right bundle block.
Note: consider bundle branch blocks when QRS complex is wide.
Knowledge Level 3, System: Cardiovascular
Anonymous Contributor

ECG: T wave inversion causes

## INVERT:

Ischemia
Normality [esp. young, black]
Ventricular hypertrophy
Ectopic foci [eg calcified plaques]
RBBB, LBBB
Treatments [digoxin]
Knowledge Level 2, System: Cardiovascular
Robert O'Connor University College Dublin

Exercise ramp ECG: contraindications
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
"Heart SAVER":
Symphatoadrenal 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

Heart failure: signs
[ID 3194]
TAPED TORCH:
Tachycardia
Ascites
Pulsus alternans
Elevated jugular venous pressure
Displaced apex beat
Third heart sound
Oedema
Right ventricular heave
Crepitations or wheeze
Hepatomegaly (tender)
Knowledge Level 6, System: Cardiovascular
Sandeep Samrat Sharma Armed Forces Medical College

Heart murmurs
Hi Yield [ID 1682]
"hARD ASS MRS. MSD":
hARD: Aortic Regurg = Diastolic
ASS: Aortic Stenosis = Systolic
MRS: Mitral Regurg = Systolic
MSD: Mitral Stenosis = Diastolic
Knowledge Level 1, System: Cardiovascular
Jack Pasquale, MD St. George's University, School of Medicine
Jugular venous pressure (JVP) elevation: causes
Hi Yield [ID 1087]
HOLT: Grab Harold Holt around the neck and throw him in the ocean:
Heart failure
Obstruction of venea cava
Lymphatic enlargement - supraclavicular
Intra-Thoracic pressure increase
Knowledge Level 3, System: Cardiovascular
Daniel Clarke University of Queensland

JVP: wave form
Hi Yield [ID 2022]
ASK ME:
Atrial contraction
Systole (ventricular contraction)
Klosure (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:

Bed rest
Oxygen
Opiate
Monitor
Anticoagulate
Reduce clot size
Knowledge Level 1, System: Cardiovascular
Anonymous Contributor

| MI: signs and symptoms | Hi Yield [ID 413] |
| :--- | :--- |

PULSE:
Persistent chest pains
Upset stomach
Lightheadedness
Shortness of breath
Excessive sweating
Knowledge Level 1, System: Cardiovascular
Sara Nemetz

MI: therapeutic treatment $\quad$ Hi Yield [ID 850]

## ROAMBAL:

Reassure
Oxygen
Aspirin
Morphine (diamorphine)
Beta blocker
Arthroplasty
Lignocaine
Knowledge Level 1, System: Cardiovascular
Anonymous Contributor
MI: therapeutic treatment $\quad$ Hi Yield [ID 981]
"O BATMAN!":
Oxygen
Beta blocker
ASA
Thrombolytics (eg heparin)
Morphine
Ace prn
Nitroglycerin
Knowledge Level 1, System: Cardiovascular
Kristy Thomas, PA-C Mesquite Medical Associates, Mesquite, NV

MI: therapeutic treatment
Hi Yield [ID 1137]
MONAH:
Morphine
Oxygen
Nitrogen
Aspirin
Heparin
Knowledge Level 1, System: Cardiovascular
Anonymous Contributor

MI: treatment of acute MI
Hi Yield [ID 1588]

COAG:
Cyclomorph
Oxygen
Aspirin
Glycerol trinitrate
Knowledge Level 1, System: Cardiovascular
Alan Desmond Cork University Hospital

Mitral regurgitation
Hi Yield [ID 1710]
When you hear holosystolic murmurs, think "MR-THEM ARE holosystolic murmurs".
Knowledge Level 1, System: Cardiovascular
James Noble Emory University School of Medicine

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

## Murmur attributes

[ID 1437]
"IL PQRST" (person has ill PQRST heart waves):
Intensity
Location
Pitch
Quality
Radiation
Shape
Timing
Knowledge Level 6, System: Cardiovascular
Ghassan Abu Said 4th year Medical Student

Murmurs: innocent murmur features
Hi Yield [ID 1243]
8 S's:
Soft
Systolic
Short
Sounds (S1 \& S2) normal
Symptomless
Special tests normal (X-ray, EKG)
Standing/ Sitting (vary with position)
Sternal depression
Knowledge Level 4, System: Cardiovascular
Ziad Jaradat Jordan University School of Medicine

Murmurs: locations and descriptions
[ID 1535]
"MRS A\$\$":
MRS: Mitral Regurgitation--S ystolic
A\$\$: Aortic Stenosis--S ystolic
The other two murmurs, Mitral stenosis and Aortic regurgitation, are obviously diastolic.
Knowledge Level 2, System: Cardiovascular
Alex Gitelman SUNY Downstate

Murmurs: louder with inspiration vs expiration
Hi Yield [ID 3061]
LEft sided murmurs louder with Expiration
RIght sided murmurs louder with Inspiration.
Knowledge Level 3, System: Cardiovascular
Anonymous Contributor
Murmurs: questions to ask

## SCRIPT

Site
Character (eg harsh, soft, blowing)
Radiation
Intensity
Pitch
Timing
Knowledge Level 2, System: Cardiovascular
Jamal Khan Birmingham University Medical Student

Murmurs: right vs. left loudness
"RILE":
Right sided heart murmurs are louder on Inspiration.
Left sided heart murmurs are loudest on Expiration.
Knowledge Level 2, System: Cardiovascular
Anonymous Contributor

Murmurs: systolic
[ID 2767]

## MR PV TRAPS:

Mitral
Regurgitation and
Prolaspe
VSD
Tricupsid
Regurgitation
Aortic and
Pulmonary
Stenosis
Knowledge Level 4, System: Cardiovascular
Ugonna Duru Yale University School Of Medicine

Murmurs: systolic types

## SAPS:

## Systolic

Aortic
Pulmonic
Stenosis
Systolic murmurs include aortic and pulmonary stenosis.
Similarly, it's common sense that if it is aortic and pulmonary stenosis it could also be mitral and tricusp regurgitation].
Knowledge Level 2, System: Cardiovascular
Anonymous Contributor

Murmurs: systolic vs. diastolic
Hi Yield [ID 967]
PASS: Pulmonic \& Aortic Stenosis=S ystolic.
PAID: Pulmonic \& Aortic Insufficiency=Diastolic.
Knowledge Level 1, System: Cardiovascular
W. Ciulla, RN, PA-C New Life Medical Clinic

Murmurs: systolic vs. diastolic
Hi Yield [ID 980]
Systolic murmurs: MR AS: "MR. ASner".
Diastolic murmurs: MS AR: "MS. ARden".
The famous people with those surnames are Mr. Ed Asner and Ms. Jane Arden.
Knowledge Level 1, System: Cardiovascular
Kristy Thomas, PA-C Mesquite Medical Associates, Mesquite, NV

Myocardial infarctions: treatment

## INFARCTIONS:

IV access
Narcotic analgesics (eg morphine, pethidine)
Facilities for defibrillation (DF)
Aspirin/ Anticoagulant (heparin)
Rest
Converting enzyme inhibitor
Thrombolysis
IV beta blocker
Oxygen 60\%
Nitrates
Stool Softeners
Knowledge Level 2, System: Cardiovascular
Anonymous Contributor

Pericarditis: causes

## CARDIAC RIND:

Collagen vascular disease
Aortic aneurysm
Radiation
Drugs (such as hydralazine)
Infections
Acute renal failure
Cardiac infarction
Rheumatic fever
Injury
Neoplasms
Dressler's syndrome
Knowledge Level 5, System: Cardiovascular
Anonymous Contributor
Pericarditis: EKG
Hi Yield [ID 1067]
"PericarditiS":
PR depression in precordial leads.
ST elevation.
Knowledge Level 3, System: Cardiovascular
Anonymous Contributor

Peripheral vascular insufficiency: inspection criteria
Hi Yield [ID 1615]

## SICVD:

Symmetry of leg musculature
Integrity of skin
Color of toenails
Varicose veins
Distribution of hair
Knowledge Level 1, System: Cardiovascular
Jeffrey Turner Memorial University, Canada

Pulseless electrical activity: causes
Hi Yield [ID 1869]

## PATCH MED:

Pulmonary embolus
Acidosis
Tension pneumothorax
Cardiac tamponade
Hypokalemia/ Hyperkalemia/ Hypoxia/ Hypothermia/ Hypovolemia
Myocardial infarction
Electrolyte derangements
Drugs
Knowledge Level 2, System: Cardiovascular
Will Anderson University of Alberta, Edmonton, Alberta, Canada

STREP:
Sydenhams chorea
Transient migratory arthritis
Rheumatic subcutaneous nodules
Erythema marginatum
Pancarditis (endocarditis, myocarditis, pericarditis)
STREP, since Rheumatic fever is caused by group A strep.
Knowledge Level 1, System: Cardiovascular
Anonymous Contributor

Rheumatic fever: Jones criteria
Hi Yield [ID 1933]
Major criteria: CANCER:
Carditis
Arthritis
Nodules
Chorea
Erythema
Rheumatic anamnesis
Minor criteria: CAFE PAL:
CRP increased
Arthralgia
Fever
Elevated ESR
Prolonged PR interval
Anamnesis of rheumatism
Leucocytosis
Knowledge Level 3, System: Cardiovascular
AAG Student

Rheumatic fever: Jones major criteria
Hi Yield [ID 2104]

## JONES:

Joints (migrating polyarthritis)
Obvious, the heart (carditis, pancarditis, pericarditis, endocarditis or valvulits)
Nodes (subcutaneous nodules)
Erythema marginatum
Sydenham's chorea
Knowledge Level 3, System: Cardiovascular
Anonymous Contributor
Rheumatic fever: Revised Jones criteria
Hi Yield [ID 1764]

## JONES PEACE:

Major criteria:
Joints: migratory
O (heart shaped) Carditis: new onset murmur
Nodules, subcutaneous: extensor surfaces
Erythema marginatum
Sydenham's chorea
Minor criteria:
PR interval, prolonged
ESR elevated
Arthralgias
CRP elevated
Elevated temperature (fever)
Need 2 major or 1 major and 2 minor criteria, plus evidence of recent GAS infection (throat cx, rapid antigen test, or rising strep antibody titer). Knowledge Level 3, System: Cardiovascular
Vince Yamashiroya

JONES crITERIA:
Major criteria:
Joint (arthritis)
Obvious (Cardiac)
Nodule (Rheumatic)
Erythema marginatum
Sydenham chorea
Minor criteria:
Inflammatory cells (leukocytosis)
Temperature (fever)
ESR/CRP elevated
Raised PR interval
Itself (previous Hx of Rheumatic fever)
Arthralgia
Knowledge Level 3, System: Cardiovascular
Anthony Chan Chinese University of Hong Kong

Sino-atrial node: innervation
Sympathetic acts on $\mathbf{S}$ odium channels (SS).
Parasympathetic acts on Potassium channels (PS).
Knowledge Level 9, System: Cardiovascular
Anonymous Contributor

Sinus bradycardia: aetiology
[ID 1913]
"SINUS BRADICARDIA" (sinus bradycardia):

## Sleep

Infections (myocarditis)
Neap thyroid (hypothyroid)
Unconsciousness (vasovagal syncope)
Subnormal temperatures (hypothermia)
Biliary obstruction
Raised CO2 (hypercapnia)
Acidosis
Deficient blood sugar (hypoglycemia)
Imbalance of electrolytes
Cushing's reflex (raised ICP)
Aging
$\mathbf{R x}$ (drugs, such as high-dose atropine)
Deep anaesthesia
Ischemic heart disease
Athletes
Knowledge Level 8, System: Cardiovascular
Dr. Sonali Vadi

Sinus tachycardia
[ID 3058]

## TACH FEVER:

Tamponade/ Thyrotoxicosis
Anemia
CHF
Hypotension
Fever
Excrutiating pain
Volume depletion
Exercise
Rx (Theo, Dopa, Epi, etc)
Knowledge Level 3, System: Cardiovascular
Andrew Mackie, PA Rhode Island Hospital

ST elevation causes in ECG

ELEVATION:
Electrolytes
LBBB
Early repolarization
Ventricular hypertrophy
Aneurysm
Treatment (eg pericardiocentesis)
Injury (AMI, contusion)
Osborne waves (hypothermia)
Non-occlusive vasospasm
Knowledge Level 4, System: Cardiovascular
Ken Evans Saskatchewan Health, Acute and Emergency Services
Supraventricular tachycardia: treatment
Hi Yield [ID 1737]

## ABCDE:

Adenosine
Beta-blocker
Calcium channel antagonist
Digoxin
Excitation (vagal stimulation)
Knowledge Level 5, System: Cardiovascular
Richard Thompson Queens University, Belfast, NI

Ventricular tachycardia: treatment
Hi Yield [ID 1739]
LAMB:
Lidocaine
Amiodarone
Mexiltene/ Magnesium
Beta-blocker
Knowledge Level 5, System: Cardiovascular
Richard Thompson Queens University, Belfast, NI

## CHEMI STRY

Anion vs. cation charge
ANion is A Negative ion.
Knowledge Level 1, System: Other/Miscellaneous
Anonymous Contributor
Benzene ring: effects of substituents on further additions
"Benzene likes to ROMP. We HOPED she's be safe, but now she's knocked up. ADOPt or WEDD'M?":
ROMP: Substituents in order: R-group, Ortho, Meta, Para.
HOPED: Halogens are Ortho, Para, Electron withdrawing, Deactivating.
ADOPt: Addititive substituents Direct Ortho \& Para.
WEDD'M: Withdrawing Electrons Deactivates, Directs Meta.
Knowledge Level 4, System: Other/Miscellaneous
Sabra
Benzene ring: order of substituents
Meta: the two sticks representing functional groups make a capital letter $\mathbf{M}$ with the ring.
$\mathbf{O}$ tho: can close the top of the functional groups and make a boxy capital letter $\mathbf{O}$.
See diagram.
Remaining one must therefore be para.
Knowledge Level 1, System: Other/Miscellaneous
Robert O'Connor University College Dublin

"Benzene likes to ROMP":
From R group moving around the ring:
$\mathbf{R}$ group
Ortho
Meta
Para
Knowledge Level 1, System: Other/Miscellaneous
Sabra and Josh Kunken Undergrad, Univ. of Calif, Berkeley


Benzene ring: order of substituents
"Oh My Penis!":
Putting R at top and moving around the ring:
Ortho
Meta
Para
Penis is the one pointing down, like the penis of a man pointing downwards.
Knowledge Level 1, System: Other/Miscellaneous
Ricky Lee
Cathode: what happens during electrolysis
Current Carries Cations to the Cathode for reduCtion.
Knowledge Level 1, System: Other/Miscellaneous
Andreas Efstathiades

Cation vs. anion: positive vs. negative
[ID 322]
The $\mathbf{t}$ 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) isomer nomenclature
[ID 1148]
The letter " Z " is written in a zigzag way. If you draw a vertical line splitting it down the middle then its the same halves (same sides of double bond). The letter " E " is written differently so a vertical line splits it into different halves (different sides of double bond).
Knowledge Level 1, System: Other/Miscellaneous
Peter J. Kos


Cis/trans (geometric) isomers: arrangement of functional groups
Hi Yield [ID 2440]
Cis starts with a $\mathbf{C}$ and the functional groups form a $\mathbf{C}$.
Trans, therefore is the other one by default.
Knowledge Level 1, System: Other/Miscellaneous
Spencer Oates


| "Good Honey Tastes $\mathbf{S}$ weet": |
| :--- |
| (delta) $\mathbf{G}=\mathbf{H}-\mathbf{T}($ delta) $\mathbf{S}$ |
| Knowledge Level 1, System: Other/Miscellaneous |
| Ken Evans Saskatchewan Health, Acute and Emergency Services |
|  |
| Orbital names before alphabetical order begins |
| "Sober People Don't Find Good In Killing": |
| Orbital names for electrons are S,P,D,F,G,I,K. After that, alphabetical order begins. |
| Knowledge Level 8, System: Other/Miscellaneous |
| Anonymous Contributor |
|  |
| Oxidation vs. reduction: electrochemical cell and electron gain/loss |
| [ID 155] |
| 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 |
| [ID 340] |
| Oxidation vs. reduction: electron gain/loss |

"LEO the lion says GER":
Lose Electrons = Oxidation.
Gain Electrons = Reduction.
Knowledge Level 1, System: Other/Miscellaneous
Anonymous Contributor

Oxidation vs. reduction: electron gain/loss

## OIL RIG:

Oxidation Is Loss (of electrons).
Reduction Is Gain (of electrons).
Knowledge Level 1, System: Other/Miscellaneous
Fred Reid Undergrad at St-Andrews, UK

## DERMATOLOGY

Albinism: type I vs. Il classification
"One has None. Two Accumulates":
Type I: have no pigment.
Type II: No pigment at birth, but accumulates as person ages.
Knowledge Level 3, System: Integumental
Robert O'Connor University College Dublin

Clubbing: causes

## 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
"Pus of Pig Valve"
Remove the vowels: PSFPGVLV:
Psoriaform
Spongiotic (eczematous)
Folliculitis
Panniculitis
Granulomatous
Vasculopathic
Lichenoid
Vessiculobullous
Knowledge Level 3, System: Integumental
Daniel Clarke University of Queensland
Generalized skin hyperpigmentation: causes
Hi Yield [ID 923]
"With generalized, none of skin is SPARED":
Sunlight
Pregnancy
Addison's disease
Renal failure
Excess iron (haemochromatosis)
Drugs (eg busulphan)
Knowledge Level 9, System: Integumental
Lau Yue Young Geoffrey HKU

Malignant melanoma: 3 sites with poor prognosis
[ID 208]
BANS:
Back of Arm
Neck
Scalp
Knowledge Level 6, System: Integumental
Anonymous Contributor

| Nodules: painful cutaneous nodules causes | [ID 2856] |
| :--- | :--- |

## BENGAL CO.:

Blue rubber bleb nevus
Eccrine spiradenoma
Neurilemmoma/ Neuroma
Glomus tumor
Angiolipoma/ Angioleiomyoma/ Angiosarcoma
Leiomyoma
Cutaneous endometriosis/ Calcinosis cutis
Osteoma cutis
Knowledge Level 5, System: Integumental
Jaggi Rao University of Alberta

Psoriasis: pathophysiology

## PSORIASIS:

Pink Papules/ Plaques/ Pinpoint bleeding (Auspitz sign)/ Physical injury (Koebner phenomenon)/ Pain
Silver Scale/ Sharp margins
Onycholysis/ Oil spots
Rete Ridges with Regular elongation
Itching
Arthritis/ Abscess (Munro)
Stratum corneum with nuclei, neutrophils
Immunologic
$\mathbf{S}$ tratum granulosum absent/ $\mathbf{S}$ tratum $\mathbf{S}$ pinosum thickening
Knowledge Level 6, System: Integumental
Rinku Uberoi New York Hospital
|Raynaud's phenomenon: causes

## COLD HAND:

Cryoglobulins/ Cryofibrinogens
Obstruction/ Occupational
Lupus erythematosus, other connective tissue disease
Diabetes mellitus/ Drugs
Hematologic problems (polycythemia, leukemia, etc)
Arterial problems (atherosclerosis)
Neurologic problems (vascular tone)
Disease of unknown origin (idiopathic)
Knowledge Level 5, System: Integumental
Jaggi Rao University of Alberta

White patch of skin: differential
"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
[ID 1387]
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

$\begin{array}{ll}\text { Foregut derivatives } & \text { Hi Yield [ID 2452] }\end{array}$
"Little Embryo People Do Like S wallowing, Producing Gas":
Lungs
Esophagus
Pancreas
Duodenum (proximal)
Liver
Stomach
Pancreas
Gall bladder
Knowledge Level 2, System: Alimentary
Jason Wild Georgetown School of Medicine

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

Tetrology of Fallot Hi Yield [ID 607]
"IHOP-International House of Pancakes":
Interventricular septal defect
Hypotrophy of right ventricle
Overriding aorta
Pulmonary stenosis
Knowledge Level 1, System: Cardiovascular
Bradey T. Kleman Wright State University School of Medicine

Tetrology of Fallot

## PROVe:

Pulmonary stenosis
Right ventricular hypertrophy
Overriding aorta
Ventricular septal defect
Knowledge Level 1, System: Cardiovascular
Young Byun Emory Med

Vasculogenesis vs. angiogenesis
"Vascu is new. Angi is pre":
Vasculogenesis is new vessels developing in situ from existing mesenchyme.
Angiogenesis is vessels develop from sprouting off pre-existing arteries.
Knowledge Level 8, System: Cardiovascular
Robert O'Connor University College Dublin

Potter syndrome: features
Hi Yield [ID 1658]

## POTTER:

Pulmonary hypoplasia
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
Hi Yield [ID 508]

## GAMES:

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

Neuroectoderm gives rise to:

## Neurons

Neuroglia
Neurohypophysis
piNeurol (pineal) gland
Knowledge Level 6, System: Nervous
Payam Mehranpour

Fetal alcohol syndrome (FAS): features
Hi Yield [ID 1686]

## FAS:

Facial hypoplasia/ Forebrain malformation
Attention defecit disorder/ Altered joints
Short stature/ Septal defects/ S mall 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
Hi Yield [ID 861]
TEratogenesis is most likely during organogenesis--between the:
Third and
Eighth weeks of gestation.
Knowledge Level 3, System: Other/Miscellaneous
Rinku Uberoi

Vitelline duct: closure time
VItelline duct normally closes around week VI of intrauterine life.
Knowledge Level 6, System: Other/Miscellaneous
Anonymous Contributor

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

Lung development phases
"Every Premature Child Takes Air":
Embryonic period
Pseudoglandular period
Canalicular peroid
Terminal sac period
Alveolar period
Knowledge Level 8, System: Pulmonary
Robert O'Connor University College Dublin

## "WANT My Hot Dog":

Wastes
Antibodies
Nutrients
Teratogens
Microorganisms
Hormones/ HIV
Drugs
Knowledge Level 4, System: Reproductive
Anonymous Contributor

Woffian duct (mesonephric duct) derivatives.
Hi Yield [ID 1266]

## Gardener's SEED:

Female:
Gartner's duct, cyst
Male:
Seminal vesicles
Epididymis
Ejaculatory duct
Ductus deferens
Knowledge Level 4, System: Reproductive
Anonymous Contributor

## EMERGENCY MEDICINE

Activated charcoal: contraindications

## CHEMICAL CamP:

Cyanide
Hydrocarbons
Ethanol
Metals
Iron
Caustics
Airway unprotected
Lithium
CAMphor
Potassium
Knowledge Level 8, System: Alimentary
Vince Yamashiroya

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

Acute LVF management

## LMNOP:

Lasex (frusemide)
Morphine (diamorphine)
Nitrates
Oxygen (sit patient up)
Pulmonary ventilation (if doing badly)
Knowledge Level 2, System: Cardiovascular
Graeme Little University College London
"Have some asystole "TEA":
Transcutaneous pacing

## Epi

Atropine
Knowledge Level 7, System: Cardiovascular
Brenda L. Snyder, RN, CEN, PHRN George Washington University Hospital, Washington, D.C.

Atrial fibrillation: causes of new onset
Hi Yield [ID 1732]
THE ATRIAL FIBS:
Thyroid
Hypothermia
Embolism (P.E.)
Alcohol
Trauma (cardiac contusion)
Recent surgery (post CABG)
Ischemia
Atrial enlargement
Lone or idiopathic
Fever, anemia, high-output states
Infarct
Bad valves (mitral stenosis)
Stimulants (cocaine, theo, amphet, caffeine)
Knowledge Level 9, System: Cardiovascular
Sam LaCapra, M.D., F.A.C.E.P. Emergency Physician
Chest pain treatment, for nurses
[ID 2710]
"MOVE your patient!":
Monitor: put patient on cardiac monitor
Oxygen: put patient on O 2
Venous: gain large bore venous access
EKG: 12 lead EKG
Knowledge Level 1, System: Cardiovascular
R. Stilts, S.N. Senior Nursing Student

Endotrachial tube deliverable drugs
[ID 1405]
O NAVEL:
Oxygen
Naloxone
Atropine
Ventolin (albuterol)
Epinephrine
Lidocaine
If you can't get IV access established, and have necessity to administer resuscitative meds, remember you have the airway and can give the above drugs.

Drug delivery is enhanced if diluted with 10cc NS and rapid introduced for aeresolization.
Alternatively, bare bone version is ALE, as above.
Knowledge Level 7, System: Cardiovascular
Robert Lueken and Marc Eastern Virginia Medical School

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

## FAT PEA:

Fever
Anaemia
Thyrotoxicosis
Pregnancy
Exercise
A-V fistula
These are in addition to all the cardiac ones (pericardial effusion, RHF, tricuspid stenosis, SVC obstruction, etc).
Knowledge Level 3, System: Cardiovascular
Rajeev Peravali Year 3 Medical student, Birmingham University, UK

Malaria: complications of falciparum malaria
[ID 1900]
CHAPLIN:
Cerebral malaria/ Coma
Hypoglycemia
Anaemia
Pulmonary edema
Lactic acidosis
Infections
Necrois of renal tubules (ATN)
Knowledge Level 7, System: Cardiovascular
Dr. Harsh Sharma BJMC, Pune, India

MI: immediate treatment
Hi Yield [ID 1944]
DOGASH:
Diamorphine
Oxygen
GTN spray
Asprin 300mg
Streptokinase
Heparin
Knowledge Level 2, System: Cardiovascular
Ken Hodson Medical Student, University of Bristol

Pain history checklist Hi Yield [ID 2016]

## OLDER SAAB:

Onset
Location
Description (what does it feel like)
Exacerbating factors
Radiation
Severity
Associated symptoms
Alleviating factors
Before (ever experience this before)
Knowledge Level 6, System: Cardiovascular
Lissa Bird, NREMT-P

PEA/Asystole (ACLS): etiology
Hi Yield [ID 2505]

## 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

PEA:
Pulses check
Epinepherine
Atropine
Knowledge Level 5, System: Cardiovascular
Anonymous Contributor

Shock: general features
[ID 3205]

## CHORD ITEM:

Cold, clammy skin
Hypotension
Oliguria
Rapid, shallow breathing
Drowsiness, confusion
Irritability
Tachycardia
Elevated or reduced central venous pressure
Multi-organ damage
Knowledge Level 4, System: Cardiovascular
Seyi Kayode College of Health Sciences, Obafemi Awolowo University, Ile-ife, Osun State, Nigeria

Shock: signs and symptoms

## TV SPARC CUBE:

Thirst
Vomiting
S weating
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
Embolism (PE)
Aortic obstruction (IHSS, AS or myxoma)
Rhythm disturbance, ventricular

Tachycardia
Vascular causes are VESSELS:
Vasovagal
Ectopic (reminds one of hypovolemia)
Situational
Subclavian steal
ENT (glossopharyngeal neuralgia)
Low systemic vascular resistance (Addison's, diabetic vascular neuropathy)
Sensitive carotid sinus
Knowledge Level 6, System: Cardiovascular
Bill Young MD University of Kentucky Dept of Emergency Medicine
Ventricular fibrillation: treatment
Hi Yield [ID 598]
"Shock, Shock, Shock, Everybody Shock, Little Shock, Big Shock, Momma Shock, Poppa Shock":
Shock= Defibrillate
Everybody= Epinephine
Little $=$ Lidocaine
Big $=$ Bretylium
Momma $=\mathrm{MgSO} 4$
Poppa= Pocainamide
Knowledge Level 1, System: Cardiovascular
Anonymous Contributor
V-fib/pulseless v-tach (new ACLS as of 2001)
Hi Yield [ID 2490]
"EVAL My Pumper":
Epinephrine
Vasopressin
Amiodarone (class IIb--better for heart failure)
Lidocaine (indeterminate - better for young, healthy or persistent)
MgSO4 (IIb for hypomagnesemic state or torsades)
Procainamide (IIb for intermittent/recurrent VF/VT)
Knowledge Level 7, System: Cardiovascular
Brenda L. Snyder, RN, CEN, PHRN George Washington University Hospital, Washington, D.C.
Vfib/Vtach drugs used according to ACLS
"Every Little Boy Must Pray":
Epinephrine
Lidocaine
Bretylium
Magsulfate
Procainamide
Knowledge Level 2, System: Cardiovascular
Midnight Medic Paramedic in Texas

Diabetic ketoacidosis management

## F*¢KING:

Fluids (crytalloids)
Urea (check it)
Creatinine (check it)/ Catheterize
K+ (potassium)
Insulin (5u/hour. Note: sliding scale no longer recommended in the UK)
Nasogastic tube (if patient comatose)
Glucose (once serum levels drop to 12)
Knowledge Level 4, System: Endocrine
Graeme Little University College London

## AEIOU TIPS:

Acidosis/ Alcohol
Epilepsy
Infection
Overdosed
Uremia
Trauma to head
Insulin: too little or or too much
Pyschosis episode
Stroke occurred
Knowledge Level 2, System: Nervous
Midnight Medic Paramedic in Texas

Coma: differential

## UNCONSCIOUS:

Units of insulin
Narcotics
Convulsions
Oxygen
Nonorganic
Stroke
Cocktail
ICP
Organism
Urea
Shock
Knowledge Level 2, System: Nervous
Tom Hiser Clear Lake Emergency Medical Corps

ICU confusion causes
[ID 1351]

## ICU CONFUSION:

ICU psychosis
Cardiac output low [hypotension, post cardiac arrest]
Uncontrolled temperature [hypo/hyperthermia]
Convulsion [post ictal]
Oxygen [hypoxia, hypercarbia]
Nociception [pain]
Full bladder
Uremia
Sugar [hypo/hyperglycemia]
Infection
Opiates
Natremia [hypo/hyper]
Knowledge Level 8, System: Nervous
Dr. Sonali Vadi

Meningicoccal meningitis: complications
Hi Yield [ID 1735]
SAD REP:
Sepsis/ Shock/ Subdural effusion
Ataxia/ Abscess (brain)
DIC/ Deafness
Retardation
Epilepsy
Paralysis
Knowledge Level 5, System: Nervous
Richard Thompson Queens University, Belfast, NI

Miosis: causes of pin-point pupils

## CPR ON SLIME:

Clonidine
Phenothiazines
Resting (deep sleep)
Opiates
Narcotics
Stroke (pontine hemorrhage)
Lomotil (diphenoxylate)
Insecticides
Mushrooms/ Muscarinic (inocybe, clitocybe)
Eye drops
Knowledge Level 7, System: Nervous
Sam LaCapra, M.D., F.A.C.E.P. Emergency Physician

Neurological focal deficits
[ID 1733]
10 S's:
Sugar (hypo, hyper)
Stroke
Seizure (Todd's paralysis)
Subdural hematoma
Subarachnoid hemorrhage
Space occupying lesion (tumor, avm, aneurysm, abscess)
Spinal cord syndromes
Somatoform (conversion reaction)
Sclerosis (MS)
Some migraines
Knowledge Level 9, System: Nervous
Sam LaCapra, M.D., F.A.C.E.P. Emergency Physician

Organophosphates poisoning symptoms
Hi Yield [ID 1325]

## MILES:

Miosis
Increased urinary frequency
Lacrimation
Enuresis
Salivation
Knowledge Level 4, System: Nervous
Anonymous Contributor

Organophosphates poisoning: symptoms

## DUMBBELS:

Diarrhea
Urination
Miosis
Bradycardia
Bronchospasm
Emesis
Lacrimation
Salivation
Knowledge Level 5, System: Nervous
Martin Herman Le Bonheur Children's Medical Center

## SICK DRIFTER:

Substrates (sugar, oxygen)
Isoniazid overdose
Cations (Na, Ca, Mg)
Kids (ecclampsia)
Drugs (CRAP: Cocaine, Rum (alcohol), Amphetamines, PCP)
Rum (alchohol withdrawl)
Illnesses (chronic seizure disorder or other chronic disorder)
Fever (meningitis, encephalitis, abscess)
Trauma (epidural, subdural, intraparynchymal hemorrhage)
Extra: toxocologic (TAIL: Theo, ASA, Isoniazid, Lithium) and 3 Anti's: (Antihistamine overdose, Antidepressant overdose, Anticonvulsants
(too high dilanitin, tegretol) or benzo withdrawl.
Rat poison (organophospates poisoning)
Knowledge Level 1, System: Nervous
Joseph Rogers, MD Duke University

Unconciousness: differential
Hi Yield [ID 2607]

## FISH SHAPED:

## Fainted

Illness/ Infantile febrile convulsions
Shock
Head injuries
Stroke (CVE)
Heart problems
Asphxia
Poisons
Epilepsy
Diabetes
Knowledge Level 1, System: Nervous
B Sylvester Surrey Ambulance Service (UK)

Coma and signicantly reduced conscious state causes: causes
COMA:
CO2 and CO excess
Overdose: TCAs, Benzos, EtOH, insulin, paracetamol, etc.
Metabolic: BSL, $\mathrm{Na}+, \mathrm{K}+, \mathrm{Mg} 2+$, 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

Coma: conditions to exclude as cause
MIDAS:
Meningitis
Intoxication
Diabetes
Air (respiratory failure)
Subdural/ Subarachnoid hemorrhage
Knowledge Level 3, System: Other/Miscellaneous
Anonymous Contributor

Malignant hyperthermia treatment
"S ome Hot Dude Better Give Iced Fluids Fast!" (Hot dude = hypothermia):
Stop triggering agents
Hyperventilate/ Hundred percent oxygen
Dantrolene ( $2.5 \mathrm{mg} / \mathrm{kg}$ )
Bicarbonate
Glucose and insulin
IV Fluids and cooling blanket
Fluid output monitoring/ Furosemide/ Fast heart [tachycardia]
Knowledge Level 3, System: Other/Miscellaneous

## ABCDE:

Airway
Breathing
Circulation
Drugs
Environment
Knowledge Level 1, System: Other/Miscellaneous
Mohamed Azim, MD Pediatric Surgeon, Alexandria University, Egypt

RLQ pain: differential
Hi Yield [ID 933]

## APPENDICITIS:

Appendicitis/ Abscess
PID/ Period
Pancreatitis
Ectopic/ Endometriosis
Neoplasia
Diverticulitis
Intussusception
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

Trauma: motor vehicle accident considerations
[ID 2489]
I AM SCARED:
Impact (head-on, rear-end, t-bone, rollover, rotational etc.)
Auto vs. pedestrian, bike, motorcycle (start @ speed $>10 \mathrm{mph}$ )
Medical history (cardiac, coagulolation, liver, immuno, obese, prego)
Speed ( $>50 \mathrm{mph}$ ?)
Compartment intrusion (>12 inches?)
Age ( $<5$ or $>55$ y.o.?)
Restraints (lap \& shoulder, either, airbag, infant or child seat?)
Ejection/ Extrication (eject=25x greater death, extr>20min)
Death (at scene, same vehicle, other)
Knowledge Level 6, System: Other/Miscellaneous
Brenda L. Snyder, RN, CEN, PHRN George Washington University Hospital, Washington, D.C.

ARDS: diagnostic criteria
[ID 2906]

## ARDS:

Acute onset
Ratio ( $\mathrm{PaO} 2 / \mathrm{FiO} 2$ ) less than 200
Diffuse infiltration
S wan-Ganz Wedge pressure less than 19 mmHg
Knowledge Level 6, System: Pulmonary
Fahed Al-Daour

ARDS: full differential

## CARDS? HOPE ITS NOT ARDS:

CNS disorders
Aspiration (gastric)
Radiation
Drugs (heroin, morphine, barbiturates, etc)
Smoke, toxic gas inhalation
Hypotension, shock
Oxygen toxicity
Pancreatitis
Emboli
Infection, sepsis
Transfusion reaction
Surgery (esp. cardiac)
Near drowning
Obstetrical emergencies (eg eclampsia, HELLP)
Thermal injuries/ burns
Altitude sickness
Renal failure
DIC
SLE
Knowledge Level 7, System: Pulmonary
Fahed Al-Daour

## Asthma: management of acute severe

Hi Yield [ID 472]

## "O S\#!T":

Oxygen (high dose: >60\%)
S albutamol (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

Decompression sickness
[ID 1273]
Boyle's law: volume of gas is inversely proportionate to its pressure.
Therefore, BOYLE:
Breathe (as you ascend)
Or
Your
Lung
Explodes
Breathe as you ascend after scuba diving, since the pressure decreases on surfacing, so the gas volume in lung increases.
Knowledge Level 8, System: Pulmonary
Mohamed Azim, MD Assistant lecturer, Pediatric surgery, Alexandria University, Egypt

3A's: Three Airways: Airway obstruction, Anaphylaxis, Asthma
3P's: Three Pulmonary's: Pneumothorax, PE, Pulmonary edema
3C's: Three Cardiacs: Cardiogenic pulmonary edema, Cardiac ischemia, Cardiac tamponade
3M's: Three Metabolics: (DOC) DKA, Organophosphates, Carbon monoxide poisoning
Knowledge Level 1, System: Pulmonary
Joseph Rogers, MD Duke University
Endotracheal tube: troubleshooting

## DOPEY:

Displaced: esophagus, right mainstem, back of throat, etc
Obstructed: secretions, blood, mucus plug, kink, etc
Pneumothorax
Equipment: malfunctions, O2, ETT, BVM, ventilator, monitor
You: your approach, technique: missing something?
Knowledge Level 5, System: Pulmonary
Brenda L. Snyder, RN, CEN, PHRN George Washington University Hospital, Washington, D.C.
Pneumothorax: causes [ID 3079]

SIT, 3 A's, 3 C's:
Spontaneous (often tall thin men)
Iatrogenic
Trauma
Asthma
Alveolitis
AIDS
COPD
Carcinoma
Cystic fibrosis
Knowledge Level 4, System: Pulmonary
Jamal Khan Birmingham University Medical Student
$\begin{array}{ll}\text { Fall: potential causes } & \text { [ID 459] }\end{array}$

## CLADE SPADE:

Cardiovascular/ Cerebrovascular
Locomotor (skeletal, muscular, neurological)
Ageing (increased body sway, decreased reaction time)
Drugs (esp. antihypertensives, antipsychotics)
Environmental
Sensory deficits (eg. visual problems)
Psychological/ Psychiatric (depression)
Acute illness
Dementia
Epilepsy
Knowledge Level 4, System: Skeletal
Harris-Davies-Tamblyn Adelaide Medical School
Fall: potential causes

## I'VE FALLEN:

Illness
Vestibular
Environmental
Feet/ Footwear
Alcohol and drugs
Low blood pressure
Low O2 states
Ears/ Eyes
Neuropathy
Knowledge Level 2, System: Skeletal
Muhammad Asif Iqbal Resident, SLU, MO

## ENT

Oralpharangeal cancers: aetiology
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

## EPIDEMI OLOGY / BI OSTATISTICS

| Alcohol withdrawal effects | Hi Yield [ID 402] |
| :--- | :--- |

## "S\#IT":

Shakes/ Seizures/ S weats/ 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

## SAD PERSONS:

Sex: male
Age: young, elderly
Depression
Previous suicide attempts
Ethanol and other drugs
Reality testing/ Rational thought (loss of)
Social support lacking
Organized suicide plan
No spouse
Sickness/Stated future intent
Knowledge Level 4, System: Nervous
Anonymous Contributor

Suicide risk factors in order of risk

## SOARS:

Top 6 risk factors in order of highest to lowest risk:
Serious previous attempt
Older than 45
Alcohol
Rage history
Sex (male)
Knowledge Level 4, System: Nervous
Robert O'Connor University College Dublin
seNsitivity of a test: related to the rate of false Negatives.
sPecificity of a test: related to the rate of false Positives.
Alternatively written:
seNsitive: No Non-Negatives.
sPecific: Puny Psuedo-Positives.
Knowledge Level 2, System: Other/Miscellaneous
Fred Reid Undergrad at St-Andrews, UK

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

Error: type I (alpha) vs. type II (beta)
Hi Yield [ID 2026]
Type I (Alpha) Error:
"There Is An Effect" where in reality there is none.
Knowledge Level 1, System: Other/Miscellaneous
Robert O'Connor University College Dublin
Hill criteria for causality
[ID 925]
" 'Clowns Pursuing Epidemiology' Commonly Behind The Silly Samples":
Consistency
Plausibility
Experimentation
Biological gradient
Coherence
Temporality
Strength of association
Specificity
Knowledge Level 6, System: Other/Miscellaneous
TR Columbia PandS

Incidence vs. prevalence
Hi Yield [ID 1411]
Incidence: Initiate Infection In Interval.
Prevalence: Population's Percentage Positive.
Knowledge Level 1, System: Other/Miscellaneous
Robert O'Connor University College Dublin

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
Knowledge Level 1, System: Other/Miscellaneous
Robert O'Connor University College Dublin
"How I want a drink, alcoholic of course, after the heavy chapters involving quantum mechanics. One is, yes, adequate even enough to produce some fun and pleasure for an instant, miserably brief":
The number of letters in each subsequent word of these two sentences give the value of pi to 3.141592653589793238462643383279
Alternatively: If only want first 6 decimal places, use the sentence "How I wish I could calculate Pi! "
Knowledge Level 8, System: Other/Miscellaneous
Anonymous Contributor

Poisson distribution formula
MNEMONIc: $\mathbf{M}$ to the $\mathbf{N}$ th power times $\mathbf{E}$ to the Minus nth $\mathbf{O}$ ver $\mathbf{N}$ factorial
Formula is: $\left(\left(m^{\wedge} \mathrm{n}\right) *\left(\mathrm{e}^{\wedge}-\mathrm{n}\right)\right) / \mathrm{n}$ !
Note: the factorial (!) at the end is an inverted lowercase letter $\mathbf{i}$.
Knowledge Level 7, System: Other/Miscellaneous
Anonymous Contributor

Prevention: primary vs. secondary vs. tertiary
Hi Yield [ID 1409]
Primary: Predisposing factors decreased.
Secondary: Severity decreased.
Tertiary: Therapy, Training.
Knowledge Level 1, System: Other/Miscellaneous
Robert O'Connor University College Dublin

## Recall bias

Hi Yield [ID 1354]
REcall bias is a problem with
REtrospective studies and is based on ability to
REmember.
Knowledge Level 4, System: Other/Miscellaneous
Rinku Uberoi

Reliability
Hi Yield [ID 2213]
Random Error

## REduces

REliability (REproducibility)
Knowledge Level 4, System: Other/Miscellaneous
Anonymous Contributor
Cigarette smoke: major carcinogens

## PANT:

Polynuclear aromatic hydrocarbons
Aromatic amines
Nitrosamines
Tar
Nicotine and Carbon monoxide are Non-Carcinogenic. Knowledge Level 4, System: Pulmonary
Dr. Harsh Sharma BJMC, Pune, India

## GASTROENTEROLOGY

## Bilirubin: common causes for increased levels

## "HOT Liver":

Hemolysis
Obstruction
Tumor
Liver disease
Knowledge Level 4, System: Alimentary
Sung H. Kim

BROW:
Barley
Rye
Oats
Wheat
Flattened intestinal villi of celiac sprue are smooth, like an eyebrow.
Knowledge Level 4, System: Alimentary
Jack A. Pasquale, MD St. George's University, School of Medicine
Charcot's triad (gallstones)
Hi Yield [ID 695]
"Charcot's Triad is $\mathbf{3}$ C's":
Color change (jaundice)
Colic (biliary) pain, aka RUQ pain
Chills and fever
Knowledge Level 3, System: Alimentary
Rinku Uberoi UNIBE

| Charcot's triad (gallstones) | Hi Yield [ID 835] |
| :--- | :--- |

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

Cholangitis features
Hi Yield [ID 696]

## CHOLANGITITS:

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

Cirrhosis: differential: common and rarer
[ID 3071]

Common causes are ABC:
Alcohol
B (Hepatitis)
C (Hepatitis)
Rarer are also ABC:
Autoimmune
Biliary cirrhosis
Copper (Wilson's)
Knowledge Level 3, System: Alimentary
Jamal Khan Birmingham University Medical Student
Constipation: causes
[ID 3063]

## DOPED:

Drugs (eg opiates)
Obstruction (eg IBD, cancer)
Pain
Endocrine (eg hypothyroid)
Depression
Knowledge Level 2, System: Alimentary
Jamal Khan Birmingham University Medical Student
Crohn's disease: morphology, symptoms
Hi Yield [ID 1270]

## 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

Digestive disorders: pH level
With vomiting both the pH and food come up.
With diarrhea both the pH and food go down.
Knowledge Level 3, System: Alimentary
Joel Topf Indiana University

Dry mouth: differential
"DRI":
2 of each:
Drugs/ Dehydration
Renal failure/ Radiotherapy
Immunological (Sjogren's)/ Intense emotions
Knowledge Level 5, System: Alimentary
Anil Pandit Manipal College of Medical Sciences, Pokhara, Nepal
Dysphagia: causes
[ID 3070]

## MOON:

Mouth lesions
Obstruction
Oesophageal stricture
Neurological (eg stroke, Guillain-Barre, achalasia)
Knowledge Level 2, System: Alimentary
Jamal Khan Birmingham University Medical Student
|Dysphagia: differential

## DISPHAGIA:

Disease of mouth and tonsils/ Diffuse oesophageal spasm/ Diabetes mellitus
Intrinsic lesion
Scleroderma
Pharyngeal disorders/ Palsy-bulbar-MND
Achalasia
Heart: eft atrium enlargement
Goitre/ myesthenia Gravis/ mediastinal Glands
Infections
American trypanosomiasis (chagas disease)
Knowledge Level 4, System: Alimentary
Anil Pandit, Manipal College of Medical Sciences, Pokhara, Nepalmanipal
GIT symptoms
BAD ANAL S\#!T:
Bleeding
Abdominal pain
Dysphagia
Abdominal bloating
Nausea \& vomiting
Anorexia/ Appetite changes
Lethargy
S\#!ts (diarrhea)
Heartburn
Increased bilirubin (jaundice)
Temperature (fever)
Knowledge Level 1, System: Alimentary
The Cashman University of Queensland, Australia
H. Pylori treatment regimen (rough guidelines)

Hi Yield [ID 425]
"Please Make Tummy Better":
Proton pump inhibitor
Metronidazole
Tetracycline
Bismuth
Alternatively: TOMB:
Tetracycline
Omeprazole
Metronidazole
Bismuth
Knowledge Level 2, System: Alimentary
Steven Holsenback and Leena Alexander COMP and Texas, USA

Hepatic encephalopathy: precipitating factors

## HEPATICS:

Hemorrhage in GIT/ Hyperkalemia
Excess protein in diet
Paracentesis
Acidosis/ Anemia
Trauma
Infection
Colon surgery
Sedatives
Knowledge Level 4, System: Alimentary
Dr. Chetan Wasekar

DNA mismatch causes a bubble in the strand where the two nucleotides don't match.
This looks like the ensuing polyps that arise in the colon.
See diagram.
Knowledge Level 7, System: Alimentary
Anonymous Contributor

IBD: extraintestinal manifestations

## A PIE SAC:

Aphthous ulcers
Pyoderma gangrenosum
Iritis
Erythema nodosum
Sclerosing cholangitis
Arthritis
Clubbing of fingertips
Knowledge Level 5, System: Alimentary
Anonymous Contributor

IBD: surgery indications
[ID 209]
"I CHOP":
Infection
Carcinoma
Haemorrhage
Obstruction
Perforation
"Chop" convenient since surgery chops them open.
Knowledge Level 3, System: Alimentary
Anonymous Contributor

Liver failure (chronic): signs found on the arms

## CLAPS:

Clubbing
Leukonychia
Asterixis
Palmar erythema
Scratch marks
Knowledge Level 1, System: Alimentary
Jason

Pancreatitis (acute): causes
Hi Yield [ID 143]

## GET SMASHED:

Gallstones
Ethanol
Trauma
Steroids
Mumps
Autoimmune (PAN)
Scorpion stings
Hyperlipidemia/ Hypercalcemia
ERCP
Drugs (including azathioprine and diuretics)
Note: 'Get Smashed' is slang in some countries for drinking, and ethanol is an important pancreatitis cause.
Knowledge Level 3, System: Alimentary
Chris Perry Edinburgh Medical School

## 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
Hi Yield [ID 1055]

## LEGAL:

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

Pancreatitis: Ranson criteria for pancreatitis: at admission
Hi Yield [ID 999]
"GA LAW" (GA is abbreviation for the U.S. state of Georgia):
Glucose >200
AST >250
LDH > 350
Age $>55$ y.o.
WBC > 16000
Knowledge Level 2, System: Alimentary
Anonymous Contributor
Pancreatitis: Ranson criteria for pancreatitis: initial 48 hours
"C \& HOBBS" (Calvin and Hobbes):
Calcium < 8
Het drop > 10\%
Oxygen < 60 mm
BUN > 5
Base deficit > 4
Sequestration of fluid $>6 \mathrm{~L}$
Knowledge Level 2, System: Alimentary
Anonymous Contributor

Splenomegaly: causes
[ID 3066]
CHINA:
Congestion/ Cellular infiltration
Haematological (eg haemolytic anaemia, Sickle cell)
Infection/ Infarction (eg malaria, GF, CMV)
Neoplasia (eg CML, lymphoma, other myeloproliferative)
Autoimmune
Knowledge Level 3, System: Alimentary
Jamal Khan Birmingham University Medical Student
| Ulcerative colitis: complications
"PAST Colitis":
Pyoderma gangrenosum
Ankylosing spondylitis
Sclerosing pericholangitis
Toxic megacolon
Colon carcinoma
Knowledge Level 4, System: Alimentary
Ritu Garg

Ulcerative colitis: definition of a severe attack
[ID 2719]

## A STATE:

Anemia less than $10 \mathrm{~g} / \mathrm{dl}$
Stool frequency greater than 6 stools/day with blood
Temperature greater than 37.5
Albumin less than $30 \mathrm{~g} / \mathrm{L}$
Tachycardia greater than 90 bpm
ESR greater than $30 \mathrm{~mm} / \mathrm{hr}$
Knowledge Level 6, System: Alimentary
Anil Pandit Manipal College of Mecdical Sciences, Pokhara, Nepal

Vomiting: extra GI differential
Hi Yield [ID 2720]

## 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
Whipple's disease: clinical manifestations

## SHELDA:

Serositis
Hyperpigmentation of skin
Eating less (weight loss)
Lymphadenopathy
Diarrhea
Arthritis
Knowledge Level 6, System: Alimentary
Pedro Tulio Universidade Federal do Rio de Janeiro, Brazil

Haemachromatosis complications
Hi Yield [ID 888]
"HaemoChromatosis Can Cause Deposits Anywhere":
Hypogonadism
Cancer (hepatocellular)
Cirrhosis
Cardiomyopathy
Diabetes mellitus
Arthropathy
Knowledge Level 6, System: Cardiovascular
Logan Mitchell Dunedin Medical School, New Zealand
Diabetic ketoacidosis: precipitating factors

## 5 I's:

Infection
Ischaemia (cardiac, mesenteric)
Infarction
Ignorance (poor control)
Intoxication (alcohol)
Knowledge Level 4, System: Endocrine
James Thomas

Liver failure: decompensating chronic liver failure differential
[ID 2742]

## HEPATICUS:

Haemorrhage
Electrolyte disturbance
Protein load/ Paracetamol
Alcohol binge
Trauma
Infection
Constipation
Uraemia
Sedatives/ Shunt/ Surgery
Knowledge Level 5, System: Integumental
Jude McSharry University College Hospital Galway
$\begin{array}{ll}\text { Splenomegaly: causes } & \text { [ID 2852] }\end{array}$
CHIMP:
Cysts
Haematological ( eg CML, myelofibrosis)
Infective (eg viral (IM), bacterial)
Metabolic/ Misc (eg amyloid, Gauchers)
Portal hypertension
Knowledge Level 1, System: Lymphoid
Mel

## GENETICS

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

APKD: genetics
ADult Polycystic Kidney Disease is
Autosomal
Dominant
Also, "Polycystic kidney" has $\mathbf{1 6}$ letters and is due to a defect on chromosome $\mathbf{1 6}$.
Knowledge Level 5, System: Kidney/Urine
Anonymous Contributor

Bartter syndrome: inheritance
[ID 1310]
BARtter syndrome is autosomal recessive (AR).
Knowledge Level 8, System: Kidney/Urine
Anonymous Contributor

## CATCH 22:

Cardiac abnormalities
Abnormal facies
Thymic aplasia
Cleft palate
Hypocalcemia
22q11 deletion
Knowledge Level 7, System: Lymphoid
Anonymous Contributor

Tumor suppressor vs. proto-onogene mutations: recessive vs. dominant
"Recess Suppress":
Tumor suppressor mutations are recessive.
Proto-oncogenes are opposite (dominant).
Knowledge Level 3, System: Lymphoid
Anonymous Contributor

| Tay Sach's features | Hi Yield [ID 829] |
| :--- | :--- |

## SACHS:

Spot in macula
Ashkenazic Jews
CNS degeneration
Hex A deficiency
Storage disease
Extra details with TAY:
Testing recommended
Autosomal recessive/ Amaurosis
Young death ( $<4 \mathrm{yrs}$ )
Knowledge Level 2, System: Nervous
Robert O'Connor University College Dublin

"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 S ally Go! Make Children!":
G1 phase (Growth phase 1)
S phase (DNA Synthesis)
G2 phase (Growth phase 2)
$\mathbf{M}$ phase (Mitosis)
C phase (Cytokinesis)
Knowledge Level 1, System: Other/Miscellaneous
Anonymous Contributor

## Chromosome 15 diseases

Hi Yield [ID 1287]
Chromosome 15 has its own MAP:
Marfan syndrome
Angelman syndrome
Prader-Willi syndrome
Knowledge Level 3, System: Other/Miscellaneous
Christopher Jordan UAG

## "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 $5 p(-)$
Hi Yield [ID 408]
What's another name for a cat that's five letters long and starts with a P? (Answer: pussy).
Why is the cat crying? Missing its $\mathbf{P}$.
Knowledge Level 3, System: Other/Miscellaneous
Anonymous Contributor

DNA: $\mathbf{Z}$ vs. $B$ form: which is inactive
Hi Yield [ID 2250]
$\mathbf{Z Z Z Z}$ is sleeping (inactive).
B form is therefore active DNA.
Knowledge Level 2, System: Other/Miscellaneous
Robert O'Connor University College Dublin

Down syndrome features: complete $\quad$ Hi Yield [ID 865]
"My CHILD HAS PROBLEM!":
Congenital heart disease/ Cataracts
Hypotonia/ Hypothyroidism
Incure 5th finger/ Increased gap between 1st and 2nd toe
Leukemia risk x2/Lung problem
Duodenal atresia/ Delayed development
Hirshsprung's disease/ Hearing loss
Alzheimer's disease/ Alantoaxial instability
Squint/ Short neck
Protruding tongue/ Palm crease
Round face/ Rolling eye (nystagmus)
Occiput flat/ Oblique eye fissure
Brushfield spot/ Brachycephaly
Low nasal bridge/ Language problem
Epicanthic fold/ Ear folded
Mental retardation/ Myoclonus
Knowledge Level 9, System: Other/Miscellaneous
Lau Yue Young Geoffrey Medical Student '03, Hong Kong University

| Down syndrome pathology | Hi Yield [ID 803] |
| :---: | :---: |

## DOWN:

Decreased alpha-fetoprotein and unconjugated estriol (maternal)
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

Hardy-Weinberg equilibrium: causes for deviations from it

[^9]Hurler syndrome features
Hi Yield [ID 820]

## HURLER'S:

Heptosplenomegaly
Ugly facies
Recessive (AR inheritance)
L-iduronidase deficiency (alpha)
Eyes clouded
Retarded
Short/ S tubby fingers
Knowledge Level 3, System: Other/Miscellaneous
Robert O'Connor University College Dublin

Imprinting diseases: Prader-Willi and AngeIman
Hi Yield [ID 699]
"Pray to an Angel":
Prader-Willi and Angelman are the 2 classic imprinting diseases.
Which disease results, depends on whether 15 q 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

Hi Yield [ID 642]

## 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
Hi Yield [ID 32]
"Pyrimadines are CUT from purines"
Pyrimidines are:
Cytosine
Uracil
Thiamine
They are cut from purines so the pyrimadines must be smaller (one ring).
Knowledge Level 1, System: Other/Miscellaneous
Anonymous Contributor

Nucleotides: double vs. triple bonded basepairs
Hi Yield [ID 2060]
"TU bonds" (two bonds):
T-A and U-A have Two bonds.
G-C therefore has the three bonds.
Knowledge Level 2, System: Other/Miscellaneous
Robert O'Connor University College Dublin
"AGUA PURa":
Adenine and GUAnine are PURines.
"Agua pura" is spanish for "pure water".
Knowledge Level 1, System: Other/Miscellaneous
Patricia Sanchez INTEC University, Santo Domingo, Dominican Republic

Nucleotides: purines vs. pyrimidines
[ID 1228]
"Guardian Angels are Pure, with two Wings":
$\mathbf{G}$ and $\mathbf{A}$ are Purines, with two Rings. See diagram.
Knowledge Level 1, System: Other/Miscellaneous
V. Coleman University of Washington SOM, Seattle

Nucleotides: which are purines
Hi Yield [ID 415]
"Pure Silver":
Chemical formula of Pure silver is $\mathbf{A g}$.
Therefore, Purines are Adenine and Guanine.
Knowledge Level 1, System: Other/Miscellaneous
Jason Mounts Medical College of Georgia
Pedigree symbols: gender and affected
[ID 113]
Gender: The cIRcle is a gIR1 [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


$$
1
$$

"Powerful Businesses Pollute Our Reeling Environment":
Proerythroblast
Basophilic erythroblast
Polychromatic erythroblast
Orthochromatophilic erythroblast
Reticulocyte
Erythrocyte
Knowledge Level 3, System: Cardiovascular
Samuel Atom Haek-Kim

Vascular endothelium: simplified cross-section
Hi Yield [ID 2165]
LIMA:
Lumen
Intima
Media
Adventitia
Knowledge Level 1, System: Cardiovascular
Anonymous Contributor

Adrenal cortex layers [for Florida Gator fans]
"Gator Football Rocks!":
From outside inwards:
Glomerulosa
Fasciculata
Reticularis
Knowledge Level 1, System: Endocrine
Anonymous Contributor

Pancreatic exocrine cells: nuclei
[ID 282]
A cells are indented around the capital $\mathbf{A}$.
$\mathbf{B}$ cells have a round nucleus like a $\mathbf{B}$ lymphocyte.
See diagram.
D cells have Different shapes and sizes.
Knowledge Level 4, System: Endocrine
Anonymous Contributor


Pituitary: anterior pituitary products: acidophilic vs basophilic
[ID 1165]
Acidophilic:

## GPA:

Growth hormone
Prolactin
Acidophilic
Basophilic:
B-FLAT
Basophilic
FSH
LH
ACTH
TSH
Knowledge Level 5, System: Endocrine
Anonymous Contributor

[^10]Epidermis layers
"Bad Skin Gets Little Calluses":
From deep to superficial:
Basale
Spinosum
Granulosum
Lucidum
Corneum
Knowledge Level 1, System: Integumental
Anonymous Contributor

Epidermis layers
"Bull S\#it Grandma Likes C*ck!":
In order from deep to superficial:
Basale
Spinosum
Granulosum
Lucidum
Corneum
Knowledge Level 1, System: Integumental
Anonymous Contributor

Epidermis layers [for Star Trek fans]
"Brent Spiner Gained Lieutenant Commander":
From deep to superficial:
Basale
Spinosum
Granulosum
Lucidum
Corneum
Knowledge Level 1, System: Integumental
Anonymous Contributor

Hair: 4 layers of germinal matrix product
"Mary Can't C*ck Suck":
From centre to periphery:
Medulla
Cortex
Cuticle
Sheaths
Knowledge Level 2, System: Integumental
Anonymous Contributor

Basophil has Big Blue Balls (granules).
Knowledge Level 3, System: Lymphoid
Anonymous Contributor

Basophil vs. eosinophils: effect for allergic persons
[ID 2619]
Basophils are "Bad-o-phils" because they contribute to our allergic reactions.
Eosinophils are "Easy-on-me-phils" because they counteract our allergic reactions.
Knowledge Level 4, System: Lymphoid
Andrew Hammer

Leukocytes: granulated and agranulated
[ID 762]
"BEN Loves Money":
Granulocytes:
Basophil
Eosinophil
Neurophil
Agranulocytes:
Lymphocytes
Monocytes
Alternatively: Granpa BEN..." to keep the granulated group straight.
Knowledge Level 2, System: Lymphoid
Priya and Abe UNIBE

Mast cell primary granule contents
"Master, His Hepes Causes Choking \& Gagging!":
Mast = Mast cell
His $=$ Histamine
$\mathrm{He}=$ Heparin
C = Chymase
$\mathbf{C h}=$ Chemotactic factor for eosinophils
Gag $=\mathbf{G A G a s e}$
Knowledge Level 5, System: Lymphoid
Ms Sushi UCLA Medicine

Neutrophil's 2 distinctive physical features
[ID 119]
1: There's up to $\mathbf{5}$ lobes of the nucleus joined by thin appendages. Tie this to it being a neutrophil nucleus by arranging the $\mathbf{5}$ lobes into a capital $\mathbf{N}$ for Neutrophil.
2: the chicken leg (Barr Body) sticking out. Say it out loud: chick-N. The chick-N leg is for Neutrophil.
Knowledge Level 2, System: Lymphoid
Robert O'Connor University College Dublin


White blood cell relative concentrations
"Never Let Monkeys Eat Bananas":
From greatest to least:
Neutrophils (65\%)
Lymphocytes (25\%)
Monocytes (6\%)
Eosinophils (3\%)
Basophils (1\%)
Alternatively: "Nine Little Monkeys Eating Bananas".
Alternatively: "Noone Likes My Educational Background".
Alternatively: "Never Let Mamma Eat Beans".
Can remember that Eosinophils is $\mathbf{3} \%$, by the mirror image of $\mathbf{E}$ is $\mathbf{3}$.
Knowledge Level 1, System: Lymphoid
Anonymous Contributor and Dr. Atif Farooq and Anonymous Contributor University of Sydney, Australia and Rawalpindi Medical College, Islamabad, Pakistan and Nurse

Nuclei location mirrors where the muscle is located in human body.
Heart muscle is in the middle of body, so heart muscle has nucleus in middle.
Skeletal muscles are at periphery of body, so nuclei are at periphery.
Also, you have 1 heart, so usually only 1 nucleus per heart muscle cell, but have many skeletal muscles, so have many nuclei per long fibre.

See diagram.
Knowledge Level 1, System: Muscle
Robert O'Connor University College Dublin


Muscle fiber: types

## Type 1:

"1 slow fat red 0 ":
-slow twitch
-lipid accumulation
-red fibers
-oxidative
Type 2:
" 2 fast skinny white breasts":
-fast twitch
-low lipid
-white fibers, like chicken breasts
Knowledge Level 3, System: Muscle
Ocean University of Texas Medical Branch

Muscle sarcomere bands
[ID 379]
"Zee Intelligent Animal Has Muscle":
From the Z disk, working inward, remembering symmetry:

## ZIAHMHAIZ.

Alternatively: "Zoe Is A Horny Momma".
Knowledge Level 1, System: Muscle
Jeremy Smith and Josh Kunken GSU Undergrad and University of California, Berkeley

Muscle sarcomere: A vs. I as light or dark
[ID 50]
There is only one vowel in "dark" and one vowel in "light".
These one vowels match up to their one letter names:
DArk band is the $\mathbf{A}$ band.
LIght band is the I band.
Knowledge Level 2, System: Muscle
Robert O'Connor University College Dublin

Muscle sarcomere: H line vs. Z disc location
HAZI (Hazy):
$\mathbf{H}$ line is in $\mathbf{A}$-band.
$\mathbf{Z}$ disc is in the $\mathbf{I}$ band.
Knowledge Level 1, System: Muscle
Sujay Patel University College Dublin

Cochlea chambers: ones with perilymph vs. endolymph
PerI- ones also end with 'I': vestibulI and tympanI.
Therefore, perilymph is in scala vestibuli and scala tympani, and the endolymph is in the scala media.
Knowledge Level 6, System: Nervous
Robert O'Connor University College Dublin

Organ of corti: location

The organ of COrti
is inside the $\mathbf{C O}$ chlea.
Knowledge Level 3, System: Nervous
Rinku Uberoi Willsey Institute

Schwann cell only myelinates 1 axon
Hi Yield [ID 1130]
SchWANN = sounds like ONE.
A single Schwann cell only myelinates one PNS axon.
Knowledge Level 1, System: Nervous
Lior Greenberg Technion Faculty of Medicine, Haifa, Israel

Collagen: location of types
[ID 3159]
Type One: bONE
Type Two: CarTwolage
Type Four: "Four on the Floor" [automotive transmission term] basement membrane (the "floor") is mostly Type IV collagen Knowledge Level 1, System: Other/Miscellaneous

Extracellular matrix components
"HELP Form Collagen":
Hyaluronic acid
Elastin
Laminin
Proteoglycan
Fibronectin
Collagen
Knowledge Level 4, System: Other/Miscellaneous
Kelvin University of Hong Kong
Epiphyseal plate: zones
"Real People Have Career Opportunities":
Resting zone
Proliferative zone
Hypertrophic zone
Calcified cartilage zone
Ossification zone
Knowledge Level 2, System: Skeletal
Gonzalo Baylor College of Medicine

## I MMUNOLOGY

Chrug-Strauss syndrome: symptoms and signs
PAVE:
P-ANCA
Asthma
Vasculitis
Eosinophilia
Knowledge Level 3, System: Cardiovascular
Marcus Fidel UNM School of Medicine

Graves disease: etiology
In Graves disease, the thyroid-stimulating immunoglobulins are of the IgG class.
Knowledge Level 5, System: Endocrine
Anonymous Contributor

## SOAP BRAIN:

Serositis [pleuritis, pericarditis]
Oral ulcers
Arthritis
Photosensitivity
Blood [all are low - anemia, leukopenia, thrombocytopenia]
Renal [protein]
ANA
Immunologic [DS DNA, etc.]
Neurologic [psych, seizures]
Knowledge Level 4, System: Integumental
Ken Evans Saskatchewan Health, Acute and Emergency Services

Acute inflammation features

## SLIPR:

S welling
Loss of function
Increased heat
Pain
Redness
"What a cute pair of slippers" can be used to tie acute inflammation to SLIPR.
Knowledge Level 1, System: Lymphoid
Robert O'Connor University College Dublin

Celiac sprue features
Hi Yield [ID 811]

## CELIAC:

Cell-mediated autoimmune disease
European descent
Lymphocytes in Lamina propria/ Lymphoma risk
Intolerance of gluten (wheat)
Atrophy of villi in small intestine/ Abnormal D-xylose test
Childhood presentation
Atrophied villi cause less absorption, so diarrhea, weight loss, less energy.
Knowledge Level 3, System: Lymphoid
Robert O'Connor University College Dublin

## Complement cascade initiating items: alternative vs. classic <br> 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
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

Dendritic cell: function
[ID 2590]

## DENDRITIC CELL:

Disguised in host tissue (but still have same function!)
ECF ingestion
Nothing left to chance (ensures an immune response)
Derived from bone marrow
Regulates the immune response
Induces an immune response (makes it unique among antigen presenting cells)
Transfers information from the ECF into the cell
Immune tolerance (increases it)
Co-ordinates the adaptive and innate immune systems
Captures and processes antigen
Expresses lymphocyte costimulatory molecules
Llong processes extend from cell (stellate shaped)
Lives in lymphoid tissue
Secretes cytokine to initiate immune response
Knowledge Level 3, System: Lymphoid
Dave Colbert Faculty of Medicine, University of Western Australia

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

Histamine: features

## HISTAMINE:

HCL production
Inflammation
Strong vasodilator
Therapeutic vaue none
Allergy
Mast cells
Neurotransmitter/ Narrow airways
$\mathrm{Ig} \mathbf{E}$
Knowledge Level 4, System: Lymphoid
Dr. Atif Farooq Rawalpindi Medical College, Pakistan, Gujranwala
HLA-B27 associated diseases

## PAIR:

Psoriasis
Ankylosing spondylitis
Inflammatory bowel disease
Reiter's syndrome
Knowledge Level 6, System: Lymphoid
Atif Farooq Khawaja Rawalpindi Medical College, Horizon Medical Institute, Pakistan
|HLA-DR genetic predisposition immune disease examples

## HLA-DR:

Hashimoto's disease
Leukemia/ Lupus
Autoimmune adrenalitis/ Anemia (pernicious)
Diabetes insipidous
Rheumatoid arthritis
Knowledge Level 8, System: Lymphoid
Robert O'Connor and Dr. Chetan Wiskar

Hypersensitivity reactions: Gell and Goombs nomenclature
Hi Yield [ID 104]

## ACID

From I to IV:
Anaphylactic type: type I
Cytotoxic type: type II
Immune complex disease: type III
Delayed hypersensitivity (cell mediated): type IV
Knowledge Level 1, System: Lymphoid
Anonymous Contributor

Hypersensitivity: type IV example
Poison IVy causes type IV hypersensitivity.
Knowledge Level 4, System: Lymphoid
Anonymous Contributor

Immunoglobulin (lg) types: the important ones worth remembering, in order of appearance
Hi Yield [ID 106]
MAGDElaine (a girl's name):
$\operatorname{IgM}$
$\operatorname{Ig} \mathbf{A}$
IgG
IgD
IgE
Magdelaine tells you the order they usually appear: $\mathbf{M}$ first, then $\mathbf{A}$ or $\mathbf{G}$.
Alternatively: $\mathbf{I g M}$ is IMmediate.
Knowledge Level 1, System: Lymphoid
Magdelaine Deeby and Anonymous Contributor University College Dublin and University of Aberdeen

Immunoglobulins, and order B cells present them
Hi Yield [ID 2131]
MADGE (character from the old dishwashing liquid commercial):
IgM
$\operatorname{Ig} A$
IgD
IgG
IgE
Order of presentation by B cells (which is made first, IgD or IgM ?) B cells present $\mathbf{I g M}$ primarily, and then $\mathbf{I g D}$.
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 $\mathbf{M}$ then $\mathbf{G}$ 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 Gestation.
Knowledge Level 2, System: Lymphoid
Anonymous Contributor
| Interferon gamma: action on macrophages
"Th1nk BIG Mac Attack":
Th1 and NK cells Build Interferon Gamma.
Causes Macrophages 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. II: T cell interaction
Hi Yield [ID 105]
The " $=\mathbf{8}$ " equation:
$2 \times 4=8$, and $1 \times 8=8$.
MHC II goes with CD4.
MHC I goes with CD8.
Knowledge Level 1, System: Lymphoid
Anonymous Contributor
MHC I vs. MHC II properties
Hi Yield [ID 625]
"Immunity helps to exterminate fun for bacteria"
See attached chart.
Knowledge Level 3, System: Lymphoid
Robert O'Connor University College Dublin

| Cells with <br> MHC class | Immune <br> cells | All nucleated <br> cells |
| :--- | :---: | :---: |
| T-cell MHC <br> interaction | Helper <br> T-cells | Cytotoxic <br> T-cells |
| MHC name | Two (II) | One (I) |
| Exposed <br> protein | External <br> origin | Internal <br> origin |
| CD MHC use | Fungi | Viruses |
| interaction | CD4+ | CD8+ |
| 2NDMHCuse | Bacteria | Cancer cells |

MHC: loci creating class I vs. II
[ID 2089]
Class $\mathbf{1}$ has $\mathbf{1}$ letter:
HLA I is HLA-A, HLA-B, HLA-C.
Class $\mathbf{2}$ has $\mathbf{2}$ letters:
HLA II is HLA-DP, HLA-DQ, HLA-DR.
Knowledge Level 6, System: Lymphoid
Anonymous Contributor
Passive vs. active immunity
[ID 961]
"Pay for Passive, Active Ages":
Passive:Pay for a shot of antibodies for fast results following exposure to Rabies, etc.
Active: Slow onset ("aging") and memory.
Knowledge Level 1, System: Lymphoid
Lior Greenberg Technion Faculty of Medicine, Haifa, Israel
Sjogren syndrome: morphology
"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

[^11]
## INTERNAL MEDICINE / FAMILY PRACTICE

Abdominal pain: medical causes
"ABDOMENAL PANE" [abdominal pain]:
Acute rheumatic fever
Blood [purpura, a/c hemolytic crisis]
DKA
cOllagen vascular disease
Migraine [abdominal migraine]
Epilepsy [abdominal epilepsy]
Nephron [uremia]
Abdominal angina
Lead
Porphyria
Arsenic
NSAID's
Enteric fever
Knowledge Level 8, System: Alimentary
Dr. Sonali Vadi

Haemobilia: features
[ID 1806]
MOB:
Melaena
Obstructive jaundice
Biliary colic
Knowledge Level 3, System: Alimentary
Dr. Harsh Sharma

Ileus: causes Hi Yield [ID 1997]

MD SPUGERS:
Mesenteric ischemia
Drugs (see below)
Surgical (post-op)
Peritonitis/ Pancreatitis (sentinnel loop)
Unresolved mechanical obstruction (eg mass, intussusception, blockage)
Gram negative sepsis
Electrolyte imbalance (eg hypokalemia)
Retroperitoneal bleed or hematoma
Spinal or pelvic fracture
Drugs are Aluminum hydroxide, Ba++, Ca carbonate, opiates, TCA, verapamil.
Knowledge Level 6, System: Alimentary
Hugo M. Rodriguez, MD University of Virginia Roanoke-Salem Program

## PARK:

Pregnancy
Allergy
Renal artery stenosis
$\mathbf{K}$ increase (hyperkalemia)
Knowledge Level 4, System: Cardiovascular
Anthony Chan

ADP: role in platelet aggregation
[ID 1016]
ADP = Aggregation from the Dense bodies of Platelets.
Knowledge Level 5, System: Cardiovascular
Lior Greenberg Technion Faculty of Medicine, Haifa, Israel

Anemia: non-megaloblastic causes of macrocytic anemia
Hi Yield [ID 2511]
HAND LAMP:
Hypothyroidism
Aplastic anaemia
Neonates
Drugs
Liver disease
Alcohol
Myelodyplasia
Pregnancy
Knowledge Level 3, System: Cardiovascular
Philip Robinson Wellington School of Medicine, Otago University

Anion gap metabolic acidosis: causes
Hi Yield [ID 1203]
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 $\mathbf{4}$ are key in in haematology:
1.34 cm 3 of oxygen is carried by a gram of hemoglobin.

There's $\mathbf{3 . 4} \mathrm{mg}$ of iron in each gram of hemoglobin.
There's an average of $\mathbf{3 . 4}$ lobes per neutrophil.
There's $\mathbf{3 4} \mathbf{m g}$ bilirubin from each gram of hemoglobin.
Knowledge Level 5, System: Cardiovascular
Anonymous Contributor

Haemoptysis: causes

## CAVITATES:

## CHF

Airway disease, bronchiectasis
Vasculitis/ Vascular malformations
Infection (eg TB)
Trauma
Anticoagulation
Tumour
Embolism
Stomach
Knowledge Level 6, System: Cardiovascular
Fahed AI-Daour

HbA2: concentration in normal blood
[ID 1331]
HbA2:
Concentration of HbA2 is $\mathbf{2} \%$ in normal adult blood.
Knowledge Level 1, System: Cardiovascular
Dr. Atif Farooq Khawaja Rawalpindi Medical College, Horizon Medical Institute. Pakistan

## Macrocytic anemia: causes

Hi Yield [ID 1859]

## ABCDEF:

Alcohol + liver disease
B12 deficiency
Compensatory reticulocytosis (blood loss and hemolysis)
Drug (cytotoxic and AZT)/ Dysplasia (marrow problems)
Endocrine (hypothyroidism)
Folate deficieny/ Fetus (pregnancy)
Knowledge Level 2, System: Cardiovascular
Anthony Chan

Metabolic acidosis: causes
Hi Yield [ID 1660]
USED CAR:
Ureteroenterostomy
Saline hydration
Endocrinopathies (hyperparathyroid, hyperthyroid, Addison's)
Diarrhea/ DKA/ Drugs
Carbonic anhydrase inhibitors
Ammonium chloride
Renal tubular acidosis
Alternatively: USED CARP, to include Parenteral nutrition/ Pancreatic fistula.
Knowledge Level 4, System: Cardiovascular
J.J.H. and Vince Yamashiroya Good Samaritan Hospital and Not Specified

Metabolic acidosis: causes Hi Yield [ID 1873]
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

NSAIDs: contraindications
Hi Yield [ID 2564]
NSAID:
Nursing and pregnancy
Serious bleeding
Allergy/ Asthma/ Angioedema
Impaired renal function
Drug (anticoagulant)
Knowledge Level 2, System: Cardiovascular
Anthony Chan

Pancytopaenia differential
Hi Yield [ID 2648]
"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

## Sickle cell disease complications

SICKLE:
Strokes/ S welling of hands and feet/ S pleen problems
Infections/ Infarctions
Crises (painful, sequestration, aplastic)/ Cholelithiasis/ Chest syndrome/ Chronic hemolysis/ Cardiac problems
Kidney disease
Liver disease/ Lung problems
Erection (priapism)/ Eye problems (retinopathy)
Knowledge Level 5, System: Cardiovascular
Rinku Uberoi UNIBE

Toxicity/ sepsis: signs

6 T's:
Tachycardia
Tachypnea
Tremors
Toxic look
Tiredness
Temperature (fever)
Knowledge Level 4, System: Cardiovascular
Malik Tariq Rahim King Edward Medical College, Lahore, Pakistan

Ulcers: types
Hi Yield [ID 2039]
VAN:
Venous/ Vasculitic
Arterial
Neuropathic
Knowledge Level 1, System: Cardiovascular
Anonymous Contributor University of Sydney, Australia

| Acromegaly symptoms | Hi Yield [ID 2555] |
| :---: | :---: | :---: |

ABCDEF:
Arthralgia/ Arthritis
Blood pressure raised
Carpal tunnel syndrome
Diabetes
Enlargemed organs
Field defect
Knowledge Level 1, System: Endocrine
Anonymous Contributor

Gynecomastia: common causes
[ID 1039]

## GYNECOMASTIA:

Genetic Gender disorder (Klinefelter)
Young boy (pubertal)*
Neonate*
Estrogen
Cirrhosis/ Cimetidine/ Ca Channel blockers
Old age*
Marijuana
Alcoholism
Spironolactone
Tumors (Testicular \& adrenal)
Isoniazid/ Inhibition of testosterone
Antineoplastics (Alkylating Agents)/ Antifungal(ketoconazole)

* Asterisk indicates physiologic cause.

Knowledge Level 5, System: Endocrine
Rinku S. Uberoi UNIBE

Hypercalcemia causes

## MD PIMPS ME:

Malignancy
Diuretics (thiazide the main culprit)
Parathyroid (hyperparathyroidism)
Immobilization/ Idiopathic
Megadoses of vitamins A,D
Paget's disease
Sarcoidosis
Milk alkali syndrome
Endocrine (Addison's disease, thyrotoxicosis)
Knowledge Level 2, System: Endocrine
Anonymous Contributor

GRIM FED:
Granulomas (sarcoid, TB),
Renal faliure
Immobility (esp. long term)
Malignancy
Familial (eg familial hypocalciuric hypercalcemia)
Endocrine (see below for subtypes)
Drugs (esp. thiazide diuretics, lithium)
Endocrine causes are PATH:
Phaeochromocytoma
Addison's disease
Thyrotoxicosis
Hyperparathyroidism
Knowledge Level 4, System: Endocrine
Steve London, England

Hypercalcemia: differential
Hi Yield [ID 1651]

## VITAMIN TRAPS:

Vitamin A and D intoxication
Immobilization
Thyrotoxicosis
Addison's disease/ Acidosis
Milk-alkali syndrome
Inflammatory disorders
Neoplastic disease
Thiazides, other drugs
Rhabdomyolysis
AIDS
Paget's disease/ Parenteral nutrition/ Parathyroid disease
Sarcoidosis
Knowledge Level 2, System: Endocrine
Anonymous Contributor

Thyroid storm: initial management
[ID 1730]

## PCP'S:

PTU - 1 gm po
Corticosteroids
Propranolol
SSKI
Knowledge Level 6, System: Endocrine
Hugo M. Rodriguez, MD University of Virginia Roanoke-Salem Program

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

## 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 pregancy)
Drugs
eXcretory dysfunctions (eg uremia)
Knowledge Level 4, System: Integumental
Anonymous Contributor

Rashes: time of appearance after fever onset
Hi Yield [ID 1128]
"Really Sick Children Must Take No Exercise":
Number of days after fever onset that a rash will appear:
1 Day: Rubella
2 Days: Scarlet fever/ S mallpox
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
Hi Yield [ID 2642]
"Al-K-loss, Al-Ca-loss":
There is loss of $\mathbf{K +}$ (hypokalemia) and $\mathbf{C a + +}$ (hypocalcemia) in state of alkalosis.
Knowledge Level 2, System: Kidney/Urine
Ibrahim Mansoor King Edward Medical College
Allopurinol: indications
[ID 1893]

## STORE:

Stones (history of renal stones)
Tophaceous gout (chronic)
Over-producers of urate
Renal disease
Elderly
Bonus: Probenecid indications are basically the opposite of STORE (no renal stone history, etc.).
Knowledge Level 7, System: Kidney/Urine
Hugo M. Rodriguez, MD University of Virginia Roanoke-Salem Program
Dialysis indications
Hi Yield [ID 2242]

## HAVE PEE:

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

Hi Yield [ID 1963]

## 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

Hi Yield [ID 1703]
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 $\quad$ Hi Yield [ID 1810]
SIADH:
Spasms
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
Hi Yield [ID 1680]
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
Hi Yield [ID 1935]

## CHICAGO:

Cancer
Hem, onc
Infection
Congestion (portal hypertension)
Autoimmune (RA, SLE)
Glycogen storage disorders
Other (amyloidosis)
Knowledge Level 4, System: Lymphoid
Gerard Dang Chicago Medical School

Splenomegaly: causes
[ID 3047]

## HICCUPS:

Haematological
Infective : Kala azar, malaria, enteric fever
Congestive: CCF, constrictive pericarditis, IVC thrombosis, Hepatic vein thrombosis, portal vein thrombosis and splenic vein thrombosis
Collagen diseases: SLE, Felty's syndrome
Unknown etiology: tropical splenomegaly
Primary malignacies (secondaries are rare)
Storage diseases: Gaucher's disease, Niemman Pick
Knowledge Level 2, System: Lymphoid
Saurav Pokharel MBBS Student, Final year

Horner's syndrome: components
[ID 2395]

## SAMPLE:

Sympathetic chain injury
Anhidrosis
Miosis
Ptosis
Loss of ciliospinal reflex
Enophthalmos
Knowledge Level 5, System: Nervous
Harsh Sharma BJMC, Pune, India
Lead poisoning (chronic): features
[ID 1923]

## ABCDEFGHI:

Anaemia/ Anorexia/ Arthralgia/ Abortion/ Atrophy of optic nerve
Basophilic stippling of RBC (punctate basophilia)/ Burtonian line on gums
Colic/ Constipation/ Coprophyrin excess in urine/ Cerebraloedema
Drop (wrist, foot)
Encephalopathy/ Emaciation
Foul smell of breath/ Failure of kidneys/ Fanconi syndrome
Gonadal dysfunction/ Gout-like picture
High BP/ Headache/ Hallucination/ Hyperaesthesia
Impotence/ Insomnia/ Irritability
Knowledge Level 8, System: Nervous
Dr. 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

Thickened nerves: causes
[ID 1808]
HANDS:
Hansen's (leprosy)
Amyloidosis
Neurofibromatosis
Diabetes mellitus
Sarcoidosis
Knowledge Level 7, System: Nervous
Dr. Harsh Sharma

Back pain causes
Hi Yield [ID 237]
DISK MASS (since near vertebral disc):
Degeneration (DJD, osteoporosis, spondylosis)
Infection (UTI, PID, Pott's disease, osteomyelitis, prostatitis)/ Injury, fracture or compression fracture
Spondylitis (ankylosing spondyloarthropathies such as rheumatoid arthritis, Reiters, SLE)
Kidney (stones, infarction, infection)
Multiple myeloma/ Metastasis (from cancers of breast, kidney, lung, prostate, thyroid)
Abdominal pain (referred to the back)/ Aneurysm
$\mathbf{S}$ kin (herpes zoster)/ $\mathbf{S}$ train/ $\mathbf{S}$ coliosis and lordosis
Slipped disk/ Spondylolisthesis
Knowledge Level 3, System: Other/Miscellaneous
Anonymous Contributor
Behcet's syndrome: diagnostic criteria
[ID 1863]

## PROSE:

Pathergy test (i/d saline injection)
Recurrent genital ulceration
Oral ulceration (recurrent)
Skin lesions
Eye lesions
Oral ulceration is central criteria, plus any 2 others.
Knowledge Level 7, System: Other/Miscellaneous
Dr. Harsh Sharma BJMC, Pune, India

Ducket John's: major criteria
[ID 1339]

## ACNES:

Arthritis
Carditis
Nodule (subcutaneous)
Erythrema marginatum
Sydenham chorea
Knowledge Level 3, System: Other/Miscellaneous
Atif Farooq Khawaja Rawalpindi Medical College, Horizon Medical Institute, Pakistan

## I SAVED PANGS:

Illness
Syncope
Accident
Vision
Epilepsy (or other fit)
Drugs
Psychiatric (eg dementia)
Anaemia
Neurological (Parkinsons, cerebellar, neuropathy)
Glucose (hypoglycemia)
Stroke
Knowledge Level 5, System: Other/Miscellaneous
Steve

ICU management: A to Z
A: Asepsis/ Airway
B: Bed sore/ encourage Breathing/ Blood pressure
C: Circulation/ encourage Coughing/ Consciousness
D: Drains
E: ECG
F: Fluid status
G: GI losses/ Gag reflex
H: Head positioning/ Height
I: Insensible losses
J: Jugular venous pulse
K: Kindness
L: Limb care/ Label
M: Mouth care
N: Nociception/ Nutrition
O: Oxygenation/ Orient the patient
P: Pulse/ Peristalsis/ Physiotherapy
Q: Quiet surroundings
R: Respiratory rate/ Restraint
S: Stress ulcer/ Suctioning
T: Temperature
U: Urine
V: Ventilator
W: Wounds/ Weight
X: Xerosis
Y: whY
Z: Zestful care of the patient
Knowledge Level 9, System: Other/Miscellaneous
Dr. Sonali Vadi
Left iliac fossa: causes of pain

## 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

## RICE:

Rest
Ice
Compression
Elevation
RICE especially for fractures, sprains, muscle strains, contusions
Alternatively: $\mathrm{I}=$ Immobilization, $\mathrm{C}=\mathbf{C o l d}$ compresses.
Knowledge Level 1, System: Other/Miscellaneous
Mohamed Azim Assistant lecturer of Pediatric Surgery, Alexandria University, Egypt
Acute stridor: differential
Hi Yield [ID 1650]

## ABCDEFGH:

With fever:
Abscess
Bacterial tracheitis
Croup
Diphtheria
Epiglottitis
Without fever:
Foreign body
Gas (Toxic Gas)
Hypersensitivity
Knowledge Level 2, System: Pulmonary
Anthony Chan Chinese University of Hong Kong

Bronchiectasis: causes
Hi Yield [ID 2624]

## A SICK AIRWAY:

Airway lesion, chronic obstruction
Sequestration
Infection, inflamation
Cystic fibrosis
Kartagners syndrome
Allergic brochopulmonary aspergilliosis
Immunodeficiencies (hypogammaglobinaemia, myeloma, lymphoma)
Reflux, inhalation injury
William Campbell syndrome (and other congenitals)
Aspiration
Yellow nail syndrome/ Young syndrome
Knowledge Level 3, System: Pulmonary
Mr. LW Mason 4th Year Medical Student

Bronchiectasis: differential
Hi Yield [ID 548]

## BRONCHIECTASIS:

Bronchial cyst
Repeated gastric acid aspiration
Or due to foreign bodies
Necrotizing pneumonia
Chemical corrosive substances
Hypogammaglobulinemia
Immotile cilia syndrome
Eosinophilia (pulmonary)
Cystic fibrosis
Tuberculosis (primary)
Atopic bronchial asthma
Streptococcal pneumonia
In Young's syndrome
Staphylococcal pneumonia
Knowledge Level 4, System: Pulmonary
Benson Moses Benjamin JSS Medical College Mysore India

CAPlan:
Coal worker pneumoconiosis
Arthritis
Pulmonary nodule
Knowledge Level 6, System: Pulmonary
Anonymous Contributor

Chronic cough: full differential
[ID 2901]

## GASPS AND COUGH:

## GORD

Asthma
Smoking, chronic bronchitis
Post-infection
Sinusitis, post-nasal drip
ACE inhibitor
Neoplasm
Diverticulum
Congestive heart failure
Outer ear
Upper airway obstruction
GI-airway fistula
Hypersensitivity
Knowledge Level 7, System: Pulmonary
Fahed AI-Daour

Clubbing: respiratory causes
ABCDEF:
Abcess (lung)
Bronchiectasis (including CF)
Cancer (lung)
Decreased oxygen (hypoxia)
Empyaema
Fibrosing alveolitis
Knowledge Level 3, System: Pulmonary
Anonymous Contributor

Dyspnea: causes
SHE PANTS:
Stress, anxiety
Heart disease
Emboli
Pulmonary disease
Anaemia
Neuromuscular disease
Trachea obstruction
Sleep disorder
Knowledge Level 1, System: Pulmonary
Fahed AI-Daour

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
Hi Yield [ID 1678]
LMNOP:
Lasix
Morphine
Nitrates (NTG)
Oxygen
Position (upright vs. flat)
Knowledge Level 3, System: Pulmonary
Jeff Gilfor, M.D.

Pulmonary edema: treatments
MAD DOG:
Morphine
Aminophylline
Digitalis
Diuretics
Oxygen
GGases in blood (ABG's)
Knowledge Level 4, System: Pulmonary
Anonymous Contributor

Pulmonary fibrosis: causes
SCAR:
Upper lobe:
Silicosis/S arcoidosis
Coal worker pneumonconiosis
Ankylosing spondylitis
Radiation
Lower lobe:
Systemic sclerosis
Cyptogenic fibrosing alveolitis
Asbetosis
Rheumatoid arthritis
Knowledge Level 4, System: Pulmonary
Anthony Chan

## CASH:

Clubbing
Asterixis
S mall muscle wasting
HPOA
Knowledge Level 5, System: Pulmonary
Sushant Varma Medical student, University of Sheffield, UK

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
Extraspinal tumour
Spondylolisthesis
Ankylosing spondylitis
Lumbar disk increase
Intraspinal tumor
Unhappiness
Stress
Knowledge Level 5, System: Skeletal
Anonymous Contributor

## INTERVIEWING / PHYSI CAL EXAM

Abdomen assessment
To assess abdomen, palpate all 4 quadrants for DR. GERM:
Distension: liver problems, bowel obstruction
Rigidity (board like): bleeding
Guarding: muscular tension when touched
Eviseration/ Ecchymosis
Rebound tenderness: infection
Masses
Knowledge Level 2, System: Alimentary
Lyssa Lenske Mount Saint Mary's College BSN Program

## Alcohol abuse screening questions

## CAGE:

1. Ever felt it necessary to Cut down on drinking?
2. Has anyone ever said they felt Annoyed by your drinking?
3. Ever felt Guilty about drinking?
4. Ever felt a need to have a morning drink as an Eye opener?

Knowledge Level 3, System: Alimentary
Anonymous Contributor
Vomiting: non-GIT differential

## ABCDEFGHI:

Acute renal failure
Brain [increased ICP]
Cardiac [inferior MI]
DKA
Ears [labyrinthitis]
Foreign substances [Tylenol, theo, etc.]
Glaucoma
Hyperemesis gravidarum
Infection [pyelonephritis, meningitis]
Knowledge Level 3, System: Alimentary
Ken Evans Saskatchewan Health, Acute and Emergency Services

Branham sign: definition
[ID 2278]
BRAnham sign:
BRAdycardia after compression or excision of a large AV fistula.
Knowledge Level 8, System: Cardiovascular
Anonymous Contributor

Heart ausculation sites: ribs
Apt. M 225A:
Aortic valve
Pulmonary valve
Tricuspid valve
Mitral valve
In order they correspond with the following landmarks:
2nd intercostal space (right)
2nd intercostal space (left)
5th intercostal space (left)
Apex (still the 5th intercostal space)
Knowledge Level 1, System: Cardiovascular
John Medical school

Heart valve auscultation sites
Hi Yield [ID 543]
"All Patients Take Meds":
Reading from top left:
Aortic
Pulmonary
Tricuspid
Mitral
See diagram.
Alternatively: All Prostitutes Take Money.
Alternatively: APe To Man.


Knowledge Level 1, System: Cardiovascular
Anonymous Contributor and Raarsi and Dana M. Not specified and University of Birmingham Medical School and MCC Michigan

Heart valve auscultation sites
"All People Try Marijuana":
Aortic
Pulmonic
Tricuspid
Mitral
Knowledge Level 1, System: Cardiovascular Leah Harris Tufts University School of Medicine

You look OUt with Both eyes.
Take the Right dose so you won't OD [overdose].
The only one that is Left is OS.
Both eyes=OU, Right eye=OD, Left eye=OS.
Knowledge Level 7, System: Nervous
Deborah Belty, RN, MS Tulsa Community College
Glasgow coma scale: components and numbers
Hi Yield [ID 2288]
Scale types is $3 \mathbf{V}^{\prime}$ 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

Mental state examination: stages in order
[ID 2150]
"Assessed Mental State To Be Positively Clinically Unremarkable":
Appearance and behaviour [observe state, clothing...]
Mood [recent spirit]
Speech [rate, form, content]
Thinking [thoughts, perceptions]
Behavioural abnormalities
Perception abnormalities
Cognition [time, place, age...]
Understanding of condition [ideas, expectations, concerns]
Knowledge Level 5, System: Nervous
Hafizur Rahman MRI-Manchester Med School
Pain history checklist

## OPQRSTU:

Onset of pain (time, duration)
Palliative factors for pain
Quality of pain (throbbing, stabbing, dull, etc.)
Region of body affected
Severity of pain (usually scale of 1-10)
Timing of pain (after exercise, in evening, etc.)
$\mathbf{U}$ : How does it affect ' $\mathbf{U}$ ' in your daily life?
May wish to expand to OPPQRRSTTUVW, with the extra letters representing:
Provocative factors
Radiation (how does pain spread)
Treatments tried
Deja Vu: Has this happened before?
Worry: What do you think or fear that it is?
Knowledge Level 1, System: Nervous
Midnight Medic and Robert Lueken and Michael Waddell Paramedic in Texas and Eastern Virginia Medical School and University of Wisconsin
Medical School
"On Days Feeling Low Character, Run A Seven Pace Race":
Onset
Duration
Frequency
Location
Character
Radiation
Severity
Precipitating factors
Relieving factors
Knowledge Level 1, System: Nervous
Carrie Davis, RNC, MSN, WHNP Obici Health System
Pain history checklist
ASK LAST:
Aggravating/ Alleviating
Severity
Karacter
Location
Associated symptoms
Setting
Timing
Knowledge Level 1, System: Nervous
Miguel Gonzalez Chicago Medical School

Pain history checklist
[ID 501]

## SOCRATES:

Site
Onset
Character
Radiation
Alleviating factors/ Associated symptoms
Timing (duration, frequency)
Exacerbating factors
Severity
Alternatively, 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

Pain history checklist

## LOST WAR:

Location
Onset
Severity
Time
Worsening factors
Alleviating factors
Radiation
Knowledge Level 1, System: Nervous
Jane Day Nottingham Medical School
| Pain history checklist
[ID 966]

## CHLORIDE:

CHaracter (stabbing, throbbing, etc.)
Location
Onset
Radiation
Intensity
Duration
Exacerbating and alleviating factors
Knowledge Level 1, System: Nervous
Anonymous Contributor Student

| Pain history checklist | [ID 1527] |
| :--- | :--- |

MR. C T FARADS:
Main site
Radiation
Character
Timing
Frequency
Associated factors
Relieving factors
Aggravating factors
Duration
Severity
Knowledge Level 1, System: Nervous
Anonymous Contributor
Pain history checklist
[ID 1781]

## CLITORIS:

Character
Location
Intensity
Timing
Onset
Radiating
Irritating and relieving factors
Symptoms associated
Knowledge Level 1, System: Nervous
Nick Rukin Birmingham Medical School, UK
Pain history checklist
[ID 2008]

## COLDER BARS:

Character
Onset
Location
Duration
Exacerbating factors
Radiation
Before (ever happened before)
Associated symptoms
Relieving factors
Severity
Knowledge Level 1, System: Nervous
Marcus Chia University of Sydney Medical Program
| Pain history checklist

## SO CRAP:

Site
Onset
Character
Radiates to
Associated symptoms/ Alleviating and exacerbating factors
Periodicity
Knowledge Level 1, System: Nervous
Polly Weston Bristol University Med School

Abdominal swelling causes
9 F's:
Fat
Feces
Fluid
Flatus
Fetus
Full-sized tumors
Full bladder
Fibroids
False pregnancy
Knowledge Level 1, System: Other/Miscellaneous
Richard Thompson and Alex Queens University, Belfast, NI and Not Specified
Clinical examination: initial Inspection of patient from end of bed
[ID 3076]
ABC:
Appearance (SOB, pain, etc)
Behaviour
Connections (drips, inhalers, etc connected to patient)
Knowledge Level 2, System: Other/Miscellaneous
Jamal Khan Birmingham University Medical Student
Differential diagnosis

## CIMETIDINE:

Congenital
Infection/ Inflammatory
Metabolic
Endocrine
Trauma
Iatrogenic
Degenerative
Idiopathic
Neoplastic
Everything else
Knowledge Level 1, System: Other/Miscellaneous
Chng Chiaw Ling NUS, Singapore
Differential diagnosis checklist

## "A VITAMIN C"

A and $\mathbf{C}$ 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, Ruematoid arthritis, Diabetes, Idiopathic, Any eye tumor, Myopia.

Differential diagnosis checklist
[ID 664]
"I VINDICATE AID":
Idiopathic
Vascular
Infectious
Neoplastic
Degenerative
Inflammatory
Congenital
Autoimmune
Traumatic
Endocrinal and metabolic
Allergic
Iatrogenic
Drugs
Knowledge Level 1, System: Other/Miscellaneous
Michael A. Chaplin SUNY-HSCB Downstate College of Medicine

Differential diagnosis checklist
[ID 1840]
DIRECTION:
Drugs
Infection
Rheumatologic
Endocrine
Cardiovascular
Trauma
Inflammatory
Other
Neoplasm
Knowledge Level 1, System: Other/Miscellaneous
Michael Waddell University of Wisconsin Medical School

Family history (FH)

## 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
"Im A People Person":
Inspection
Auscultation
Percussion
Palpation
Knowledge Level 1, System: Other/Miscellaneous
Anonymous Contributor

## "Healthy SEEDS":

Substances (alcohol, tobacco, IV drugs?)
Environment (hazards at home or work? feel safe?)
Exercise (what do you do? how often do you do it?)
Diet (any special diet?)
Sex (active with $\mathrm{m} / \mathrm{f} / \mathrm{both}$ ? > 1 partner? safe sex? STD history? difficulty with arousal or orgasm? history of abuse?)
I find this order works well: patients most expect to be asked about alcohol and they least want to talk about their STD history, but taking a solid HRB history first reassures them that it's all part of good medical care.
Knowledge Level 4, System: Other/Miscellaneous
Patrick Lee UCSF Medical School

History taking -past medical history
[ID 2825]
ABCDEFGHI:
Asthma
Blood pressure (say: 'blood pressure problems')
CVA (say: 'stroke')
Diabetes mellitus (say: 'diabetes')
Epilepsy
Fever, rheumatic
Gastrointestinal (jaundice)
Heart attack
Infection (TB)
Knowledge Level 1, System: Other/Miscellaneous
Dave Gale Sheffield University Medical School

History, HCFA components for E+M coding
[ID 2110]

## Q LSD MCAT:

Quality
Location
Severity
Duration
Modifying factors
Context
Associated signs and symptoms
Timing
Knowledge Level 1, System: Other/Miscellaneous
Robert P Lemmon III, MD Village Family Medicine

History: quick EMS medical history checklist

## SAMPLE:

Signs/ Symptoms
Allergies
Medications
Pertinent history
Last oral intake
Events preceding this incident
Knowledge Level 1, System: Other/Miscellaneous
Midnight Medic Paramedic in Texas

Medical history: disease checklist

## MJ THREADS:

Myocardial infarction
Jaundice
Tuberculosis
Hypertension
Rheumatic fever/ Rheumatoid arthritis
Epilepsy
Asthma
Diabetes
Strokes

Aside: "History" album was by Michael Jackson (MJ).
Knowledge Level 1, System: Other/Miscellaneous
Soumendra Datta University College London Medical School

Past medical history (PMH)
[ID 1828]

## VAMP THIS:

Vices (tobacco, alcohol, other drugs, sexual risks)
Allergies
Medications
Preexisting medical conditions
Trauma
Hospitalizations
Immunizations
Surgeries
Knowledge Level 3, System: Other/Miscellaneous
Michael Waddell University of Wisconsin Medical School

| Pathologic classification | [ID 1881] |
| :--- | :--- |

NIT DIT FIT:
Neoplastic
Infectious
Traumatic
Degenerative/ Drugs
Immune
Toxic
Vascular
Inflammatory
Totally obscure
Knowledge Level 1, System: Other/Miscellaneous
Darren Markland University of Alberta

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

Patient's model of illness (illness history)

## "DC REF Fears Similar Decision At ER":

Definition
Cause
Reasoning
Effect
Future
Fears and concerns
Similar experiences
Decision-making
Attempts at treatment
Expectations of treatment
Results
Knowledge Level 8, System: Other/Miscellaneous
Michael Huang School of Medicine, University of Melbourne, Australia

Physical exam for 'lumps and bumps'
" $6 \mathbf{S}$ tudents and 3 Teachers go for CAMPFIRE":
Site, Size, Shape, Surface, S kin, S car
Tenderness, Temperature, Transillumination
Consistency
Attachment
Mobility
Pulsation
Fluctuation
Irreducibility
Regional lymph nodes
Edge
Knowledge Level 5, System: Other/Miscellaneous
Lau Yue Young Geoffrey

Physical examination - correct order
[ID 2813]
"I Palpate People's Abdomens":
Inspection
Palpation
Percussion
Auscultation
Knowledge Level 1, System: Other/Miscellaneous
Jim McHugh St George's, London

## Pyrexia of Unknown Origin: history taking

## SIT ON FRAD:

Sexual history
Immunisation status
Travel history
Occupational history
Nutrition (consumption of dairy products, etc.)
Family history
Recreational habits
Animal contacts (including ticks and other vectors)
Drug history
Knowledge Level 8, System: Other/Miscellaneous
Dr. Sonali Vadi

## RETARD HEIGHT:

Rickets
Endocrine (cretinism, hypopituitarism, Cushing's)
Turner syndrome
Achondroplasia
Respiratory(suppurative lung disease)
Down syndrome
Hereditary
Environmental (postirradiation, postinfectious)
IUGR
GI (malabsorption)
Heart (congenital heart disease)
Tilted backbone (scoliosis)
Knowledge Level 9, System: Other/Miscellaneous
Lau Yue Young Geoffrey Medical Student ' 03 , Hong Kong University

Sign vs. symptom
[ID 396]
sIgn: something I can detect even if patient is unconscious.
sYMptom is something only hYM knows about.
Knowledge Level 1, System: Other/Miscellaneous
Anonymous Contributor

Sign vs. symptom
Remember Ace of Base's song that goes like this:
"I Saw the Sign, and it opened up my eyes".
The physician sees the signs.
Knowledge Level 1, System: Other/Miscellaneous
Lee

Surgical sieve
[ID 650]

## VANISHED:

Vascular
Accident \& trauma
Neoplastic
Inflammatory
Septic
Haematologic/ Hereditary
Endocrinological
Degenerative
Knowledge Level 1, System: Other/Miscellaneous
Anonymous Contributor University of Otago Medical School, New Zealand

Surgical sieve for diagnostic categories

## 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
"FAST LQQ'S":
Factors that make it better/worse
Associated manifestations
Setting
Timing
Location
Quality
Quantity
Severity
Knowledge Level 1, System: Other/Miscellaneous
Ron Norman AECC

| Symptom sieve | [ID 819] |
| :--- | :--- |

"TIN CAN BED DIP POG":
Trauma
Infection
Neoplasm
Cardiac
Autoimmune
Neurological
Blood/ Bone
Endocrine
Disintegration/ Degeneration
Drugs
Iatrogenic/ Idiopathic
Psychological
Paediatric
Obstetric
Gynaecological
Knowledge Level 1, System: Other/Miscellaneous
Anonymous Contributor

| Systems review: systems checklist | [ID 2683] |
| :--- | :--- |

I PUNCH EAR:
Integumental
Pulmonary
Urogenital
Nervous
Cardiovascular
Hematolymphoid
Endocrine
Alimentary
Reproductive
Knowledge Level 1, System: Other/Miscellaneous
Beth Ann Young and Robert O'Connor Kent State Univeristy, Nursing Student and University College Dublin

Ascultation: crackles (rales)
"PEBbles":
Pneumonia
Edema of lung
Bronchitis
Knowledge Level 2, System: Pulmonary
Samuel Atom Baek-Kim

Consolidations
Conduct
Consonants
Clearly
Knowledge Level 5, System: Pulmonary
Elden Rand BAMC, San Antonio, TX

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

## MI CROBI OLOGY

Clostridium difficile: disease caused
Hi Yield [ID 47]
"Difficult to be in a Closet with someone having explosive foul smelling diarrhea, because it would smell and there would be no air in there.
Clostridium Difficile causes explosive foul smelling diarrhea and is an anaeorbe (no air).
Knowledge Level 2, System: Alimentary
Robert O'Connor University College Dublin
E. coli: diseases caused in presence of virulence factors

Hi Yield [ID 887]
DUNG:
Diarrhea
UTI
Neonatal meningitis
Gram negative sepsis
Dung, since contract E. coli from dung-contaminated water.
Knowledge Level 2, System: Alimentary
Robert O'Connor University College Dublin
E. coli: major subtypes, key point of each

Hi Yield [ID 2184]
"HIT by E. coli outbreak":
EnteroHemorrhagic:
HUS from Hamburgers
EnteroInvasive:
Immune-mediated Inflammation
EnteroToxigenic:
Traveller's diarrhea
Knowledge Level 1, System: Alimentary
Robert O'Connor University College Dublin
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
Food poisoning: bugs inducing

```
"Eating Contaminated Stuff Causes Very Big Smelly Vomit":
E. coli O157-H7 [undercooked meat, esp. hamburgers]
Clostridium botulinum [canned foods]
S almonella [poultry, meat, eggs]
Vibrio parahaemolyticus [seafood]
Bacillus cereus [reheated rice]
Staphylococcus aureus [meats, mayo, custard]
Clostridium perfringens [reheated meat]
Vibrio vulnificus [seafood]
Knowledge Level 1, System: Alimentary
Joel Camilo Universidad Iberoamericana (UNIBE), Santo Domingo, Dominican Republic
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Hepatitis: oral-fecal transmitted types
"A\$\$ Eaters":
Types A and E by oral-fecal route.
Knowledge Level 4, System: Alimentary
Anonymous Contributor

Nematodes: ones spreading by egg ingestion
[ID 2674]
"ATE eggs":
Ascaris Lumbricoides
Trichuris trichuira
Enterobius vermicularis
spread by ingestion of eggs (vs skin invasion or insect bite)
Knowledge Level 6, System: Alimentary
Leena Alexander Texas, USA

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

Endocarditis: causes of culture negative endocarditis
[ID 1952]
"With Negative Tests, Investigators Should Focus Attention Somewhere Meaningful":
Wrong diagnosis
Noninfectious endocarditis
Timing (cultures drawn at end of chronic course)
obligate Intracellular organisms
Slow growing fastidious organisms
Fungal infection
Antibiotic used previously
Subacute right-sided endocarditis
Mural endocarditis
Knowledge Level 7, System: Cardiovascular
David Lucey University College Dublin
Endocarditis: indications for surgery

## PUS RIVER:

Prosthetic valve endocarditis (most cases)
Uncontrolled infection
Supporative local complications with conduction abnormalities
Resection of mycotic aneurysm
Ineffective antimicrobial therapy (eg Vs fungi)
Valvular damage (significant)
Embolization (repeated systemic)
Refractory congestive heart failure
Knowledge Level 5, System: Cardiovascular
David Lucey University College Dublin
"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
[ID 1999]

## AERUGINOSA:

Aerobic
Exotoxin A
Rod/ Resistance
UTIs, burns, injuries
Green-blue dressings
Iron-containing lesions
Negative gram
Odor of grapes
Slime capsule sometimes (in CF pt)
Adherin pili
Knowledge Level 1, System: Integumental
Joyce Egbe
Acute post-streptococcal glomerulonephritis: classic presentation
"Sore throat, Face bloat, Pi\$\$ coke":
Sore throat: 1 week ago
Face bloat: facial edema
Pi\$\$ coke: coke-coloured urine
Alternatively, short version: "Throat, bloat and coke".
Knowledge Level 4, System: Kidney/Urine
Robert O'Connor University College Dublin

Kidney transplant virus
"Borrowed Kidney":
BK virus is associated with kidney transplants.
Knowledge Level 6, System: Kidney/Urine
Anonymous Contributor

Proteus: disease caused
Hi Yield [ID 377]
Firstly, "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

Pseudomonas details
Hi Yield [ID 363]
See diagram of patient.
Patient: bug commonly infects nosocomial.
Oxygen tank: oxidase positive.
IV bag: has glucose and lactose, so its OK to give because its a nonlactose fermenter.
Why giving oxygen? Because it commonly caused pneumonia.
IV in the arm: supposed to signify sepsis.
The foley: UTI.
Burn on his foot: can infect burns.
Knowledge Level 2, System: Kidney/Urine
Anonymous Contributor

KEEPS:
Klebsiella
Enterococcus faecalis/ Enterobacter cloacae
E. coli

Pseudomonas aeroginosa/ Proteus mirabilis
Staphylococcus saprophyticcus/Serratia marcescens
Knowledge Level 2, System: Kidney/Urine
Kok Fai Kong University of Auckland

AIDS pathogens (T-cell suppression) worth knowing
Hi Yield [ID 2261]
"The Major Pathogens Concerning Complete T-Cell Collapse":
Toxoplasma gondii
M. avium intracellulare

Pneumocystis carinii
Candida albicans
Cryptococcus neoformans
Tuberculosis
CMV
Cryptosporidium parvum
Knowledge Level 4, System: Lymphoid
Robert Brown UTHSCSA MS2

Capsulated microbes
Hi Yield [ID 3213]
"S ome Nasty Killers Have S ome Capsule Protection":
Streptococcus pneumoniae
Neisseria meningitidis
Klebsiella pnemoniae
Haemophilus influenzae
Salmonella typhi
Cryptococcus neoformans
Pseudomanas aerigenosa
Knowledge Level 2, System: Lymphoid
Dr. Bijita Banerjee and Sabry Kamel University of Calcutta, West-Bengal, India and Not Specified
Endotoxin features
[ID 638]

## ENDOTOXIN:

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

HIV infection: high-risk groups
HIV:
Homosexuals/ Hemophiliacs
IV drug abusers
Knowledge Level 1, System: Lymphoid
Anonymous Contributor
| $\lg$ A protease-producing bacteria

## "Nice Strip of Ham":

Neisseria
Streptococcus pneumonia
Haemophilus influenza
Knowledge Level 7, System: Lymphoid
Marc Miller Sackler School of Medicine

Vaccines: types

## STARK:

Subunit
Toxoid
Attenuated [live]
Recombinant
Killed [inactivated]
Knowledge Level 1, System: Lymphoid
Anonymous Contributor

Tetanus: treatment for infection

## SAD RAT:

Sedation
Antitoxin
Debridement
Relaxant
Antibiotic
Tracheostomy
Knowledge Level 6, System: Muscle
Felix Fandiñola West Visayas State University, Philippines

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

Toxoplasma gondii: clinical features
Hi Yield [ID 1031]
Cat reservoir: a cat.
Bug name is Gondii: cat has a Gandi head.
Cat fecal origin: cat is in the litter box.
Causes brain infection, diagnosed by CAT scan: a "CAT" scan of Gandi's brain.
Toxic to eyes: Gandi has cat eyes.
Lymph nodes enlarged: large nodes around neck.
Affects fetus: small kitten in womb.
AIDS patient commonly: cat is very skinny, like an AIDS patient.
See diagram.


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

[^12]Trypanosoma brucei: disease caused
Hi Yield [ID 2120]
"I went on a TRYP to AFRICA":
TRYPanosoma brucei causes AFRICAn sleeping sickness.
Knowledge Level 2, System: Nervous
Anonymous Contributor

Capsulated bacteria
Hi Yield [ID 2593]
"Some Bacteria Have An Effective Paste Surrounding Membrane Yielding Pseudo Fort, Bypassing Killing":
Strep pneumonia
Bacteroides
H. influenza

Anthrax (B. anthracis)
E. coli

Pasteurella
Salmonella
Menigitidis (N. Menigitidis)
Yersinia pestis
Pseudomonas
Francisella
Brucella
Klebsiella
Knowledge Level 3, System: Other/Miscellaneous
Michel Nawfal

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

Common cold: viral causes
Hi Yield [ID 1731]
"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 Positives

Stain Purple (violet-blue)
because of their thick Peptidoglycan layer
Knowledge Level 1, System: Other/Miscellaneous
JuP University of Washington
Gram staining: mechanism
[ID 1160]
"Murein gets the red out" [Allusion to an old eye-wash slogan]:
Peptidoglycan (aka murein) remains purple during Gram staining. The Gram negatives, devoid of murein, are red.
Thus, murein prevents redness and are purple (positive).
Knowledge Level 4, System: Other/Miscellaneous
Caoimhín P. Connell Industrial Hygienist
Gram+: bacterial cell wall $\quad$ Hi Yield [ID 840]
Gram+ has:
+hick pepidoglycan layer.
+eichoic acid in wall.
Knowledge Level 1, System: Other/Miscellaneous
Gilvano Amorim Oliveira Universidade de santo Amaro- São Paulo Brasil.

| Hemophilius: culture requirements | Hi Yield [ID 1591] |
| :--- | :--- |

Read Hemophilus as "HemoFive":
Needs Heme with Factors Five and Ten.
Knowledge Level 3, System: Other/Miscellaneous
Dr. Atif Farooq Rawalpindi Medical College, Pakistan, Gujranwal

Listeria: motility
Istanbul sounds like Listambul = list + tumble.
Listeria has tumbling motility.
Knowledge Level 5, System: Other/Miscellaneous
Lior Greenberg Technion Faculty of Medicine, Haifa, Israel

Neisseria: fermentation of N. gonorrhoeae vs. N. meningitidis
Hi Yield [ID 1905]
Gonorrhoeae: Glucose fermenter only.
MeninGitidis: Maltose and Glucose fermenter.
Maltose fermentation is a useful property to know, since it's the classic test to distinguish the Neisseria types.
Knowledge Level 2, System: Other/Miscellaneous
Anonymous Contributor

## Obligate anaerobes: members worth knowing

Hi Yield [ID 2199]
ABC:
Actinomyces
Bacteroides
Clostridium
Knowledge Level 1, System: Other/Miscellaneous
Sung Hoon Kim El Paso, TX

Picornavirus: features
PICORNAvirus:
Positive sense
ICOsahedral
RNA virus
Knowledge Level 2, System: Other/Miscellaneous
Dr. Khawaja Atif Farooq Rawalpindi Medical College, Pakistan, Gujranwala

FORT ABC, Puerto Rico:
Flavivirus/ Filo
Orthomyxo
Retro
Toga
Arena
Bunya
Corona
Paramyxo
Rhabdo
Knowledge Level 1, System: Other/Miscellaneous
Sung Hoon Kim El Paso, TX

RNA viruses: negative stranded $\quad$ Hi Yield [ID 1940]
"Orthodox Rhabbi's Party Around Fine Bunnies":
Orthomyxo
Rhabdo
Paramyxo
Arena
Filo
Bunya
Knowledge Level 1, System: Other/Miscellaneous
Rodolfo Chirinos Universidad Central del Caribe, PR
RNA viruses: positive stranded $\quad$ Hi Yield [ID 1941]
"Pico Called Flavio To Return Renzo's Corona":
Picorna
Calici
Flavi
Toga
Retro
Reo
Corona
Knowledge Level 1, System: Other/Miscellaneous
Rodolfo Chirinos Universidad Central del Caribe, PR
Staphylococci: novobiocin test to distinguish coagulase negative staphylococci
Staph epidermidis stays away from the novobiocin disc like an epidemic.
Therefore, epidermidis is sensitive to novobiocin.
Staph saprophyticus, much friendlier, comes up to the disc and says, "'sap?'" [short for "whassup?", ie "what's up"].
Therefore, saprophyticus is novobiocin resistant.
Knowledge Level 5, System: Other/Miscellaneous
Lior Greenberg Technion Faculty of Medicine, Haifa, Israel

Staphylococcus aureus: diseases caused

## 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

Gamma: Garbage (no hemolytic activity).
Alpha: Almost (almost lyse, but incomplete).
Beta: Best (complete lysis).
Knowledge Level 1, System: Other/Miscellaneous
Robert O'Connor University College Dublin

Streptococcus pyogenes: diseases caused

## 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
[ID 1640]

## SMASHED:

Streptolysins
$\mathbf{M}$ protein
Anti-C5a peptidase
Streptokinase
Hyaluronidase
Exotoxin
DNAses
Knowledge Level 4, System: Other/Miscellaneous
Anonymous Contributor
Streptococcus pyrogenes: antibody
SPAM:
Streptococcus Pyogenes: Antibody to M protein.
Knowledge Level 1, System: Other/Miscellaneous
Anonymous Contributor
Typhus: Epidemic Typhus: etiologic agent, vector
ePidemic typhus:
Etiological agent: Rickettsia Prowazekii.
Vector: Pediculus corporis (human body louse).
This is in contrast to Endemic typhus.
Knowledge Level 1, System: Other/Miscellaneous
Joel Camilo Universidad Iberoamericana (UNIBE), Santo Domingo, Dominican Republic

Urease positive organisms
[ID 2235]

## PUNCH:

Proteus (leads to alkaline urine)
Ureaplasma (renal calculi)
Nocardia
Cryptoccocus (the fungus)
Helicobacter pylori
Knowledge Level 8, System: Other/Miscellaneous
Dr. Enrique Cifuentes Universidad Autonoma de Guadalajara

Influenza infection: clinical manifestations

[^13]Klebsiella details
Hi Yield [ID 362]
You tell the patient: "Get UPS you fat alcoholic":
UTI
Pneumonia
Sepsis
Fat capsule
Get up=nonmotile since no flagella.
Alcoholic=commonly seen in alcoholic and nosocomial patients.
Knowledge Level 3, System: Pulmonary
Anonymous Contributor

Mycobacterium tuberculosis: culture identification
Hi Yield [ID 668]
"Rough, Tough, Buff":
Rough: colony isn't smooth but rough like breadcrumbs.
Tough: colony stuck to plate well, and tough to remove.
Buff: buff is a color, a cream/coffee shade.
Knowledge Level 1, System: Pulmonary
Anonymous Contributor

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
Hi Yield [ID 859]
"Quell-lung":
Quell: Capsules swell [+ve test].
Lung: S. pnuemonia [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.
Gardnerella= Gram negative.
Vaginalis= Variable.
Knowledge Level 3, System: Reproductive
Rinku S Uberoi UNIBE

## STARCH:

Syphilis
Toxoplasmosis
AIDS (HIV)
Rubella
CMV
Herpes/ Hepatitis
Knowledge Level 1, System: Reproductive
Anonymous Contributor

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

## Battle sign

## BattlE:

Behind Ear
Knowledge Level 4, System: Cardiovascular
Anonymous Contributor

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

Stroke: basic work up
The 3 P's:
Pump
Pipes
Plasma
Knowledge Level 1, System: Cardiovascular
Anonymous Contributor

7 C's:
Cocaine
Consanguinity [familial such as neurofibromatosis and von Hippel-Lindau]
Cancer
Cardiogenic embol
hyperCoagulation
CNS infection [eg: HIV conditions]
Congenital arterial lesion
Knowledge Level 2, System: Cardiovascular
Samuel Atom Baek-Kim Tuckahoe, N.Y.

Proximal myopathy: differential [ID 2744]

## PEACH PODS:

Polymyositis
Endocrine: hyper, hypothyroidism, Cushing's syndrome, acromegaly
Alcohol
Carcinoma
HIV infection
Periodic hypokalemic paralysis
Osteomalacia
Drugs: steroids, statins
Sarcoidosis
Knowledge Level 6, System: Muscle
Anonymous Contributor

Babinski and LMN signs: conditions exhibiting them
"D MASTS":
Diabetes
Motor neuron disease
Ataxia (friedrichs)
Subacute combined degeneration of cord
Tabo paresis
Syringobulbia
Knowledge Level 4, System: Nervous
G.S. Dutt

Balint's syndrome
[ID 2530]
SOOT:
Simultagnosia
Optic ataxia
Ocular apraxia
Tunnel vision
Knowledge Level 7, System: Nervous
Bobby Varkey SCTIMST
Benidict's syndrome: site affected
[ID 3088]
Benidict's test for sugar gives red precipitate.
Similarly, Benidict's syndrome affects red nucleus.
Knowledge Level 4, System: Nervous
Ram Mohan Svrr Tirupathi AP India

## 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 $\quad$ Hi Yield [ID 2130]
DREAMS:
Dominantly inherited, mostly
Reflexes decreased
Enzymes normal
Apathetic floppy baby
Milestones delayed
Skeletal abnormalities
Knowledge Level 7, System: Nervous
Bobby Varkey SCTIMST

Dementia: reversible dementia causes
Hi Yield [ID 1388]

## DEMENTIA:

Drugs/ Depression
Elderly
Multi-infarct/ Medication
Environmental
Nutritional
Toxins
Ischemia
Alcohol
Knowledge Level 1, System: Nervous
Mohamed Azim Assistant lecturer of Pediatric Surgery, Alexandria University, Egypt

Dementia: some common causes
Hi Yield [ID 928]

## DEMENTIA:

Diabetes
Ethanol
Medication
Environmental (eg CO poisoning)
Nutritional
Trauma
Infection
Alzheimer's
Knowledge Level 1, System: Nervous
Anonymous Contributor

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
[ID 1503]

## HE'S LATIN AMERICAN:

Herpesviridae
Enteroviridae (esp. Polio)
Slow viruses (esp. JC, prions)
Syphilis
Legionella/ Lyme disease/ Lymphocytic meningoencephalitis
Aspergillus
Toxoplasmosis
Intracranial pressure
Neisseria meningitidis
Arboviridae
Measles/ Mumps/ Mycobacterium tuberculosis/ Mucor
E. coli

Rabies/ Rubella
Idiopathic
Cryptococcus/ Candida
Abscess
Neoplasm/ Neurocysticercosis
Neurocysticercosis should be assumed with recent Latin American immigrant patient unless proven otherwise.
Knowledge Level 3, System: Nervous
Samuel Atom Baek-Kim Tuckahoe, NY

Head trauma: rapid neuro exam
12 P's:
Psychological (mental) status
Pupils: size, symmetry, reaction
Paired ocular movememts
Papilloedema
Pressure (BP, increased ICP)
Pulse and rate
Paralysis, Paresis
Pyramidal signs
Pin prick sensory response
Pee (incontinent)
Patellar relex (and others)
Ptosis
Reevaluate patient every 8 hrs.
Knowledge Level 3, System: Nervous
Ernest Boiselier, MD and Sung Kim Attending physician, ISSSTE, Juarez, Mexico

Huntington's: chromosome, involvement
Hi Yield [ID 2096]

## HUNT 4 DATE:

HUNTington's on chromosome 4, with cauDATE nucleus involvement.
Knowledge Level 7, System: Nervous
Syed Medical doctor

MS is a feminine title (Ms.) and is female predominant.
Knowledge Level 3, System: Nervous
Anonymous Contributor

Neurofibromatosis: diagnositic criteria (type-1)
Hi Yield [ID 1705]

## CAFE SPOT:

Cafe-au-lait spots
Axillary, inguinal freckling
Fibroma
Eye: lisch nodules
Skeletal (bowing leg, etc)
Pedigree/ Positive family history
Optic Tumor (glioma)
Knowledge Level 3, System: Nervous
Hui-quan Zhao Children's Hospital Cincinnati

Neurofibromatosis: diagnostic criteria

## ROLANDO:

Relative (1st degree)
Osseous fibromas
Lisch nodules in eyes
Axillary freckling
Neurofibromas
Dime size cafe au lait spots
Optic gliomas
Knowledge Level 3, System: Nervous
Balraj Jhawar The University of Western Ontario

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

Ocular bobbing vs. dipping
[ID 2074]
"Breakfast is fast, Dinner is slow, both go down":
Bobbing is fast.
Dipping is slow.
In both, the initial movement is down.
Knowledge Level 2, System: Nervous
Parameswaran Doctor

Perinaud's syndrome: clinical features
[ID 3087]

## PERINAUD'S:

Pseudo 6th nerve palsy/ Penial region
Eyelid Retraction
Internuclear ophthalmoplegia
Nystagmus
Accomodation reflex present
Upward gaze palsy
Defective convergence/ Decerebrate rigidity
Skew deviation
Knowledge Level 3, System: Nervous
Ram Mohan Svrr Tirupathi AP India

## DANG THERAPIST:

Diabetes
Amyloid
Nutritional (eg B12 deficiency)
Guillain-Barre
Toxic (eg amiodarone)
Heriditary
Endocrine
Recurring (10\% of G-B) Alcohol
$\mathbf{P b}$ (lead)
Idiopathic
S arcoid
Thyroid
Knowledge Level 3, System: Nervous
Ben Campbell University of Otago Medical School, Dunedin, New Zealand

Pin-point pupil causes
[ID 364]
Pin-Point Pupils are due to oPioids and Pontine Pathology
Knowledge Level 3, System: Nervous
Anonymous Contributor

Pupillary dilatation (persistent): causes
[ID 1918]
3AM:
3rd nerve palsy
Anti-muscarinic eye drops (eg to facilitate fundoscopy)
Myotonic pupil (Holmes Adie pupil): most commonly in young women, with absent/delayed reaction to light and convergence, and of no pathological significance.
Knowledge Level 1, System: Nervous
Gajan Rajeswaran Final Year Medical Student, Imperial College School Of Medicine, London

Ramsay-Hunt syndrome: cause and common feature
Hi Yield [ID 1063]
"Ramsay Hunt":
Etiology:
Reactivated
Herpes zoster
Complication:
Reduced
Hearing
Knowledge Level 4, System: Nervous
Rinku S. Uberoi UNIBE

Status epilepticus: treatment
Hi Yield [ID 2271]
"Thank Goodness All Cerebral Bursts Dissipate":
Thiamine
Glucose
Ativan
Cerebyx
Barbiturate
Diprivan
Knowledge Level 2, System: Nervous
J.D. Broughton, MD
| Vertigo: differential

## VOMITS:

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

Visual loss: persistent bilateral sudden onset visual loss differential
FLOP:
Functional
Leber's hereditary neuropathy
Occipital infarctions
Pituitary apoplexy
Knowledge Level 9, System: Nervous
Dr. Bobby Varkey SCTIMST

Whipple's disease: features [for neurologists]

## A WHIPPLES DOOM

Arthralgias
Whipplei (organism)
Hypothalamic involvement
Intestinal involvement/ Intestinal biopsy required
PAS positive macrophages
PCR positivity
Lymphadenopathy
Extrapyramidal involvement
Septran treat with
Dementia
Ocular abnormalities (vertical gaze palsy)
Oculomasticatory myorhythmia
Myoclonus
Knowledge Level 9, System: Nervous
Bobby Varkey SCTIMST

## NEUROSCI ENCES

Pituitary: which half is the adenohypophysis
The Anterior pituitary is the Adenohypophysis.
Knowledge Level 1, System: Endocrine
Anonymous Contributor

Alzheimer's disease: common characteristics

## ALZHEIMER'S:

Anterograde amnesia is usually first sign
Life expectancy increase shows more cases in recent years
Zapped (loss of) acetylcholinergic neurons
Hereditary disease
Entire hippocampus becomes affected
Identified by neurofibrillary tangles
Mutation in amyloid genes associated w/ disease
Entorhinal areas degenerate first
Retrograde amnesia ultimaltely develops
Senile plaques are formed at synapse
Knowledge Level 4, System: Nervous
David H. Chafey Ponce School of Medicine

Look at the math signs around the two parts of the name: A-R.
The A has no sign in front, which in math means $\mathbf{+} \mathbf{A}(+$ Accommodate).
There is a subtract sign in front of the R (- React).
Therefore, pupil can accommodate, but can't react.
Knowledge Level 1, System: Nervous
Robert O'Connor University College Dublin

| Argyll-Robertson Pupil features | Hi Yield [ID 326] |
| :--- | :--- | :--- |

Argyll Robertson Pupil (ARP)
Read it from front to back: it is ARP, standing for Accomodation Reflex Present.
Read it from back to front: it is PRA, standing for Pupillary Reflex Absent.
Knowledge Level 1, System: Nervous
Anonymous Contributor

Argyll-Robertson Pupil features
Hi Yield [ID 410]
Argyll Robertson Pupil is like a prostitute.
She/he will accomodate, but will not react.
Pupil still accomodates, but doesn't react to light.
Pupil is a common sign in syphilis, which is often carried by prostitutes.
Knowledge Level 1, System: Nervous
Anonymous Contributor

Auditory pathway: mandatory stops
Hi Yield [ID 2080]
"Come In My Baritone":
Cochlear nucleus
Inferior colliculus
Medial geniculate nucleus
Brodmann's 41 (cortex)
Knowledge Level 4, System: Nervous
Anonymous Contributor Baylor College of Medicine, Houston, TX

Basal ganglia: D1 vs. D2 connections
[ID 2774]
D1 has 1 connection (Striatum-GPi/SNpr).
D2 has 2 connections (Striatum-GPe-GPi/SNpr).
Knowledge Level 7, System: Nervous
Christina Billcliffe Oxford University Medical School

Basal ganglia: indirect vs. direct pathway
[ID 67]
The 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
Hi Yield [ID 3]
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": 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.
Knowledge Level 1, System: Nervous
Robert O'Connor University College Dublin
Cerebellar damage signs
Hi Yield [ID 434]
DASHING:
Dysdiadochokinesia
Ataxia
Speech
Hypotonia
Intention tremor
Nystagmus
Gait
Knowledge Level 3, System: Nervous
Anonymous Contributor
Cerebellar damage signs
Hi Yield [ID 1878]

## DANISH:

Dysdiadochokinesis
Ataxia
Nystagmus
Intention tremor
Slurred speech
Hypotonia
Knowledge Level 3, System: Nervous
Grant Wilde and Kristian Mears University of Leicester and University of Nottingham, UK

| Cerebellar damage symptoms | Hi Yield [ID 179] |
| :--- | :--- |

## VANISHeD:

Vertigo
Ataxia
Nystagmus
Intention tremor
Slurred speech
Hypotonic reflexes
Dysdiadochokinesia.
Knowledge Level 3, System: Nervous
Anonymous Contributor
Cerebellar deep nuclei
[ID 346]
"Ladies Demand Exceptional Generosity From Men":
The 4 nuclei, from lateral to medial:
[Lateral]
Dentate
Emboliform
Globose
Fastigial
[Medial]
Knowledge Level 1, System: Nervous

| Cerebellar deep nuclei
"Fat Girls Eat Doritos":
From medial to lateral:
Fastigial
Globose
Emboliform
Dentate
Knowledge Level 1, System: Nervous

Cerebellar functional areas
Hi Yield [ID 1894]
Anatomical shape/location of cerebellar areas is a key to their function and related tract.
Vermis $=$ Spinocerebellar $=$ Axial equilibrium.
Vermis: right down the axis of cerebellum, and vertically segmented like a spinal column.
Flocculonodular lobe = Vestibulocerebellar = Ear, eye, body coordination.
Flocculonodular lobe: flares out to the edges, just like ears.
Hemispheres of cerebellum = Cerebrocerebellar $=$ Peripheral coordination.
Hemispheres: around periphery of cerebellum, and tract to cerebral hemispheres.
Knowledge Level 3, System: Nervous
Neil Bratney, M1 U. Nebraska Med Ctr


Cerebellar peduncles: afferent vs efferent
[ID 1435]

## SEMA:

Superior cerebellar peduncle
Efferent (fibres)
Middle cerebellar peduncle
Afferent (fibres)
Knowledge Level 9, System: Nervous
Durre Dow Medical College, Pakistan
Chemoreceptor trigger zone
"S yringes Help Men On Drugs":
Serotonin
Histamine
Muscarinic
Opioids
Dopamine
Knowledge Level 7, System: Nervous
Anonymous Contributor

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
Hi Yield [ID 406]
"On Occasion, Old Tim Taylor Asks For Very Good Vagina And Head":
From I to XII:
Olfactory
Optic
Occulomotor
Trochlear
Trigeminal
Abducens
Facial
Vestibulocochlear
Glossopharyngeal
Vagus
Accessory
Hypoglossal
Knowledge Level 1, System: Nervous
Daniel Clapton University of Tasmania

Cranial nerves
Hi Yield [ID 420]
"Our Officer Ordered To Touch And F\#*k Virgin Girl's Vagina And Hip":
In ascending order:
Olfactory
Optic
Occulomotor
Trochlear
Trigeminal
Abducens
Facial
Vestibulocochlear
Glossopharyngeal
Vagus
Accessory
Hypoglossal
Knowledge Level 1, System: Nervous
Dr. A. Manaf Pediatrician
| Cranial nerves
"One Of Our Trained Teachers Asked For A Good Vagina And Hymen":
Olfactory
Optic
Occulomotor
Trochlear
Trigeminal
Abducens
Facial
Auditory
Glossopharyngeal
Vagus
Accessory
Hypoglossal
Alternatively: "...Trained Tutors..."
Knowledge Level 1, System: Nervous
D. Suresh and Dr. M.S. Vishveshwara Freeman Health System and Consultant Oncologist, Bharath Cancer Hospital, Mysore, India

Cranial nerves
Hi Yield [ID 495]
"One Octopus Offered Two Toddlers And Five Virgins Great Valium And Hash":
Olfactory
Optic
Oculomotor
Trochlear
Trigeminal
Abducens
Facial
V>estibulocochlear
Glossopharyngeal
Vagus
Accesory
Hypoglossal
Knowledge Level 1, System: Nervous
Whit Fisher Georgetown Med
Cranial nerves
Hi Yield [ID 751]
"Old Opticians Operate To Try Adding Fortune And Getting Vegas Another Hotel!": In order from 1 to 12:
Olfactory
Optic
Occulomotor
Trochlear
Trigeminal
Abducens
Facial
Auditory
Glossopharyngeal
Vagus
Accessory
Hypoglossal
Knowledge Level 1, System: Nervous
Melissa Student in California

Cranial nerves [for political Americans]
"Our Oval Office Tomorrow Teeters As Florida Adds George Versus Al's Handcounts":
Olfactory
Optic
Oculomotor
Trochlear
Trigeminal
Abducent
Facial
Acoustic
Glossopharyngeal
Vagus
Accessory
Hypoglossal
Knowledge Level 1, System: Nervous
Chris Teng SUNY-HSCB Downstate College of Medicine, [Annual SUNY CN Contest Winner, 2000]

Cranial nerves [for those under stress] Hi Yield [ID 386]
"Oh Once One Takes The Anatomy Final A Good Vacation Seems Heavenly":
Olfactory
Optic
Occulomotor
Trochlear
Trigeminal
Abducens
Facial
Auditory
Glossopharyngeal
Vagus
Spinal root of the accessory
Hypoglossal
Knowledge Level 1, System: Nervous
Anonymous Contributor

Cranial nerves [for those with a vegetable fetish]
Hi Yield [ID 504]
"Oh Oh Oh To Touch And Feel Very Green Vegetables, Ah Heaven!":
Olfactory
Optic
Oculomotor
Trochlear
Trigeminal
Abducens
Facial
Vestibulocochlear
Glossopharyngeal
Vagus
Accesory
Hypoglossal
Knowledge Level 1, System: Nervous
Anonymous Contributor

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

[^14]Cranial nerves: sensory, motor or both [1950s style]
Hi Yield [ID 450]
"S ome S ay Marilyn Monroe But My Brother Says Bridget Bardot Mmm, Mmm!":
From I to XII:
Sensory
Sensory
Motor
Motor
Both
Motor
Both
Sensory
Both
Both
Motor
Motor
Knowledge Level 1, System: Nervous
Anonymous Contributor

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

Dorsal= afferent, Ventral= efferent and their functions
"My friend DAVE got kicked in the behind and screamed":
Dorsal/Afferent component is the sensation of pain coming from the rear.
Ventral/Efferent component is the motor action of screaming (which is done at front of body).
Knowledge Level 1, System: Nervous
Anonymous Contributor

Dysphagia vs. dysphasia
DysphaSia is for $\mathbf{S}$ peech
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)

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When you Glue two things together, you add (+) those things together, therefore Glu is the excitatory one (+).
GABA is therefore the negative one
Knowledge Level 2, System: Nervous
Robert O'Connor University College Dublin
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Geniculate bodies: medial vs. lateral system
Hi Yield [ID 307]
MALE:
Medial=Auditory. Lateral=Eye.
Medial geniculate body is for auditory system, lateral geniculate body is for visual system.
Can expand to MALES to remember Lateral=Eye=Superior colliculus (thus medial is inferior colliculus by default).
Knowledge Level 1, System: Nervous
Robert O'Connor University College Dublin

Geniculate bodies: medial vs. lateral system $\quad$ Hi Yield [ID 640]
"Lateral=Light. Medial=Music.":
Lateral geniculate body is for visual system.
Medial geniculate is for auditory system.
Knowledge Level 1, System: Nervous
Matt Morgan University of Utah School of Medicine

Geniculate bodies: paired to respective colliculi
Hi Yield [ID 1436]
SLIM:
Superior colliculi: Lateral geniculate body.
Inferior colliculi: Medial geniculate body.
Knowledge Level 1, System: Nervous
Durre Dow Medical College, Pakistan

Geniculocalcarine tract
Lower bank of calcarine sulcus is the Lingual gyrus: it receives input from Lower retinal quadrants.
Therefore, Cuneus is the Upper bank of calcarine sulcus: it receives input from Upper retinal quadrants.
Remember: lower retinal quadrants represent superior visual field quadrants and viceversa.
Knowledge Level 2, System: Nervous
Miruna Segarceanu UMF Carol Davila, Bucharest, Romania

Hypothalamus: feeding vs. satiety center
Hi Yield [ID 311]
"Stim the lat, get fat":
Stimulating 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

Hypothalamus: feeding vs.satiety center
"Late night snack":
LATEral is snacking [feeding] center
Therefore, ventromedial is satiety center.
Knowledge Level 1, System: Nervous
Robert O'Connor University College Dublin

Hypothalamus: general functions
"TALE of the hypothalamus":
Temperature
Appetite
Libido
Emotion
Knowledge Level 1, System: Nervous
Anonymous Contributor

## 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

|  | Upper | Lower |
| :---: | :---: | :---: |
| Strength | F | $F$ |
| Tone | (1)[spastic] | F[flaccid] |
| Other | fasiculations fibrillations clonus |  |
| Reflexes | (1) | 7 |
| Muscle mass | slight loss only | F |
| $\begin{aligned} & \hline \text { BABInski's } \\ & \text { sign } \end{aligned}$ | A [toe up] | [toe down] |

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
Hi Yield [ID 3131]
PAD:
Piamater
Arachnoid
Dura
Knowledge Level 1, System: Nervous
Mohammed Azizuddin Ahmed Indian Medical Council

Olivary nuclei: ear vs. eye roles
Hi Yield [ID 2097]
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

Optic chiasma: what it looks like if you're a genetics star
[ID 116]
The optic chiasma looks the same as a chiasma in meiosis, making it easy to spot on the dissected brain. Knowledge Level 3, System: Nervous
Anonymous Contributor


Parasympathetic vs. sympathetic function
Sympathetic nervous system: "Fight or Flight".
Parasympathetic nervous system: "Rest and Digest".
Knowledge Level 1, System: Nervous
Anonymous Contributor

Precentral vs. postcentral gyrus: motor vs. sensory
Just an extension of the rule that anterior $=$ ventral $=$ efferent $=$ motor.
The precentral gyrus is on the anterior side of the brain, so is therefore motor.
Knowledge Level 1, System: Nervous
Robert O'Connor University College Dublin

Purkinje cells in cerebellum are inhibitory to deep nuclei

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: ' $\mathbf{A}$ ' is Afferent, and also, in a limo, the aerial on the top of the trunk has a capital ' $\mathbf{A}$ ' 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
Hi Yield [ID 265]
2 posterior: cross at the medulla.
2 lateral: ipsilateral (same side).
2 anterior: cross at the spinal level.
See diagram.
Note 1: Descending tracts on left of figure, ascending tracts on right.
Note 2: For ipsilaterals: one never crosses, one crosses at the level then doubles back farther up. The ipsilateral that crosses at the level (ventral spinocerebellar) is the ipsilateral closest to the 2 anterior ones, which also cross at the level.

Tract names in each group:


Posterior 2: lateral corticalspinal, dorsal columns. Lateral 2: dorsal spinocerebellar, ventral spinocerebellar. Anterior 2: ventral corticospinal, spinothalamic.
Knowledge Level 3, System: Nervous
Robert O'Connor University College Dublin

Temporal lobe: location of high vs. low frequency recognition
[ID 15]
The bass clef looks like an ear.
Therefore, the bass clef [low frequency] is closer to the ear, and the treble clef [high frequency] is more medial.
See diagram.
Knowledge Level 8, System: Nervous
Robert O'Connor University College Dublin


Thirst/water balance control centre: location in hypothalamus
"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

Magendie foramen is the Medial aperture.
Luschka foramen is the Lateral aperture.
Knowledge Level 4, System: Nervous
Anonymous Contributor

## OBSTETRICS / GYNECOLOGY

Preeclampsia: classic triad
Hi Yield [ID 1652]
PREeclampsia:
Proteinuria
Rising blood pressure
Edema
Knowledge Level 4, System: Cardiovascular
Anonymous Contributor

| RLQ pain: brief female differential | Hi Yield [ID 2071] |
| ---: | ---: |

## AEIOU:

Appendicitis/ Abscess
Ectopic pregnancy/ Endometriosis
Inflammatory disease (pelvic)/ IBD
Ovarian cyst (rupture, torsion)
Uteric colic/ Urinary stones
Knowledge Level 1, System: Other/Miscellaneous
Sushant Varma University of Sheffield, UK

| Abdominal pain: causes during pregnancy | Hi Yield [ID 474] |
| :--- | :--- |

LARA CROFT:
Labour
Abruption of placenta
Rupture (eg. ectopic/ uterus)
Abortion
Cholestasis
Rectus sheath haematoma
Ovarian tumour
Fibroids
Torsion of uterus
Knowledge Level 5, System: Reproductive
Graeme Little University College London
Alpha-fetoprotein: causes for increased maternal serum AFP during pregnancy
Hi Yield [ID 849]
"Increased Maternal Serum Alpha Feto Protein":
Intestinal obstruction
Multiple gestation/ Miscalculation of gestational age/ Myeloschisis
Spina bifida cystica
Anencephaly/ Abdominal wall defect
Fetal death
Placental abruption
Knowledge Level 4, System: Reproductive
Rinku Uberoi UNIBE
Alpha-fetoprotein: some major causes for increased maternal serum AFP during pregnancy
TOLD:
Testicular tumours
Obituary (fetal death)
Liver: hepatomas
Defects (neural tube defects)
Knowledge Level 3, System: Reproductive
Isae Kilonzo University College Cork, Ireland

## 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/ Eugonadotropic
Repeated uterine trauma
Missed Menses
Adhesions
Normal estrogen and progesterone
Knowledge Level 8, System: Reproductive
Rinku Uberoi UNIBE

B-agonist tocolytic (C/I or warning)

## 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 $\mathbf{1 6}$ letters and it's measured at $\mathbf{1 6}$ weeks gestation.
Knowledge Level 3, System: Reproductive
Anonymous Contributor

Delivery: instrumental delivery prerequisites
Hi Yield [ID 2215]

## AABBCCDDEE:

Analgesia
Antisepsis
Bowel empty
Bladder empty
Cephalic presentation
Consent
Dilated cervix
Disproportion (no CPD)
Engaged
Episiotomy
Knowledge Level 4, System: Reproductive
Harold Choi Medical student in Singapore

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 2015]

## RAPID CS:

Rh incompatibility
Asphyxia
Premature delivery
Infections
Diabetic mother
CS (caesarian section) previously, so the funda is RAPID CS
Knowledge Level 4, System: Reproductive
Rajeev and Ashish Doctors, RNTMC, UDP

Fetus: cardinal movements of fetus
[ID 2691]
"Don't Forget I Enjoy Really Expensive Equipment":
Descent
Flexion
Interal rotation
Extension
Restitution
External rotation
Expulsion
Knowledge Level 1, System: Reproductive
Anonymous Contributor

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
$\mathbf{P}$ !ss and $\mathbf{S} \#!t$ (bladder and bowel empty)
Knowledge Level 3, System: Reproductive
Simon Holliday St. George's Hospital Medical School, UK

Gestation period, oocytes, vaginal pH , menstrual cycle: normal numbers

4 is the normal pH of the vagina.
40 weeks is the normal gestation period.
400 oocytes released between menarche and menopause.
400,000 oocytes present at puberty.
$\mathbf{2 8}$ days in a normal menstrual cycle.
$\mathbf{2 8 0}$ days (from last normal menstrual period) in a normal gestation period.
Knowledge Level 5, System: Reproductive
Anonymous Contributor

IUD: side effects
[ID 3161]

## PAINS:

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

IUGR: causes Hi Yield [ID 1975]

## IUGR:

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

| Labour: preterm labor causes | Hi Yield [ID 3218] |
| :--- | :--- |

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

Multiple pregnancy complications Hi Yield [ID 2871]

## HI, PAPA:

Hydramnios (Poly)
IUGR
Preterm labour
Antepartum haemorrhage
Pre-eclampsia
Abortion
Knowledge Level 3, System: Reproductive
Ashley Liew University of Glasgow, UK

Omental caking: likeliest cause
Hi Yield [ID 2985]

## Omental CAking $=\mathbf{O}$ varian $\mathbf{C A}$

"Omental caking" is term for ascities, plus a fixed upper abdominal and pelvic mass. Almost always signifies ovarian cancer. Knowledge Level 2, System: Reproductive
Anonymous Contributor
Oral contraceptive complications: warning signs

## ACHES:

Abdominal pain
Chest pain
Headache (severe)
Eye (blurred vision)
Sharp leg pain
Knowledge Level 4, System: Reproductive
Carrie Davis, RNC, MSN, WHNP Obici Health System

Oral contraceptives: side effects
Hi Yield [ID 2018]

## CONTRACEPTIVES:

Cholestatic jaundice
Oedema (corneal)
Nasal congestion
Thyroid dysfunction
Raised BP
Acne/ Alopecia/ Anaemia
Cerebrovascular disease
Elevated blood sugar
Porphyria/ Pigmentation/ Pancreatitis
Thromboembolism
Intracranial hypertension
Vomiting (progesterone only)
Erythema nodosum/ Extrapyramidal effects
Sensitivity to light
Knowledge Level 6, System: Reproductive
Dr. Harsh Sharma BJMC, Pune, India

Ovarian cancer: risk factors
"Blue FILM":
Breast cancer
Family history
Infertility
Low parity
Mumps
Knowledge Level 4, System: Reproductive
Sung H. Kim

Parity abbreviations (ie: G 3, P 2012)
"To Peace And Love":
T: of Term pregnancies
P: of Premature births
A: of Abortions (spontaneous or elective)
L: of Live births
Describes the outcomes of the total number of pregnancies (Gravida).
Knowledge Level 1, System: Reproductive
Megan Duffy Medical student, AZCOM

Pelvic Inflammatory Disease (PID): causes, effects
Hi Yield [ID 2019]
"PID CAN be EPIC":
Causes:
Chlamydia trachomatis
Actinomycetes
Neisseria gonorrhoeae
Effects:
Ectopic
Pregnancy
Infertility
Chronic pain
Knowledge Level 2, System: Reproductive

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, meninigitis
Knowledge Level 2, System: Reproductive
Lum

Postpartum collapse: causes

## HEPARINS:

Hemorrhage
Eclampsia
Pulmonary embolism
Amniotic fluid embolism
Regional anaethetic complications
Infarction (MI)
Neurogenic shock
Septic shock
Knowledge Level 6, System: Reproductive
Hossam Elzeiny Trainee, Royal Womens Hospital, Victoria, Australia

Post-partum haemmorrage (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

Post-partum haemorrhage (PPH): causes
4 'T's:
Tissue (retained placenta)
Tone (uterine atony)
Trauma (traumatic delivery, episiotomy)
Thrombin (coagulation disorders, DIC)
Knowledge Level 3, System: Reproductive
Nicholas Kelly

Prenatal care questions

## ABCDE:

Amniotic fluid leakage?
Bleeding vaginally?
Contractions?
Dysuria?
Edema?
Fetal movement?
Knowledge Level 3, System: Reproductive
Jason Bermak UC Irvine

SOAP:
Stress
OCP
Anorexia
Pregnancy
Knowledge Level 2, System: Reproductive
Nathan Sachdev University of New South Wales, Sydney

Spontaneous abortion: definition
"Spontaneous abortion" has less than 20 letters [it's exactly 19 letters].
Spontaneous abortion is defined as delivery or loss of products of conception at less than $\mathbf{2 0}$ weeks gestation.
Knowledge Level 4, System: Reproductive
Rinku Uberoi

Vaginal pH
[ID 837]
Vagina has 4 labia and normal pH of vagina is about 4.
Knowledge Level 4, System: Reproductive
Anonymous Contributor

Female pelvis: shapes
Hi Yield [ID 1095]

## GAP:

In order from most to least common:
Gynecoid
Android /Anthropoid
Platypelloid
Knowledge Level 4, System: Skeletal
Anonymous Contributor

## OPHTHAMOLOGY / OPTOMETRY

Red eye causes

## GO SUCK:

Glaucoma
Orbital disease
Scleritis
Uveitis
Conjunctivitis
Keratitis
Knowledge Level 2, System: Cardiovascular
Anonymous Contributor

Anopsia: quarantic anopsia: location of lesion
Hi Yield [ID 2601]
Upper: Top: Temporal lesions.
Lower: Pits: Parietal lesions.
Knowledge Level 1, System: Nervous
Sung Hoon Kim Wonkang Univ Medical school, South Korea
Cataracts: causes Hi Yield [ID 1973]
ABCDE:
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

## CATARAct:

Congenital
Aging
Toxicity (steroids, etc)
Accidents
Radiation
Abnormal metabolism (diabetes mellitus, Wilson's)
Knowledge Level 2, System: Nervous
Anonymous Contributor

Cataracts: differential
Hi Yield [ID 2808]

## CATARAct:

Congenital
Aging
Toxicity (steroids, etc)
Accidents
Radiation
Abnormal metabolism (DM, Wilsons, etc)
Knowledge Level 2, System: Nervous
Robert O'Connor University College Dublin
Corneal stromal dystrophies
[ID 2371]
"Marilyn Monroe Gets High in LA":
Macular: Mucopolysaccharide
Granular: Hyaline
Lattice: Amyloid
Knowledge Level 3, System: Nervous
Elise R. Leonard, M.D.

Dacryocystitis, dacryoadenitis: apparatus affected
Hi Yield [ID 2840]
Dacryocystitis, dacryadenitis:
Cry, so affects lacrimal gland.
Infection and inflammation, respectively.
Knowledge Level 1, System: Nervous
Anonymous Contributor
Diplopia (uniocular): causes
Hi Yield [ID 1974]

## 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

## HAMMAR

Histoplasmosis
ARMD
Multifocal Choroiditis
Myopia
Angiod
Rupture of the choroid
Knowledge Level 5, System: Other/Miscellaneous
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

Nasopharyngeal cancer: classic symptoms
[ID 2806]

## NOSE:

Neck mass
Obstructed nasal passage
Serous otitis media externa
Epistaxis and discharge
Knowledge Level 4, System: Pulmonary
Robert O'Connor University College Dublin

## ORTHOPEDICS

Carpal tunnel syndrome: treatment

## 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
disPlacement
Angulation
Rotation
Impaction
Shortening
Knowledge Level 3, System: Other/Miscellaneous
Fletcher Davies Adelaide Medical School

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 $\mathbf{Y}$.

Patient's body is the stem of the Y laying on the bed, and legs are the ends of the Y up in the air.
Knowledge Level 1, System: Skeletal
Kayle Luther

Forearm fractures: bone in Monteggia vs. Galeazzi
Hi Yield [ID 998]
Monteggia is fracture of ulna.
Therefore, Galeazzi is fracture of radius.
Knowledge Level 1, System: Skeletal
Dr R. Coleman Junior House Officer

Fracture: description

## BLT LARD:

Bone
Location on bone
Type of fracture
Lengthening
Angulation
Rotation
Displacement
Knowledge Level 1, System: Skeletal
Brian Crownover Staff Family Physician, Offutt AFB, Nebraska

Monoarthritis differential
Hi Yield [ID 2082]

## GHOST:

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

Osteosarcoma: risk factors

## PRIMARY:

Paget's
Radiation
Infaction of bone
Male
Alcohol, poor diet, sedentary lifestyle [adults only]
Retinoblastoma, Li-Fraumeni syndrome
Young [10-20 yrs]
Osteosarcoma is the most common primary malignant tumor of bone.
Knowledge Level 4, System: Skeletal
Robert O'Connor University College Dublin

## PANICS:

Pain
Arthralgia
Nerve compression / Neural deafness
Increased bone density
Cardiac failure
Skull / S clerotic vertebrae
Knowledge Level 3, System: Skeletal
Andrew Young UMDS

Sacroiliitis: causes

## PUB CAR:

Psoriasis
Ulcerative colitis
Behcet's disease
Crohn's disease
Ankylosing spondylitis
Reiter's disease
Knowledge Level 4, System: Skeletal
Chris Brewer University of Birmingham Medical School
Salter Harris fracture classification
[ID 2632]
Salter Harris, modified to SALTR:
type 1: Slipped epiphysis
type 2: Above the eiphyseal plate
type 3: Lower than the eiphyseal plate
type 4: Through both above and below eiphyseal plate
type 5: Raised epiphysis, as in a compression injury
Salter Harris classification utilises visualising long bone distal portion with diaphysis superiorly placed and epiphysis inferiorly placed. Knowledge Level 5, System: Skeletal
Anonymous Contributor

## OTHER / MISCELLANEOUS

Syncope (fainting) treatment
If the face is red, raise the head.
If the face is pale, raise the tail.
Knowledge Level 2, System: Cardiovascular
Anonymous Contributor
Clinical essay plan
[ID 2007]
"During Exams Please Say Silently I Must Prepare F***ing Well":
Definition
Epidemiology
Pathology
Signs and $\mathbf{S y m p t o m s}$
Investigations
Management
Prognosis
Further Work
Knowledge Level 3, System: Other/Miscellaneous
Kit and Gaj University College London Medical School
| Healthy lifestyle modification

DRAINS:
Diet
Reduce weight
Alcohol reduced
Improve circulation (exercise)
No other disease
Smoking stopped
Knowledge Level 1, System: Other/Miscellaneous
Lum

Hospice facets

## HOSPICE:

Home
Outpatient
Support groups
Pain medication/ Physical needs
Inpatient
Counseling
End-stage (terminal) illness/ Emotional needs
Knowledge Level 7, System: Other/Miscellaneous
Anonymous Contributor

Safety factors
SETUP:
Stop
Environment
Traffic
Unknown hazards
Protect yourself, patient, bystanders
Knowledge Level 1, System: Other/Miscellaneous
Robert Davis First aid facilitator

## PATHOLOGY

Achalasia: 1 possible cause, 1 treatment

## aCHAlasia:

1 possible cause: CHAgas' disease
1 treatment: Ca++ CHAnnel blockers
Knowledge Level 5, System: Alimentary
Anonymous Contributor

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

Colon cancer: risk factors
HULA:
Heridity/ Heriditary diseases
Ulcerative colitis
Low fibre, high fat diet
Adenomatous polyps
Knowledge Level 3, System: Alimentary
Anonymous Contributor

5 F's:
Fat
Female
Family history
Fertile
Forty
Knowledge Level 4, System: Alimentary
Anonymous Contributor

Haemochromatosis definition, classic triad
Hi Yield [ID 844]
"Iron man triathalon":
Iron man: deposition of iron in many body tissues.
Triathalon has 3 components, which match triad:
S wimming: 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

## Triathlete:



Black athlete: skin pigmentation

Bronze medal bronze diabetes

Liver dots:
micronodular pigment cirrhosis

Hepatocellular carcinoma: aetiology, features
ABC:
Aetiology:
Aflatoxins
Нер В
Cirrhosis
Features:
AFP increased (classic marker)
Bile-producing (DDx from cholangiocarcinoma)
Commonest primary liver tumor
Knowledge Level 4, 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
Hi Yield [ID 286]
Crohn's has Cobblestones on endoscopy.
Knowledge Level 1, System: Alimentary
Anonymous Contributor

FLAME:
Fatty Liver
Anemia
Malabsorption
Edema
Knowledge Level 2, System: Alimentary
Chris UMF Bucharest

Oral cancer risks

## PATH LAB:

Plummer-vinson syndrome
Alcohol
Tobacco
Human papilloma virus
Leukoplakia
Asbestos
Bad oral hygiene
Knowledge Level 6, System: Alimentary
Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan, Gujranwala

Pancreatitis: causes
Hi Yield [ID 1561]

## PANCREATITIS:

Posterior
Alcohol
Neoplasm
Cholelithiasis
Rx (lasix, AZT)
ERCP
Abdominal surgery
Trauma
Infection (mumps)
Triglycerides elevated
Idiopathic
Scorpion bite
Knowledge Level 4, System: Alimentary
Anonymous Contributor

Pancreatitis: causes
Hi Yield [ID 1701]

## BAD S\#!T:

Biliary: gallstones, $1 \%$ of ERCP patients
Alcoholism/ Azotemia
Drugs
Scorpion bite/ Sea anenome/ SLE
Hyperlipidemia/ Hypercalcemia
Idiopathic/ Infectious (mumps, coxsackie, salmonella, ascariasis)
Tumor/ Trauma
The drugs are: penacillamine, furosemide, thiazides, ethacrynic acid, steroids, sulfas, ace inhibitors, N-SAIDs, erythromycin, estrogen. Knowledge Level 3, System: Alimentary
Anonymous Contributor

## SHAZAM:

## Smoking

Hypercalcemia
Aspirin
Zollinger-Ellison
Acidity
MEN type I
These may work with H. pylori to promote ulceration, or may act alone.
Knowledge Level 5, System: Alimentary
Robert O'Connor University College Dublin
PKU findings $\quad$ Hi Yield [ID 821]
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:

Anemia of chronic disease
No folate or B12
Ethanol
Marrow failure \& hemaglobinopathies
Iron deficient
Acute \& chronic blood loss
Knowledge Level 2, System: Cardiovascular
The Cashman University of Queensland, Australia

| 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
Hi Yield [ID 403]
"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
$\begin{array}{ll}\text { Atherosclerosis risk factors } & \text { Hi Yield [ID 477] }\end{array}$

## SHIFT MAID:

Smoking
Hypertension
(N)IDDM

Family history
Triglycerdides \& fats
Male
Age
Inactivity
Diet / Drink
Knowledge Level 2, System: Cardiovascular
Marcus McMillan Glasgow University

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:
SHEehan's syndrome
Knowledge Level 5, System: Cardiovascular
Anonymous Contributor

## "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
Hi Yield [ID 3276]

## FLASH BODIES:

Family history
Lipids
Age
Sex
Homocystinaemia
Blood pressure
Obesity
Diabetes mellitus
Inflammation (raised CRP)/ Increased thrombosis
Exercise
Smoking
Knowledge Level 1, System: Cardiovascular
Hamish Mace Dunedin School of Medicine, New Zealand

Deep venous thrombosis: diagnosis
Hi Yield [ID 896]

## DVT:

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

Deep venous thrombosis: genetic causes

## ALASCA:

Antithrombin III
Leiden (Factor V)
APC (Activated Protein C)
S-protein deficiency
C-protein deficiency
Antiphospholipid antibody
Knowledge Level 6, System: Cardiovascular
Anonymous Contributor University of Otago Medical School, New Zealand

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
Hi Yield [ID 1224]
"Fat, Bat, Fract":
Fat in urine, sputum
Bat-wing lung x-ray
Fracture history
Also, fracture of FEMur causes Fat EMboli.
Knowledge Level 3, System: Cardiovascular
Robert O'Connor \& Rinku Uberoi

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

Hemolytic anemia types

## SHEEP T!T:

Sickle cell
Heriditary splenocytosis
Enzyme deficiencies: [G6P, pyruvate kinase]
Erythroblastosis fetalis
Paroxysmal nocturnal hemoglobinuria
Trauma to RBCs
Immunohemolytics: [warm Ab, cold Ag]
Thalassemias: [alpha, beta]
Knowledge Level 2, System: Cardiovascular
Robert O'Connor University College Dublin

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

## CHILD:

$\mathbf{5}$ letters=5 days, $>\mathbf{5}$ years old, $\mathbf{5}$ out 6 criteria for diagnosis:
Conjuctivitis (bilateral)
Hyperthermia (fever) >5 days
Idiopathic polymorphic rash
Lymphoadenopathy (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
Hi Yield [ID 1034]
Disease name: a Kawasaki motorcycle.
Usually young children, epidemic in Japan: Japanese child rides the motorcycle.
Conjunctival, oral erythema: red eyes, mouth.
Fever: thermometer.
Erythema of palms, soles: red palms, soles.
Generalized rash: rash dots.
Cervical lymphadenitis: enlarged cervical nodes with inflammation arrows.
Vasculitis of arteries: inflammation arrows on arteries.
Cardiovascular sequelae [20\%]: inflammation arrows on cardiac arteries.


Treat with aspirin: aspirin headlight.
See diagram.
Knowledge Level 3, System: Cardiovascular
Robert O'Connor University College Dublin

Kawasaki's disease: features
Hi Yield [ID 1745]
FEAR ME:
Fever
Eye: perilimbic sparing conjunctival injection
Adenopathy: usually cervical
Rash
Mouth: red lips
Extremities: red hands and feet
Disease to be feared because of risk of coronary aneurysms.
Knowledge Level 3, System: Cardiovascular
Vince Yamashiroya

Macrocytic anaemia: differential
Hi Yield [ID 2536]

## FAT RBC:

Fetus (pregnancy)
Alcohol
Thyroid disease(ie hypothyroidism)
Reticulocytosis
B12 and folate deficiency
Cirrhosis and chronic liver disease
Knowledge Level 5, System: Cardiovascular
Anonymous Contributor

MI: complications
Hi Yield [ID 512]

## HAS CRAPPED:

Heart failure/ Hypertension
Arrhythmia
Shock
Cardiac Rupture
Aneurysm
Pericarditis
Pulmonary Emboli
DVT

MI: complications
Hi Yield [ID 1794]
"LEAP on the MAP":
LVF
Embolism (systemic)
Aneurysm (ventricular)
Progressive infarction
Myocardial rupture
Arrhythmia
Pericarditis
Knowledge Level 1, System: Cardiovascular
Kevin Lau University of Hong Kong

| MI: post-MI complications | Hi Yield [ID 2789] |
| :--- | :--- |

## ACT RAPID:

Arrhythmias (SVT, VT, VF)
Congestive cardiac failure
Tamponade/ Thromboembolic disorders
Rupture (ventricle, septum, papillary muscle)
Aneurysm (ventricle)
Pericarditis
Infaction (a second one)
Death/ Dressler's syndrome
Knowledge Level 2, System: Cardiovascular
Dr. Huw Davies

MI: sequence of elevated enzymes after MI
Hi Yield [ID 230]
"C-AST-Le" (castle):
CK-MB first
AST second
LDH third
Also: can use the last 'E' for ESR.
Knowledge Level 2, System: Cardiovascular
Anonymous Contributor

## MI: sequence of elevated enzymes after MI

Hi Yield [ID 589]
"Time to CALL 911":
From first to appear to last:
Troponin
CK-MB
AST
LDH1
Knowledge Level 2, System: Cardiovascular
Marco Foramiglio Centro de Ciências Médicas e Biológicas - PUC/SP- Sorocaba/SP - Brazil

Pericarditis: findings
Hi Yield [ID 1222]

## 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

## See figure.

Pick axes are Picking away at the old woman's cerebral cortex, causing cortical atrophy.
2 pick axes on her brain: frontal lobe and anterior $1 / 3$ of temporal.
An old woman, since epidemiology is elderly \& more common in women.
Knowledge Level 1, System: Cardiovascular
Robert O'Connor University College Dublin


Portal hypertension: features

## ABCDE:

Ascites
Bleeding (haematemesis, piles)
Caput medusae
Diminished liver
Enlarged spleen
Knowledge Level 3, System: Cardiovascular
Dr. Harsh Sharma

Protein C, Protein S: function
$\mathbf{C}$ and $\mathbf{S}$ are:
Clot
Stoppers
These proteins inhibit coagulation.
Knowledge Level 5, System: Cardiovascular
Rinku Uberoi New York Hospital

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

Thrombus: possible fates

## DOPE:

Dissolution
Organization \& repair
Propagation
Embolization
Knowledge Level 3, System: Cardiovascular
Robert O'Connor University College Dublin

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)
Hi Yield [ID 1009]
"VIRchow":
Vascular trauma
Increased coagulability
Reduced blood flow (stasis)
Knowledge Level 2, System: Cardiovascular
Rinku Uberoi UNIBE

Von Hippel-Lindau: signs and symptoms
Hi Yield [ID 1065]
HIPPEL:
Hemanigoblastomas
Increased renal cancer
Pheochromocytoma
Port-wine stains
Eye dysfunction
Liver, pancreas, kidney cysts
Bare bones version: Hippel-Lindau, with H and L as above.
Knowledge Level 4, System: Cardiovascular
Robert O'Connor University College Dublin

| Addison's disease: features | Hi Yield [ID 897] |
| :--- | :--- |

ADDISON:
Autoimmune
DIC (meningcoccus)
Destruction by cancer, infection, vascular insufficiency
Iatrogenic
Sarcoidosis, granulomatous such as TB histiomycosis
hypOtension/ hypOnatermia
Nelson's syndrome [post adrelectomy, increased ACTH]
Knowledge Level 3, System: Endocrine
Samuel Atom Baek-Kim
Adrenal disorders: Cushing's vs Addison's
Hi Yield [ID 1613]
Cushing: is Gushing cortisol.
In Addison's: patient's cortisol doesn't Add up.
Knowledge Level 1, System: Endocrine
Anonymous Contributor
Calcification: metastatic vs. dystrophic
Metastatic: Metabolism imbalance.
Dystrophic: Damaged tissue.
Knowledge Level 1, System: Endocrine
Anonymous Contributor
Cushing syndrome

```
CUSHING:
Central obesity/ Cervical fat pads/ Collagen fiber weakness/ Comedones (acne)
Urinary free corisol 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
Hi Yield [ID 2839]
Hirsutism: Hair on body like a male.
Virilism: Voice and rest of secondary sexual characteristics like a male.
Knowledge Level 1, System: Endocrine
Anonymous Contributor

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

Hypothyroidism/thyroiditis: maifestations and morphology
Hi Yield [ID 628]
"A SCHISM among the Axis during WWII":
Addison disease
Subacute thyroiditis
Cretinism/ Cold intolerance/ Constipation
Hashimoto's disease
Infectious-subacute thyroiditis
Silent thyroiditis
Myxedema coma
The Axis: Schimidt syndrome (when other endocrinology disorders accompany Hashimoto's disease) and "Hitler cells" (Hurthle cells, which art follicular epithelial cells with basophilic inculsions)
Knowledge Level 5, System: Endocrine
Sung H. Kim
"Please Please Pay Attention To peptic ulceration, you worms":
Adenomas of:
Pituatary
Pancreatic islets
Parathyroid
Adrenal cortex
Thyroid, associated with peptic ulceration
Syndrome is called "Wermer's syndrome".
Knowledge Level 2, System: Endocrine
Anonymous Contributor

Multiple Endocrine Neoplasia (MEN) subtype classification
Each subtype has 2 or 3 causes, plus something 1 or 2 more items.
MEN I is disease of 3 P's: [Pituitary, Parathyroid, Pancreas] plus one more: adrenal cortex.
MEN II is disease of 2 C's: [Carcinoma of thyroid, Catacholamines (pheochromocytoma)] plus two more: parathyroid for MEN IIa or mucocutaneous neuromas for MEN IIB (also called MEN III).
Knowledge Level 3, System: Endocrine
Anonymous Contributor

Multiple endocrine neoplasia III: components
Hi Yield [ID 960]
MEN III is a disease of $\mathbf{3}$ M's:
Medullary thyroid carcinoma
Medulla of adrenal (pheochromocytoma)
Mucosal neuroma
Knowledge Level 4, System: Endocrine
Anonymous Contributor

Phaeochromocytoma: diagnositc rule
Hi Yield [ID 2040]
Rule of 10 's:
$10 \%$ ectopic
$10 \%$ multiple
$10 \%$ malignant
Knowledge Level 3, System: Endocrine
Anonymous Contributor University of Sydney, Australia

Pheochromocytoma: 3 most common symptoms
Hi Yield [ID 247]
"PHEochromocytoma":
Palpitations
Headache
Edisodic sweating (diaphoresis)
Knowledge Level 4, System: Endocrine
Anonymous Contributor
Pheochromocytoma: common symptoms
5 P's:
Paroxysmal rise in BP
Palpitations
Perspiration
Pain in abdomen
PMV in urine
Knowledge Level 3, System: Endocrine
Malik Tariq Rahim King Edward Medical College, Pakistan
|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 carcinoma: frequency
"Please Feel My A\$\$":
In order of most frequent to least frequent, and in order from least aggressive to most aggressive:
Papillary carcinoma
Follicular carcinoma
Medullary thyroid carcinoma
Anaplastic carcinoma
Knowledge Level 4, System: Endocrine
Medicine 2004 student University of Western Ontario

Thyroid storm characteristics
"Storm HITS girls cAMP":
Thyroid storm due to:
Hyperthyroidism
Infection or Illness at childbirth
Trauma
Surgery girls: Thyroid storm more common in females.
cAMP: Tx involves high dose of beta blockers (beta receptors work via cAMP)
Alternatively: "S\#IT storm": Surgery, Hyperthyroidism, Infection/ Illness, Trauma.
Knowledge Level 4, System: Endocrine
Sung H. Kim \& Lior Greenberg
Thyrotoxicosis syndrome: signs and symptoms
"A Penny For Every Symptom That Hyperthyroidism Will Make Grossly Evident":
Anxiety
Palpitations/ Pulse rapid
Fatigability
Emotional lability
Sweating
Tremor
Heat intolerance
Weight loss with good appetite
Muscular weakness/ Menstrual changes
Goitre
Eye changes
Knowledge Level 3, System: Endocrine
Daniel Clarke University of Queensland
Baldness risk factors
"Daddy Doesn't Deny Getting Hair Implants":
Diet
Disease
Drugs
Genes
Hormones
Injury to the scalp
Knowledge Level 4, System: Integumental
Anonymous Contributor
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

Melanoma vs. basal cell, squamous cell carcinoma: metastatic ability
Hi Yield [ID 1606]
MElanoma is more likely to
MEtastasize.
Basal and squamous hardly ever metastasize.
Knowledge Level 1, 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

Barter's syndrome: pathogenesis, major sign
Barter: "In exchange for giving away $\mathrm{Na}+, \mathrm{K}+, \mathrm{Cl}-$, you can drop the blood pressure".
Knowledge Level 7, System: Kidney/Urine
Samuel Atom Baek-Kim Tuckahoe, New York

Calculi: types

## CAlCUli:

Calcium
Ammonium magnesium phosphate
Cystine
Uric acid
Knowledge Level 3, System: Kidney/Urine
Robert O'Connor University College Dublin

Gout vs. pseudogout: crystal lab findings

Pseduogout 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
Hi Yield [ID 1854]
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
Hi Yield [ID 2069]

## 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
Hi Yield [ID 2109]

## PARIS:

Post-streptococcal
Alport's
RPGN
IgA nephropathy
SLE
Alternatively: PIG ARMS to include Goodpasture's [one cause of RPGN], Membranoproliferative [only sometimes included in the classic nephritic list].
Knowledge Level 3, System: Kidney/Urine
Knightmare Howard University College of Medicine
Nephrotic syndrome: hallmark findings
Hi Yield [ID 1644]

## "Protein LEAC":

## Proteinuria

Lipid up
Edema
Albumin down
Cholesterol up
In nephrotic, the proteins leak out.
Knowledge Level 2, System: Kidney/Urine
Anonymous Contributor

## ABCDEFG:

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
Plussind Siriraj Medical University, Thailand

Renal failure: causes
Hi Yield [ID 1080]

## AVID GUT:

Acute tubular necrosis
Vascular obstruction
Infection
Diffuse intravascular coagulation
Glomerular disease
Urinary obstruction
Tubulointerstitial nephritis
Knowledge Level 3, System: Kidney/Urine
Daniel Clarke University of Queensland

Anemia: TIBC finding to differentiate iron deficiency vs. chronic disease
TIBC levels at the:
Top=Iron deficiency.
Bottom=Chronic disease.
Knowledge Level 3, System: Lymphoid
Robert O'Connor University College Dublin

## Apoptosis vs. necrosis

"LIFELESS" (since cells are dead):
Differences are in:
Leaky membranes
Inflammatory response
Fate
Extent
Laddering
Energy dependent
S well or shrink
Stimulus
See attached table for apoptosis and necrosis properties for each of the above.
Knowledge Level 3, System: Lymphoid
Robert O'Connor University College Dublin

Hemophilia A: problems with VIII factor (number $\mathbf{V}$ as an inverted $\mathbf{A}$ ).
Knowledge Level 2, System: Lymphoid
Julio M. De Peña, M.D. UNIBE Med School

Hodgkin's lymphoma classification
A: Asymptomatic
B: Bad
Knowledge Level 3, System: Lymphoid
Anonymous Contributor
Hypersplenism: criteria
"Hyper S plenism Ravages Cells":
Hypercellular or normal marrow
Splenomegaly
Response to splenectomy
Cytopenias
Knowledge Level 4, System: Lymphoid
Dr. Harsh Sharma BJMC, Pune, India
Leukemias: acute vs. chronic rules of thumb
Hi Yield [ID 1538]
ABCDE:
Acute is:
Blasts predominate
Children
Drastic course
Elderly
Few WBC's (so Fevers)
Chronic is all the opposites:
Mature cells predominate
Middle aged
Less debilitating course
Elevated WBC's, so not a history of fevers and infections
Knowledge Level 2, System: Lymphoid
Anonymous Contributor

Megaloblastic anemia: vitamin B12 deficiency vs. folate deficiency
Hi Yield [ID 2910]
Vitamin B12 deficiency also affects Brain (optic neuropathy, subacute combined degeneration, paresthesia).
Folate deficiency is not associated with neurological symptoms.
Knowledge Level 1, System: Lymphoid
Glen Davis Cornell University Medical College

Microcytic anemia: causes
[ID 2836]
"Find Those S mall Cells":
Fe deficiency
Thalassemia
Sideroblastic
Chronic disease
Knowledge Level 1, System: Lymphoid
K. Dang University of Toronto

## 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

## Symptoms of TTP/HUS

"Nasty Fever Ruined My Tubes":
Neurological symptoms
Fever
Renal failure
Microangiopathic hemolytic anemia
Thrombocytopenia
Knowledge Level 5, System: Lymphoid
Sol Shaftel University of Rochester School of Medicine

Wiskott-Aldrich syndrome: symptom triad
Hi Yield [ID 592]
"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
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

## AD:

Associations:
Aluminum toxicity
Acetylcholine deficiencies
Amyloid B
Apolipoprotein gene E
Altered nucleus basalis of Meynert
Down's
Findings:
Actin inclusions (Hirano bodies)
Atrophy of brain
Amyloid plaques
Aphasia, Apraxia, Agitation
DNA-coiled tangles
Dementia, Disoriented, Depressed
Knowledge Level 6, System: Nervous
Dr. Atif Farooq Khawaja Rawalpindi Medical College, Gujranwala, Pakistan

Alzheimer's disease: features
Hi Yield [ID 1852]
RONALD (Ronald Reagan, a famous victim):
Reduction of Ach
Old age
Neurofibrillary tangles
Atrophy of cerebral cortex (diffuse)
Language impairment
Dementia (MC in elderly)/ Down's syndrome
Knowledge Level 2, System: Nervous
Dr. Harsh Sharma BJMC, Pune, India

Cerebral palsy: general features
[ID 1061]

## PALSY:

Paresis
Ataxia
Lagging motor development
Spasticity
Young
Knowledge Level 2, System: Nervous
Robert O'Connor University College Dublin

Dandy-Walker syndrome: components
[ID 1060]
"Dandy Walker Syndrome":
Dilated 4th ventricle
Water on the brain
$S$ mall vermis
Knowledge Level 4, System: Nervous
Robert O'Connor University College Dublin

Lou Gehrig's is both upper and lower motor neuron signs
Hi Yield [ID 1059]
LoU = Lower \& Upper.
Knowledge Level 1, System: Nervous
Robert O'Connor University College Dublin
Multiple sclerosis (MS): pathology
MS attacks the Myelin Sheath, resulting in plaques.
Knowledge Level 1, System: Nervous
Lior Greenberg Technion Faculty of Medicine, Haifa, Israel
Neuroblastoma: features

## N-MYC:

Nuclei have "double minutes"
Malignant
Young
Catecholamine secreting
And hallmark is $\mathbf{n}$-myc amplification.
Knowledge Level 3, System: Nervous
Robert O'Connor University College Dublin

Parkinsonism: essential features
Hi Yield [ID 539]

## 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 $\mathbf{S}$ tooped. Knowledge Level 1, System: Nervous
Anonymous Contributor

Parkinson's disease: symptoms
Hi Yield [ID 1032]
PQRST:
Paucity of expression
parQinson
Rigidity (cogwheel)
Stooped posture
Tremor at rest
If can't remember that Parkinson's tremor is the one that is "resting tremor", look at the last 3 letters: RST.
Knowledge Level 1, System: Nervous
Mitul SUNY, Stony Brook
$\begin{array}{ll}\text { Pick's disease: features } & \text { Hi Yield [ID 1948] }\end{array}$

## PICK:

Progressive degeneration of neurons
Intracytoplasmic Pick bodies
Cortical atrophy
Knife edge gyri
Knowledge Level 5, System: Nervous
Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan

Pyrogenic meningitis: likeliest bug in age group
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

Tabes Dorsalis morphology
Hi Yield [ID 797]

## DORSALIS:

Dorsal column degeneration
Orthopedic pain (Charcot joints)
Reflexes decreased (deep tendon)
Shooting pain
Argyll-Robertson pupils
Locomotor ataxia
Impaired proprioception
Syphilis

Tuberous sclerosis: presenting features
Hi Yield [ID 826]

## "Zits, Fits, Deficits":

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

Wernicke-Korsakoff triad
Syndrome in alchoholics, who love to "drink CANs of beer":
Confusion

## Ataxia

Nystagmus
Knowledge Level 2, System: Nervous
Victor R. Carrion Zamoira Ponce School of Medicine

Wernicke-Korsakoff's psychosis: findings Hi Yield [ID 400]
COAT RACK:
Wernicke's encephalopathy (acute phase):
Confusion
Ophthalmoplegia
Ataxia
Thiamine tx.
Korsakoff's psychosis (chronic phase):
Retrograde amnesia
Anterograde amnesia
Confabulation
Korsakoff's psychosis
Knowledge Level 2, System: Nervous
HBV Morehouse School of Medicine

CREST sydrome: components
Hi Yield [ID 2076]

## CREST:

Calcinosis
Raynaud's phenomena
Esophageal dysmotility
Sclerodactyly
Telangectasia
Knowledge Level 1, System: Other/Miscellaneous
Andrew J. Vasil University of Minn Medical School

Edwards' syndrome: characteristics

## EDWARDS:

Eighteen (trisomy)
Digit overlapping flexion
Wide head
Absent intellect (mentally retarded)
Rocker-bottom feet
Diseased heart
S mall lower jaw
Knowledge Level 2, System: Other/Miscellaneous
Monika Kiripolsky Vanderbilt University School of Medicine

Fragile $X$ syndrome: features

## FEMALES

FMR1 gene
Exhibits anticpation
Macro-orchidism
Autism
Long face with large jaw
Everted eyes
Second most common casue of genetic mental retardation
Knowledge Level 1, System: Other/Miscellaneous
Sung Hoon Kim El Paso, TX

## Fragile-X syndrome: features

Hi Yield [ID 1726]
DSM-4:
Discontinued chromosome staining
Shows anticipation
Male (male more affected)
Mental retardation (2nd most common genetic cause)
Macrognathia
Macroorchidism
Knowledge Level 4, System: Other/Miscellaneous
Hugo M. Rodriguez, MD University of Virginia Roanoke-Salem Program

Kawasaki Disease Criteria
Hi Yield [ID 3219]
"Be careful when riding a Kawasaki motorcycle, you might get CREAMed.
Conjunctivitis (non-exudative)
Rash (polymorphous non-vesicular)
Edema (or erythema of hands or feet)
Adenopathy (cervical, often unilateral)
Mucosal involvement (erythema or fissures or crusting)
To have Kawasaki disease you must have fever for greater than 5 days plus 4 of the above.
Knowledge Level 2, System: Other/Miscellaneous
Eric J Ex

Necrosis: the 4 types
[ID 250]
"Life Can Get Complicated":
Liquifactive
Coagulation
Gangrene
Caseous
'Life' used since necrosis is 'death'.
Knowledge Level 1, System: Other/Miscellaneous
Robert O'Connor University College Dublin

Turner syndrome: components
Hi Yield [ID 579]
CLOWNS:
Cardiac abnormalities (specifically Coartication)
Lymphoedema
Ovaries underdeveloped (causing sterility, amenorrhea)
Webbed neck
Nipples widely spaced
Short
Knowledge Level 1, System: Other/Miscellaneous
Robert O'Connor University College Dublin


Whipple's disease: full features

## WHIPPLES:

Weight loss
Hyperpigmentation of skin
Infection with tropheryma whippelii
PAS positive granules in macrophage
Polyarthritis
Lymphadenopathy
Enteric involvement
Steatorrhea
Knowledge Level 7, System: Other/Miscellaneous
Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan

Bronchial obstruction: consequences
Hi Yield [ID 1077]

## APPLE BABE

Atelectasis
Pleural adhesions
Pleuritis
Lipid pneumonia
Effusion->organisation->fibrosis
Bronchiectasis
Abscess
Broncho and lobar pneumonia
Emphysema
Knowledge Level 6, System: Pulmonary
BB University of Queensland, Australia

COPD: 4 types and hallmark
Hi Yield [ID 851]

## ABCDE:

Asthma
Brochiectasis
Chronic bronchitis
Dyspnea [hallmark of group]
Emphysema
Alternatively: replace Dyspnea with Decreased FEV1/FVC ratio.
Knowledge Level 1, System: Pulmonary
Robert O'Connor University College Dublin

COPD: blue bloater vs. pink puffer diseases
Hi Yield [ID 2396]
emPhysema has letter $\mathbf{P}$ (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
Hi Yield [ID 823]
"Cigarettes Is Primary Problem":
Types:
Centrilobular
Irregular
Pancinar
Paraseptal
Most important feature for each type (in order as above):
Cigarrettes
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

## SARCOIDI:

$\mathbf{S}$ arcoidosis
Allergic reaction
Radiation
Connective tissue disease
Occupational exposure
Infection
Drugs
Idiopathic
Knowledge Level 6, System: Pulmonary
Will Herrington UCL Hospital

Lung cancer: presentation
Hi Yield [ID 894]

## ABCDE:

Snowball turned to Avalanche
Blood: hemoptysis
Cough
Distruption to airway in bronchus-->pneumonia
whEEzing
Knowledge Level 1, System: Pulmonary
Samuel Atom Baek-Kim

Nasopharyngeal malignant cancers
NASOPharyngeal:
Nasophayngeal
Adenocarcinoma
Squamous cell carcinoma
Olfactory neuroblastoma
Plasmacytoma
Knowledge Level 5, System: Pulmonary
Robert O'Connor University College Dublin

Pancoast tumor: relationship with Horner's syndrome
Hi Yield [ID 1185]
"Horner has a MAP of the Coast":
A 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

## 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

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

Pulmonary fibrosis: differential of both upper and lower lobes
[ID 2736]

## BREAST SCAR:

Upper lobe:
Beryliosis
Radiation
Extrinsic allergic alveolitis
Ankylosing spondylitis
Sarcoidosis
TB
Lower lobe:
Systemic sclerosis
Cryptogenic fibrosing alveolitis
Asbestosis
Radiation
Knowledge Level 7, System: Pulmonary
Lyndon Mason 4th Year Medical Student
Respiratory distress syndrome in infants: major risk factors
PCD (Primary Ciliary Dyskinesia, a cause of Respiratory distress syndrome):
Prematurity
Cesarean section
Diabetic mother
Knowledge Level 4, System: Pulmonary
Shebrain Cairo University

TB: features
Hi Yield [ID 1149]
TB is characterised by 4 C's:
Caseation
Calcification
Cavitation
Cicatrization
Knowledge Level 3, System: Pulmonary
Sameh Shehata Asst. Prof of Surgery, Faculty of Medicine, University of Alexandria, Egypt

Breast cancer: risk assessment
Hi Yield [ID 924]
"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

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

Endometrial carcinoma: risk factors
HONDA:
Hypertension
Obesity
Nulliparity
Diabetes
Age (increased)
Knowledge Level 5, System: Reproductive
Sarah

Gynecomastia: causes
Hi Yield [ID 1122]
DaLAS:
Digitalis
Leydig cell tumors
Alcohol
Sertoli cell tumors
Knowledge Level 2, System: Reproductive
Chris Jordan UAG

Herpes I and II: lab findings.
[ID 1048]
She's an odd chick: whenever she's in a restaurant, she always orders Her Peas and Cow dry.
Herpes I and II have Cowdry Type A inclusion bodies
Knowledge Level 7, System: Reproductive
Lior Greenberg Technion Faculty of Medicine, Haifa, Israel

Ovarian cancers: important types, by WHO classification
[ID 1674]
Surface:
"My Sister Began Experiencing Cancer":
Mucinous
Serous
Brenner
Endometrioid
Clear
Germ cell:
"Doctor Examined The Ovaries":
Dysgerminoma
Endometrial sinus
Teratoma
Ovarian choriocarcinoma
Sex cord:
"She Felt Grim":
Sertoli-Leydig
Fibroma
Granulosa-theca
Metastatic
"Killed":
Krukenberg

OHIO:
Oligomenorrhea
Hirsutism
Infertility
Obesity
Knowledge Level 2, System: Reproductive
Preethi Yerram GMC, India

Polycystic ovary: morphology, presentation
Hi Yield [ID 1026]
Morphology is poly-C:
Cysts
Capsule thickened
Cortical stromal fibrosis
Clinical presentation is OVARY:
Obese
Virilism or hirsutism
Amenorrhoea
Reproductive problem [infertile]
Young woman
Knowledge Level 3, System: Reproductive
Robert O'Connor University College Dublin

Scrotum masses
[ID 1583]

## SHOVE IT:

Spermatocele
Hydrocele/ Haematocele
Orchitis
Varicocele
Epidymal cyst
Indirect inguinal hernia
Torsion/ Tumor
Knowledge Level 3, System: Reproductive
Sushant Varma Medical student, University of Sheffield, UK

Carcinomas having tendency to metastasize to bone
Hi Yield [ID 372]
"Kinds Of Tumors Leaping Primarily To Bone":
Kidneys
$\mathbf{O}$ varies
Testes
Lungs
Prostate
Thyroid
Breasts
Alternatively: "Promptly" instead of "Primarily".
Alternatively: "BLT2 with a Kosher Pickle".
Knowledge Level 3, System: Skeletal
Anonymous Contributor

Carcinomas having tendency to metastasize to bone
Hi Yield [ID 658]

[^15]Histiocytosis X: hallmark finding
Hi Yield [ID 1276]
"Birbeck's rackets is $\mathbf{X}$ ":
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
Hi Yield [ID 1078]

## MARBLES:

Multiple fractures
Anemia
Restricted cranial nerves
Blind \& deaf
Liver enlarged
Erlenmeyer flask deformity
Splenomegaly
Eponymous name: Marbles = Albers-Schonberg (anagram).
Knowledge Level 3, System: Skeletal
Robert O'Connor University College Dublin

Osteomalacia: features
"Vit-D deficiency in ADULT":
Acetabuli protrusio
Decresed bone density
Under mineralization of osteoid
Looser's zone (pseudofracture)
Triradiate pelvis (females)
Knowledge Level 1, System: Skeletal
Dr. Harsh Sharma BJMC, Pune, India

Osteosarcoma: features
Hi Yield [ID 2117]

## PEARL HARBOR:

Paget's disease (10-20\%)*
Early age (10-20 yrs)
Around knee
Raised periosteum by expanding tumor: "sunburst pattern"
Lace-like architecture
Hyaline arteoriosclerosis
Alkaline phosphatase increased
Retinoblastoma*
Boys, predominantly
Osteomyelitis DDx
Radiation*
Sunburst pattern was Japanese Navy emblem during WWII.
*: Predisposing factors.
Knowledge Level 4, System: Skeletal
Sung H. Kim El Paso, TX

Four L's:
Larger hat size
Loss of hearing: due to compression of nerve
Leontiasis ossea (lion-like face)
Light-headed (Paget's steal)
Knowledge Level 2, System: Skeletal
Marc Miller Sackler School of Medicine

Rheumatoid arthritis: features

## RHEUMATOID:

Ragocytes/ Rheumatoid factor (anti-IgG)
HLA-DR4/ HLA-Dw4
ESR increase/ Extra-articular features (restrictive lung disease, subcutaneous nodules)
Ulnar deviation
Morning stiffness/ MCP joint
Ankylosis/ Atlantoaxial joint subluxation/ Autoimmune/ ANA
T-cells (CD4)/ TNF
Osteopenia
Inflammatory synovial tissue/ Idiopathic/ IL-1
Deformities (swan-neck, boutonniere)
Knowledge Level 5, System: Skeletal
Rinku S. Uberoi UNIBE

Seronegative spondyloarthopathy: diseases
[ID 1587]

## RAPE:

Reiter's syndrome
Ankylosing spondylitis
Psoriatic arthitis
Enteropathic arthitis (IBD)
Knowledge Level 2, System: Skeletal
Wen Sun Lum University of Calgary, Canada

## PEDIATRICS

Bilirubin: phototherapy
BiLirUbin absorbs light maximally in the
BLUe range.
Knowledge Level 6, System: Alimentary
Rinku Uberoi New York Hospital
Duodenal atresia vs. Pyloric stenosis: site of obstruction
Hi Yield [ID 1397]
Duodenal Atresia: Distal to Ampulla of vater.
Pyloric stenosis: Proximal to it.
Knowledge Level 5, System: Alimentary
Rinku Uberoi

Gastroschisis: usual location
Hi Yield [ID 2347]
GasTRoscHIsis usually occurs on the
RIGHT side of the umbilicus.
(Unscramble the letters).
Knowledge Level 5, System: Alimentary
Anonymous Contributor
Pyloric stenosis (congential): presentation

Pyloric stenosis is 3 P's:
Palpable mass
Paristalsis visible
Projectile vomiting (2-4 weeks after birth)
Knowledge Level 3, System: Alimentary
Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan
Vitamin toxicities: neonatal
Hi Yield [ID 2245]
Excess vitamin A: Anomalies (teratogenic)
Excess vitamin E: Enterocolitis (necrotizing enterocolitis)
Excess vitamin K: Kernicterus (hemolysis)
Knowledge Level 7, System: Alimentary
Anonymous Contributor
$\begin{array}{ll}\text { Cyanotic congenital heart diseases } & \text { Hi Yield [ID 1746] }\end{array}$
5 T's:
Truncus arteriosus
Transposition of the great arteries
Tricuspid atresia
Tetrology of Fallot
Total anomalous pulmonary venous return
Knowledge Level 5, System: Cardiovascular
Vince Yamashiroya

| Cyanotic heart diseases: 5 types | Hi Yield [ID 1707] |
| :--- | :--- |

Use your five fingers:
1 finger up: Truncus Arteriosus ( $\mathbf{1}$ vessel)
$\mathbf{2}$ fingers up: Dextroposition of the Great Arteries ( $\mathbf{2}$ vessels transposed)
3 fingers up: Tricuspid Atresia (3=Tri)
4 fingers up: Tetralogy of Fallot ( $\mathbf{4}=$ Tetra)
5 fingers up: Total Anomalous Pulmonary Venous Return ( $\mathbf{5}=5$ words)
Knowledge Level 3, System: Cardiovascular
Jeff Simmons University of Alabama School Of Medicine

Cyanotic heart diseases: 5 types
Hi Yield [ID 1971]
5 T's:
Tetralogy of Fallot
Transposition of the great arteries
Truncus arteriosus
Tricuspid atresia, pulmonary aTresia
Total anomalous pulmonary venous drainage
Knowledge Level 3, System: Cardiovascular
Kok Fai Kong Final year student, University of Auckland

Hemolytic-Uremic Syndrome (HUS): components
[ID 1758]
"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
Hi Yield [ID 2073]
Eliciting the PErEz reflex will make the baby PEE.
Knowledge Level 7, System: Kidney/Urine
Anonymous Contributor

Ataxia-Telangiectasia (AT): common sign
[ID 1241]
AT:
Absent
Thymus
Knowledge Level 7, System: Nervous
Anonymous Contributor

Cerebral palsy (CP): most likely cause
Hi Yield [ID 2821]
CP: Cerebral Palsy
Child Premature
The premature brain is more prone to all the possible insults.
Knowledge Level 1, System: Nervous
Anonymous Contributor

Pediatric milestones in development
Hi Yield [ID 2345]
1 year:
-single words
2 years:
-2 word sentences
-understands $\mathbf{2}$ step commands
3 years:
-3 word combos
-repeats $\mathbf{3}$ 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. PortWine stain

Knowledge Level 4, System: Nervous
Ramon Salazar
"Guthrie Cards Can Help Predict Bad Metabolism":
Galactosaemia
Cystic fibrosis
Congenital adrenal hyperplasia
Hypothyroidism
Phenylketonuria
Biotidinase deficiency
Maple syrup urine disease
Knowledge Level 4, System: Other/Miscellaneous
Logan Mitchell Dunedin Medical School, New Zealand

Guthrie card: diseases identified with it
Hi Yield [ID 1328]
GUTHRIE:
Galactosaemia
Urine [maple syrup urine disease]
THy Roid [hypothyroidism]
Inborn Errors of metabolism [eg: PKU]
Knowledge Level 4, System: Other/Miscellaneous
Anonymous Contributor

Measles: complications $\quad$ Hi Yield [ID 476]
"MEASLES COMP" (complications):
Myocarditis
Encephalitis
Appendicitis
Subacute sclerosing panencephalitis
Laryngitis
Early death
Sh!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

Rubella: congenital signs
Hi Yield [ID 2259]
"Rubber Ducky, I'm so blue!" (like the "Rubber Ducky" song):

## Rubber: Rubella

Ducky: Patent Ductus Arteriosus, VSD and pulmonary artery stenosis.
I'm: Eyes (cataracts, retinopathy, micropthalmia, glaucoma).
Blue: "Blueberry Muffin" rash (extramedullary hematopoesis in skin +purpura)
Also, deafness, growth retardation, and some more.
Knowledge Level 4, System: Other/Miscellaneous
Lior Greenberg Technion Faculty of Medicine, Haifa, Israel

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
Short stature: differential

## ABCDEFG:

Alone (neglected infant)
Bone dysplasias (rickets, scoliosis, mucopolysaccharidoses)
Chromosomal (Turner's, Down's)
Delayed growth
Endocrine (low growth hormone, Cushing's, hypothyroid)
Familial
GI malabsorption (celiac, Crohn's)
Knowledge Level 2, System: Other/Miscellaneous
Anonymous Contributor

Vacterl syndrome: components
VACTERL:
Vertebral anomalies
Anorectal malformation
Cardiac anomaly
Tracheo-esophageal fistula
Exomphalos (aka omphalocele)
Renal anomalies
Limb anomalies
Knowledge Level 4, System: Other/Miscellaneous
Mohamed Azim Assistant lecturer, Pediatric surgery, Alexandria University, Egypt

WAGR syndrome: components [ID 2075]

WAGR:
Wilm's tumor
Aniridia
Gential abnormalities
Mental retardation
Knowledge Level 6, System: Other/Miscellaneous
Andrew J. Vasil University of Minn Medical School

Weights of children with age

## Newborn 3 kg

6 mos 6 kg ( 2 x birth wt at 6 mos )
$1 \mathrm{yr} \mathbf{1 0} \mathrm{kg}$ ( 3 x birth wt at 1 yr )
3 yrs $\mathbf{1 5} \mathrm{kg}$ (odd yrs, add 5 kg until 11 yrs)
5 yrs 20 kg
7 yrs 25 kg
9 yrs 30 kg
11 yrs $\mathbf{3 5} \mathrm{kg}$ (add 10 kg thereafter)
13 yrs 45 kg
15 yrs 55 kg
17 yrs 65 kg
Knowledge Level 6, System: Other/Miscellaneous
Vince Yamashiroya

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
$\mathbf{S}$ welling around eyes (periorbital puffiness)
Knowledge Level 7, System: Other/Miscellaneous
Anthony Chan Chinese University of Hong Kong

When cough in nursery, rock the "CRADLE":
Cystic fibrosis
Rings, slings, and airway things (tracheal rings)/ Respiratory infections
Aspiration (swallowing dysfunction, TE fistula, gastroesphageal reflux)
Dyskinetic cilia
Lung, airway, and vascular malformations (tracheomalacia, vocal cord dysfunction)
Edema (heart failure)
Knowledge Level 6, System: Pulmonary
Vince Yamashiroya

Croup: symptoms
Hi Yield [ID 1125]
3 S's:
Stridor
Subglottic swelling
Seal-bark cough
Knowledge Level 1, System: Pulmonary
Robert O'Connor University College Dublin
Cystic fibrosis: exacerbation of pulmonary infection
Hi Yield [ID 1762]

## 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
Hi Yield [ID 1761]

## CF PANCREAS:

Chronic cough and wheezing
Failure to thrive
Pancreatic insufficiency (symptoms of malabsorption like steatorrhea)
Alkalosis and hypotonic dehydration
Neonatal intestinal obstruction (meconium ileus)/ Nasal polyps
Clubbing of fingers/ Chest radiograph with characteristic changes
Rectal prolapse
Electrolyte elevation in sweat, salty skin
Absence or congenital atresia of vas deferens
Sputum with Staph or Pseudomonas (mucoid)
Knowledge Level 7, System: Pulmonary
Vince Yamashiroya
Breast feeding: benefits
Hi Yield [ID 2002]

## ABCDEFGH:

Infant:
Allergic condition reduced
Best food for infant
Close relationship with mother
Development of IQ, jaws, mouth
Mother:
Econmical
Fitness: quick return to pre-pregnancy body shape
Guards against cancer: breast, ovary, uterus

Hemorrhage (postpartum) reduced
Knowledge Level 3, System: Reproductive
Anthony Chan

Milk protein: women vs. cows
[ID 2553]
Woman: Whey (mostly)
Cow: Casein (mostly)
Knowledge Level 6, System: Reproductive
Anonymous Contributor

Dentition: eruption times of permanent dentition
"Mama Is In Pain, Papa Can Make Medicine":
1st Molar: 6 years
1st Incisor: 7 years
2nd Incisor: 8 years
1st Premolar: 9 years
2nd Premolar: 10 years
Canine: 11 years
2nd Molar: 12 years
3rd Molar: 18-25 years
Knowledge Level 7, System: Skeletal
Saurabh Sikka

Head circumference with age
Remember 3, 9, and multiples of 5:
Newborn 35 cm
3 mos 40 cm
9 mos 45 cm
$\mathbf{3}$ yrs $\mathbf{5 0} \mathrm{cm}$
9 yrs 55 cm
Knowledge Level 6, System: Skeletal
Vince Yamashiroya

Septic Arthritis: most common cause
Staphylococcus Aureus is the most common cause of
Septic Arthritis in the pediatric population.
Knowledge Level 5, System: Skeletal
Anonymous Contributor

## 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

Adrenoceptors: vasomotor function of alpha vs. beta
Hi Yield [ID 2144]

## ABCD:

Alpha $=$ Constrict.
Beta = Dilate.
Knowledge Level 1, System: Cardiovascular
Anonymous Contributor

## 6 P's:

Prolongs action potential duration
Photosensitivity
Pigmentation of skin
Peripheral neuropathy
Pulmonary alveolitis and fibrosis
Peripheral conversion of T4 to T3 is inhibited -> hypothyroidism
Knowledge Level 3, System: Cardiovascular
Archana

Antiarrhythmics: class III members
Hi Yield [ID 2043]
BIAS:
Bretylium
Ibutilide
Amiodarone
S otalol
Knowledge Level 1, System: Cardiovascular
Dr. Harsh Sharma and Robert O'Connor BJMC, Pune, India and University College Dublin

Antiarrhythmics: classification I to IV
Hi Yield [ID 1976]

## MBA College

In order of class I to IV:
Membrane stabilizers (class I)
Beta blockers
Action potential widening agents
Calcium channel blockers
Knowledge Level 1, System: Cardiovascular
Dr. Harsh Sharma BJMC, Pune, India

## Beta blockers with intrinsic sympathomimetic activity

[ID 1534]
Picture diabetic and asthmatic kids riding away on a cart that rolls on pinwheels.
Pindolol and Carteolol have high and moderate ISA respectively, making them acceptable for use in some diabetics or asthmatics despite the fact that they are non-seletive beta blockers.
Knowledge Level 7, System: Cardiovascular
David Shprecher Lake Erie College of Osteopathic Medicine

Beta blockers: B1 selective vs. B1-B2 non-selective
Hi Yield [ID 2513]
A through N: B1 selective: Acebutalol, Atenolol, Esmolol, Metoprolol.
O through Z: B1, B2 non-selective: Pindolol, Propanalol, Timolol.
Knowledge Level 1, System: Cardiovascular
Amir Butt Quaid-e-Azam Medical College, Bahawalpur, Pakistan

Beta blockers: members
Hi Yield [ID 3095]
"The NEPAL Prime Minister":
Timolol
Nadolol
Esmolol
Pindolol
Atenolol
Labetalol
Propranolol
Metoprolol
Knowledge Level 2, System: Cardiovascular
Javaid H. Wani Spartan University School of Medicine, St. Lucia, W.I.

## ABCDE:

Asthma
Block (heart block)
COPD
Diabetes mellitus
Electrolyte (hyperkalemia)
Knowledge Level 4, System: Cardiovascular
Anonymous Contributor

Beta-blockers: nonselective beta-blockers
Hi Yield [ID 1725]
"Tim Pinches His Nasal Problem" (because he has a runny nose...):
Timolol
Pindolol
Hismolol
Naldolol
Propranolol
Knowledge Level 2, System: Cardiovascular
Hugo M. Rodriguez, MD University of Virginia Roanoke-Salem Program

Beta-blockers: side effects
"BBC Loses Viewers In Rochedale":
Bradycardia
Bronchoconstriction
Claudication
Lipids
Vivid dreams \& nightmares
-ve Inotropic action
Reduced sensitivity to hypoglycaemia
Knowledge Level 4, System: Cardiovascular
Anonymous Contributor

Ca++ channel blockers: uses
Hi Yield [ID 779]

## CA++ MASH:

Cerebral vasospasm/ CHF
Angina
Migranes
Atrial flutter, fibrillation
Supraventricular tachycardia
Hypertension
Alternatively: "CHASM":
Cererbral vasospasm / CHF
Hypertension
Angina
Suprventricular tachyarrhythmia
Migranes
Knowledge Level 2, System: Cardiovascular
Robert O'Connor University College Dublin

Captopril (an ACE inhibitor): side effects

## CAPTOPRIL:

## Cough

Angioedema/ Agranulocystosis
Proteinuria/ Potassium excess
Taste changes
Orthostatic hypotension
Pregnancy contraindication/ Pancreatitis/ Pressure drop (first dose hypertension)
Renal failure (and renal artery stenosis contraindication)/ Rash
Indomethacin inhibition
Leukopenia/ Liver toxicity
Knowledge Level 2, System: Cardiovascular

CLOPIdogrel is a drug that prevents
CLots, an Oral Platelet Inhibitor (OPI).
Knowledge Level 7, System: Cardiovascular
Rinku Uberoi

Enoxaprin (prototype low molecular weight heparin): action, monitoring
[ID 1657]
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

HMG-CoA reductase inhibitors (statins): side effects, contraindications, interactions
Hi Yield [ID 2025]
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
Hi Yield [ID 2627]

## 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
Hi Yield [ID 1191]
"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
Hi Yield [ID 1902]

## 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 $\mathbf{K}$ antagonist, though.
Small lipid-soluble molecule
Liver: site of action
Oral route of administration.
Warfarin
Knowledge Level 2, System: Cardiovascular
Samuel Atom Baek-Kim

Corticosteroids: adverse side effects

## CUSHINGS BAD MD:

## Cataracts

Up all night (sleep disturbances)
Suppression of HPA axis
Hypertension/ buffalo Hump
Infections
Necrosis (avascular)
Gain weight
Striae
Bone loss (osteoporosis)
Acne
Diabetes
Myopathy, moon faces
Depression and emotional changes
Knowledge Level 6, System: Endocrine
Anita Dunn University of Toronto

Gynaecomastia-causing drugs
[ID 1798]
DISCOS:
Digoxin
Isoniazid
Spironolactone
Cimetidine
Oestrogens
Stilboestrol
Knowledge Level 4, System: Endocrine
Nasseri University of Sheffield
$\mathrm{K}+$ increasing agents

## K-BANK

K-sparing diuretic
Beta blocker
ACEI
NSAID
K supplement
Knowledge Level 3, System: Endocrine
Anthony Chan

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 $\quad$ Hi Yield [ID 1526]

## CUSHINGOID:

## Cataracts

Ulcers
Skin: striae, thinning, bruising
Hypertension/ Hirsutism/ Hyperglycemia
Infections
Necrosis, avascular necrosis of the femoral head
Glycosuria
Osteoporosis, obesity
Immunosuppression
Diabetes
Knowledge Level 2, System: Endocrine
Anonymous Contributor

Steroids: side effects Hi Yield [ID 483]

## BECLOMETHASONE:

Buffalo hump
Easy bruising
Cataracts
Larger appetite
Obesity
Moonface
Euphoria
Thin arms \& legs
Hypertension/ Hyperglycaemia
Avascular necrosis of femoral head
Skin thinning
Osteoporosis
Negative nitrogen balance
Emotional liability
Knowledge Level 4, System: Endocrine
Rob Cambridge University

Lupus: drugs inducing it
HIP:
Hydralazine
INH
Procanimide
Knowledge Level 6, System: Integumental
Hodge/Gupta LSU Medicine Firml
Diuretics: thiazides: indications
"CHIC to use thiazides":
CHF
Hypertension
Insipidous
Calcium calculi
Knowledge Level 3, System: Kidney/Urine
Anonymous Contributor

## 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

Prazocin usage
[ID 1521]
Prazocin sounds like an acronym of "praszz zour urine".
Therefore Prazocin used for urinary retention in BPH.
Knowledge Level 5, System: Kidney/Urine
Diljot Singh Bedi GMCH Chandigarh, India

## SIADH-inducing drugs

Hi Yield [ID 2086]
ABCD:
Analgesics: opioids, NSAIDs
Barbiturates
Cyclophosphamide/ Chlorpromazine/ Carbamazepine
Diuretic (thiazide)
Knowledge Level 3, System: Kidney/Urine
Anthony Chan

Sulfonamide: major side effects
Hi Yield [ID 774]
Sulfonamide side effects:
Steven-Johnson syndrome
Skin rash
Solubility low (causes crystalluria)
Serum albumin displaced (causes newborn kernicterus and potentiation of other serum albumin-binders like warfarin)
Knowledge Level 3, System: Lymphoid
Robert O'Connor University College Dublin

Vir-named drugs: use
"-vir at start, middle or end means for virus":
Drugs: Abacavir, Acyclovir, Amprenavir, Cidofovir, Denavir, Efavirenz, Indavir, Invirase, Famvir, Ganciclovir, Norvir, Oseltamivir, Penciclovir, Ritonavir, Saquinavir, Valacyclovir, Viracept, Viramune, Zanamivir, Zovirax.
Knowledge Level 1, System: Lymphoid
Robert O'Connor University College Dublin

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

[^16]Anticholinergic side effects
Hi Yield [ID 1958]
"Know the ABCD'S of anticholinergic side effects":
Anorexia
Blurry vision
Constipation/ Confusion
Dry Mouth
Sedation/Stasis of urine
Knowledge Level 1, System: Nervous
Youngrin Kim University of Rochester School of Medicine and Dentistry

Antimuscarinics: members, action Hi Yield [ID 1187]
"Inhibits Parasympathetic And S weat":
Ipratropium
Pirenzepine
Atropine
Scopolamine
Muscarinic receptors at all parasympathetic endings sweat glands in sympathetic.
Knowledge Level 3, System: Nervous
Derek Obayashi Chicago Medical School

Aspirin: side effects
Hi Yield [ID 1349]

## ASPIRIN:

Asthma
S alicyalism
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, MBBS KEM Hospital

Atropine use: tachycardia or bradycardia
"A goes with B":
Atropine used clinically to treat Bradycardia.
Knowledge Level 4, System: Nervous
Anonymous Contributor

Benzodiazapines: 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
Hi Yield [ID 776]
"Ben is off with the flu":
Benzodiazepine effects off with Flumazenil.
Knowledge Level 1, System: Nervous
Robert O'Connor University College Dublin
"I'm Overly Calm":
Isoniazid
Oral contraceptive pills
Cimetidine
These drugs increase calming effect of BZDs by retarding metabolism.
Knowledge Level 3, System: Nervous
Anonymous Contributor
Benzodiazepines: actions
Hi Yield [ID 464]
"Ben SCAMs Pam into seduction not by brain but by muscle":
Sedation
anti-Convulsant
anti-Anxiety
Muscle relaxant
Not by brain: No antipsychotic activity.
Knowledge Level 2, System: Nervous
Sung H. Kim

Benzodiazepins: 3 members that undergo extrahepatic metabolism
[ID 3167]
"Outside The Liver":
Oxazepam
Temazepam
Lorazepam
These undergo extrahepatic metabolism and do not form active metabolites.
Knowledge Level 8, System: Nervous
Anonymous Contributor

Beta 1 selective blockers $\quad \mathrm{Hi}$ Yield [ID 2148]
"BEAM ONE up, Scotty":
Beta 1 blockers:
Esmolol
Atenolol
Metropolol
Knowledge Level 1, System: Nervous
Anonymous Contributor

Botulism toxin: action, related bungarotoxin
Hi Yield [ID 229]
Action: "Botulism Bottles up the Ach so it can't be the released":
Related bungarotoxin: "Botulism is related to Beta Bungarotoxin (beta-, not alpha-bungarotoxin--alpha has different mechanism).
Knowledge Level 3, System: Nervous
Robert O'Connor University College Dublin

Bromocriptine [for USA gang members]
Hi Yield [ID 3055]
The CRYPTS are an LA street gang that likes to smoke DOPE.
BromoCRYPTine is a DOPamine agonist.
Knowledge Level 1, System: Nervous
Mario Cruz Albany Medical College

Cholinergics (eg organophosphates): effects
Hi Yield [ID 388]
If you know these, you will be "LESS DUMB":
Lacrimation
Excitation of nicotinic synapses
Salivation
Sweating
Diarrhea
Urination
Micturition
Bronchoconstriction

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

Depression: 5 drugs causing it

## PROMS:

Propranolol
Reserpine
Oral contraceptives
Methyldopa
Steroids
Knowledge Level 6, System: Nervous
Sunu George

Direct sympathomimetic catecholamines
Hi Yield [ID 769]
DINED
Dopamine
Isoproterenol
Norepinephrine
Epinephrine
Dobutamine
Knowledge Level 2, System: Nervous
Robert O'Connor University College Dublin

Epilepsy types, drugs of choice

[^17]Myoclonic
Grand mal
Atonic
West syndrome
Focal
Petit mal (absence)
Respective drugsy:
Valproate
Valproate
Valproate
ACTH
Carbamazepine
Ethosuximide
Knowledge Level 3, System: Nervous

Inhalation anesthetics
Hi Yield [ID 534]

## SHINE:

Sevoflurane
Halothane
Isoflurane
Nitrous oxide
Enflurane
If want the defunct Methoxyflurane too, make it MoonSHINE.
Knowledge Level 2, System: Nervous
Robert O'Connor University College Dublin

Ipratropium: action
[ID 231]
Atropine is buried in the middle: iprAtropium, 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

Lithium: side effects
Hi Yield [ID 1252]

## LITHIUM:

Leukocytes Increased (leukocytosis)
Tremors
Hypothyroidism
Increased Urine
Moms beware (teratogenic)
Knowledge Level 6, System: Nervous
Marc Miller Sackler School of Medicine

MAOIs: indications

## MAOI'S:

Melancholic [classic name for atypical depression]
Anxiety
Obesity disorders [anorexia, bulemia]
Imagined illnesses [hypochondria]
Social phobias
Listed in decreasing order of importance.
Note MAOI is inside MelAnchOIIc.
Knowledge Level 2, System: Nervous
Robert O'Connor University College Dublin

METHYLDOPA:
Mental retardation
Electrolyte imbalance
Tolerance
Headache/ Hepatotoxicity
ps Ycological upset
Lactation in female
Dry mouth
Oedema
Parkinsonism
Anaemia (haemolytic)
Knowledge Level 5, System: Nervous
Yazeed A. Oqaili King Saud University Medical College

Migraine: prophylaxis drugs
[ID 1984]
"Very Volatile Pharmacotherapeutic Agents For Migraine Prophylaxis":
Verpamil
Valproic acid
Pizotifen
Amitriptyline
Flunarizine
Methysergide
Propranolol
Bare bones version [eg Lippincott's two], just Migraine Prophylaxis, as above.
Knowledge Level 8, System: Nervous
Dr. Harsh Sharma BJMC, Pune, India
Monoamine oxidase inhibitors: members
"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 supression
Histamine release/ Hormonal alterations
Increased ICT
Nausea
Euphoria
Sedation
Knowledge Level 6, System: Nervous
Dr. Chetan Wasekar, MBBS KEM Hospital

## PEAR:

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

MPTP: mechanism, effect
Hi Yield [ID 1274]

## MPTP:

Mitochondrial Parkinson's-Type Poison.
A mitochondrial poison that elicits a Parkinson's-type effect.
Knowledge Level 4, System: Nervous
Robert O'Connor University College Dublin

| Muscarinic effects | Hi Yield [ID 1788] |
| :--- | :--- |

## SLUG BAM:

Salivation/ Secretions/ S weating
Lacrimation
Urination
Gastrointestinal upset
Bradycardia/ Bronchoconstriction/ Bowel movement
Abdominal cramps/ Anorexia
Miosis
Knowledge Level 3, System: Nervous
John Nguyen University of Texas Medical Branch
Myasthenia gravis: edrophonium vs. pyridostigmine
Hi Yield [ID 964]
eDrophonium is for Diagnosis.
py RIDostigmine is to get RID of symptoms.
Knowledge Level 4, System: Nervous
Samuel

Narcotic antagonists
Hi Yield [ID 533]
The Narcotic Antagonists are NAloxone and NAltrexone.
Important clinically to treat narcotic overdose.
Knowledge Level 2, System: Nervous
Robert O'Connor University College Dublin

Narcotics: side effects
Hi Yield [ID 777]
"SCRAM if you see a drug dealer":
Synergistic CNS depression with other drugs
Constipation
Respiratory depression
Addiction
Miosis
Knowledge Level 2, System: Nervous
Robert O'Connor University College Dublin

## Nicotinic effects

MTWTF (days of week):
Mydriasis/ Muscle cramps
Tachycardia
Weakness
Twitching
Hypertension/ Hyperglycemia
Fasiculation
Knowledge Level 2, System: Nervous
John Nguyen University of Texas Medical Branch
"MD CARES":
Miosis
Dependency
Constipation
Analgesics
Respiratory depression
Euphoria
Sedation
Knowledge Level 1, System: Nervous
Sung Hoon Kim El Paso, TX

Opioids: effects
Hi Yield [ID 603]
BAD AMERICANS:
Bradycardia \& hypotension
Anorexia
Diminished pupilary size
Analgesics
Miosis
Euphoria
Respiratory depression
Increased smooth muscle activity (biliary tract constriction)
Constipation
Ameliorate cough reflex
Nausea and vomiting
Sedations
Knowledge Level 5, System: Nervous
Sung H. Kim

| Parkinsonism: drugs | Hi Yield [ID 1812] |
| :--- | :--- |

SALAD:
Selegiline
Anticholinenergics (trihexyphenidyl, benzhexol, ophenadrine)
L-Dopa + peripheral decarboxylase inhibitor (carbidopa, benserazide)
Amantadine
Dopamine postsynaptic receptor agonists (bromocriptine, lisuride, pergolide)
Knowledge Level 3, System: Nervous
Dr. Harsh Sharma

Phenobarbitone: side effects
Children are annoying (hyperkinesia, irritability, insomnia, aggression).
Adults are dosy (sedation, dizziness, drowsiness).
Knowledge Level 4, System: Nervous
Afif El-khuffash Trinity College Dublin

Phenytoin: adverse effects Hi Yield [ID 1796]

## PHENYTOIN:

P-450 interactions
Hirsutism
Enlarged gums
Nystagmus
Yellow-browning of skin
Teratogenicity
Osteomalacia
Interference with B12 metabolism (hence anemia)
Neuropathies: vertigo, ataxia, headache
Knowledge Level 6, System: Nervous
Ram Mohan SVRR Hospital Tirupathi, India

## LMNOP:

Lipid soluble
Miotic
Natural
Orally absorbed well
Physostigmine
Neostigmine, on the contrary, is:
Water soluble
Used in myesthenia gravis
Synthetic
Poor oral absorption
Knowledge Level 3, System: Nervous
Manpreet Saini GMC Amritsar

Pupils in overdose: morphine vs. amphetamine
Hi Yield [ID 156]
"MorPHINE: Fine. AmPHETamine: Fat":
Morphine overdose: pupils constricted (fine).
Amphetamine overdose: pupils dilated (fat).
Knowledge Level 2, System: Nervous
Anonymous Contributor

Reserpine action
Reserpine depletes the Reserves of catecholamines [and serotonin].
Knowledge Level 3, System: Nervous
Robert O'Connor University College Dublin

## Serotonin syndrome: components

Hi Yield [ID 2273]
Causes HARM:
Hyperthermia
Autonomic instability (delirium)
Rigidity
Myoclonus
Knowledge Level 4, System: Nervous
Anonymous Contributor

Sodium valproate: side effects

## 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 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
Hi Yield [ID 2236]
"I have to hide, the CIA is after me":
Clomipramine
Imipramine
Amitrptyline
If want the next 3 worth knowing, the DNDis also after me:
Desipramine
Norrtriptyline
Doxepin
Knowledge Level 5, System: Nervous
Dr. Enrique Cifuentes University Autonomus of Guadalajara

| Tricyclic antidipressents (TCA): side effects | Hi Yield [ID 2878] |
| :--- | :--- |

TCA'S:
Thrombocytopenia
Cardiac (arrhymia, MI, stroke)
Anticholinergic (tachycardia, urinary retention, etc)
Seizures
Knowledge Level 2, System: Nervous
Anonymous Contributor

Vigabatrin: mechanism
Hi Yield [ID 1578]

## Vi-GABA-Tr-In:

Via GABA Transferase Inhibition
Knowledge Level 2, System: Nervous
Anonymous Contributor
Antibiotics contraindicated during pregnancy
Hi Yield [ID 1250]
MCAT:
Metronidazole
Chloramphenicol
Aminoglycoside
Tetracycline
Knowledge Level 1, System: Other/Miscellaneous
Kyongbin Baek
Beta blockers with CYP2D6 polymorphic metabolism
"I Met Tim Carver, the metabolic polymorph":
The following beta blockers require dose adjustment due to CYP2D6 polymorphic metabolism:
Metoprolol
Timolol
Carvedilol
(in patients with lower or higher than normal CYP2D6 activity)
Knowledge Level 7, System: Other/Miscellaneous
David Shprecher Lake Erie College of Osteopathic Medicine

Bleomycin: action
Hi Yield [ID 232]
"Bleo-Mycin Blows My DNA to bits":
Bleomycin works by fragmenting DNA (blowing it to bits).
My DNA signals that its used for cancer (targeting self cells).
Knowledge Level 3, System: Other/Miscellaneous
Robert O'Connor University College Dublin
|Busulfan: features

## ABCDEF:

Alkylating agent
Bone marrow suppression s/e
CML indication
Dark skin (hyperpigmentation) s/e
Endrocrine 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
Cisplastin
Dactinomycin/ Doxorubicin
Etoposide
Flutamide and other steroids or their antagonists (eg tamoxifen, leuprolide)
Knowledge Level 2, System: Other/Miscellaneous
Sung Hoon Kim El Paso, TX

| Cisplatin: major side effect, action | Hi Yield [ID 48] |
| :--- | :--- |

"Ci-Splat-In":
Major side effect: Splat (vomiting sound)--vomiting so severe that anti-nausea drug needed.
Action: Goes Into the DNA strand.
Knowledge Level 5, System: Other/Miscellaneous
Anonymous Contributor

Disulfiram-like reaction inducing drugs
Hi Yield [ID 624]
"PM PMT" as in Pre Medical Test in the PM:
Procarbazine
Metronidazole
Cefo (Perazone, Mandole, Tetan).
Knowledge Level 4, System: Other/Miscellaneous
Prashant A. Mehta

Etoposide: action, indications, side effect
"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

## Microtubules: drugs that act on microtubules.

Hi Yield [ID 3099]
"The MicroTubule Growth Voiding Chemicals":
Thiabendazole
Mebendazole
Taxol
Griseofulvin
Vincristine/ Vinblastine
Colchicine
Knowledge Level 5, System: Other/Miscellaneous
Javaid H. Wani, Ph.D. Spartan University School of Medicine

| Morphine: side-effects | Hi Yield [ID 2550] |
| :---: | :---: |

## 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

Quinolones [and Fluoroquinolones]: mechanism
"Topple the Queen":
Quinolone interferes with Topoisomerase II.
Knowledge Level 3, System: Other/Miscellaneous
Samuel Atom Baek-Kim

Routes of entry: most rapid ways meds/toxins enter body
"Stick it, Sniff it, Suck it, Soak it":
Stick = Injection
Sniff = inhalation
Suck = ingestion
Soak $=$ absorption
Knowledge Level 5, System: Other/Miscellaneous
Anonymous Contributor

Therapeutic dosage: toxicity values for most commonly monitored medications
"The magic 2s":
Digitalis (.5-1.5) Toxicity $=\mathbf{2}$.
Lithium (.6-1.2) Toxicity $=\mathbf{2}$.
Theophylline (10-20) Toxicity $=\mathbf{2 0}$.
Dilantin (10-20) Toxicity $=\mathbf{2 0}$.
APAP (1-30) Toxicity $=\mathbf{2 0 0}$.
Knowledge Level 7, System: Other/Miscellaneous
Anonymous Contributor

Therapeutic index: formula

## TILE:

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

## APACHE:

Amiodarone
Procainamide
Arsenium
Cisapride
Haloperidol
Eritromycin
Knowledge Level 7, System: Other/Miscellaneous
Flavio Nacul Federal University of Rio de Janeiro

Zero order kinetics drugs (most common ones)
Hi Yield [ID 462]
"PEAZ (sounds like pees) out a constant amount":
Phenytoin
Ethanol
Aspirin
Zero order
Someone that pees out a constant amount describes zero order kinetics (always the same amount out)
Knowledge Level 3, System: Other/Miscellaneous
Anonymous Contributor UHS-COM

Asthma drugs: leukotriene inhibitor action
Hi Yield [ID 2241]
zAfirlukast: Antagonist of lipoxygenase
zllueton: 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- $\mathbf{1}$ are therefore primarily on heart.
Beta-2 primarily on lungs.
Knowledge Level 1, System: Pulmonary
Anonymous Contributor

Pulmonary infiltrations inducing drugs
[ID 1981]
"Go BAN Me!":
Gold
Bleomycin/ Busulphan/ BCNU
Amiodarone/ Acyclovir/ Azathioprine
Nitrofurantoin
Melphalan/ Methotrexate/ Methysergide
Knowledge Level 7, System: Pulmonary
Dr. Harsh Sharma BJMC, Pune, India

Respiratory depression inducing drugs
"STOP breathing":
Sedatives and hypnotics
Trimethoprim
Opiates
Polymyxins
Knowledge Level 2, System: Pulmonary
Dr. Harsh Sharma BJMC, Pune, India

Ribavirin: indications
Hi Yield [ID 2101]
RIBAvirin:
RSV
Influenza B
Arenaviruses (Lassa, Bolivian, etc.)
Knowledge Level 1, System: Pulmonary
Robert O'Connor University College Dublin

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

Zafirlukast, Montelukast, Cinalukast: mechanism, usage
Hi Yield [ID 648]
"Zafir-luk-ast, Monte-luk-ast, Cina-luk-ast":
Anti-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

Sex hormone drugs: male
"Feminine Males Need Testosterone":
Fluoxymesterone
Methyltestosterone
Nandrolone

## Testosterone

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

Teratogenic drugs
"W/ TERATOgenic":
Warfarin
Thalidomide
Epileptic drugs: phenytoin, valproate, carbamazepine
Retinoid
ACE inhibitor
Third element: lithium
OCP and other hormones (eg danazol)
Knowledge Level 3, System: Reproductive
Anthony Chan
Teratogenic drugs: major non-antibiotics
TAP CAP:
Thalidomide
Androgens
Progestins
Corticosteroids
Aspirin \& indomethacin
Phenytoin
Knowledge Level 2, System: Reproductive
Manpreet GMC Amritsar

Tetracycline: teratogenicity
Hi Yield [ID 876]
TEtracycline is a
TEratogen that causes staining of
TEeth in the newborn.
Knowledge Level 1, System: Reproductive

## CHAMP:

Cyclophosphamide
Hydroxycloroquine and choloroquinine
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

## PHYSI CS

Electric units
"Vaulting John S ays: 'Ann Can Sing OVA'. What Just Sing? And Vault.":
Volts $=\mathbf{J o u l e s} / \mathbf{S e c}$
Amps $=$ Coulombs $/ \mathbf{S e c}$
Ohms $=$ Volts/Amp
Watts = Joules/Sec=Amps x Volts
Knowledge Level 3, System: Other/Miscellaneous
Sabra

Ideal gas law [ID 190]
"Pure Virgins Never Really Tire":
$\mathbf{P V}=\mathbf{n R T}$
Knowledge Level 1, System: Other/Miscellaneous
Anonymous Contributor

Ideal gas law [for All My Children fans]
"Pine Valley is Not Real Time"
$\mathbf{P V}=\mathbf{n R t}$
Knowledge Level 1, System: Other/Miscellaneous
Sabra

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

## Resistor colour codes

"Bad Boys Rape Our Young Girls But Violet Gives Willingly - Get Some Now":
In ascending resistor value order:
Black: 0
Brown: 1
Red: 2
Orange: 3
Yellow: 4
Green: 5
Blue: 6
Violet: 7
Grey: 8
White: 9

Gold: 5\%
Silver: 10\%
None: 20\%
Knowledge Level 8, System: Other/Miscellaneous
Anonymous Contributor

Visible spectrum colors in order

## ROY G. BIV

In order from low end of spectrum:
Red
Orange
Yellow
Green
Blue
Indigo
Violet
Alternatively: "Richard Of York Gained Battles In Vain" (Richard III was an English king defeated in 1485).
Knowledge Level 3, System: Other/Miscellaneous
Anonymous Contributor

Work: formula
"Lots of Work gets me Mad!":
Work = Mad:
M=Mass
$\mathbf{a}=\mathbf{a c c e l e r a t i o n}$
d=distance
Knowledge Level 1, System: Other/Miscellaneous
Fox Man

## PHYSI OLOGY

Gut intrinsic innervation: myenteric plexus vs. submucosal plexus function
Myenteric: Motility.
Submucosal: Secretion and blood flow.
Knowledge Level 3, System: Alimentary
Robert O'Connor University College Dublin

Pepsin-producing cells
Hi Yield [ID 1358]
"Chief of Pepsi-Cola":
Chief cells of stomach produce Pepsin.
Knowledge Level 2, System: Alimentary
Dr. Atif Farooq Khawaja Rawalpindi Medical College, Horizon Medical Institute, Pakistan

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

Einthoven's Triangle: organization
[ID 287]
Corners are at RA (right arm), LA (left arm), LL (left leg).
Number of L's at a corner tell how many + signs are at that corner $[\operatorname{eg} \mathbf{L L}$ is $+\boldsymbol{+}$ ].
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


Left shift: causes Loading of O2 in Lungs.
Right shift: causes Release of O2 from Hb .
Knowledge Level 3, System: Cardiovascular
Dr. Khawaja Atif Farooq Rawalpindi Medical College, Horizon Medical Institute, Pakistan

Heart electrical conduction pathway
Hi Yield [ID 2314]
"If patient's family are all having Heart attacks, you must SAVe HIS KIN!"
SA node --->
AV node --->
His (bundle of) -->
PurKINje fibers
Knowledge Level 1, System: Cardiovascular
Carlo Adan, MPH University of Michigan

Heart valves: closure sequence
Hi Yield [ID 2563]
"Many Things Are Possible":
Mitral, Tricuspid, Aortic, Pulmonic
Knowledge Level 1, System: Cardiovascular
Desales University Physician Assistant Class of 2001

Heart valves: sequence of flow

## TRIPS BIAS:

TRIcuspid
Pulmonary
Semilunar
BIcuspid
Aortic
Semilunar
Alternatively: "TRIPS, MI ASs!" (uses MItral instead of BIcuspid)
Knowledge Level 1, System: Cardiovascular
Anonymous Contributor

Heart: -tropic definitions
[ID 296]
Lusitropic: loose is relaxed. Definition: relax heart.
Inotropic: when heart wall contracts, moves inward. Definition: contract heart.
Chronotropic: 'chrono-' means 'time'. Defintion: heart rate (of SA node impulses).
Dromotropic: only one left, it must be conduction speed by default.
Knowledge Level 2, System: Cardiovascular
Robert O'Connor University College Dublin
Hemoglobin and myoglobin: binding strengths, sites
"ABC" of glycosylated $\mathrm{Hb}(\mathrm{Hb} 1 \mathrm{c})$ :
Glucose binds to Amino terminal of Beta Chain.
" HbF binds Forcefully":
HbF binds oxygen more forcefully than HbA , so $\mathrm{Oxy}-\mathrm{Hb}$ dissociation curve shifts to left.
Stored blood is SOS:
$\mathbf{S}$ tored blood Hb binds to $\mathbf{O}$ xygen $\mathbf{S}$ trongly because of decrease in 2,3 BPG.
2,3 BPG binding site is BBC:
BPG binds to Beta Chain of Hb .
Myoglobin binding strength is MOM:
Myoglobin binds Oxygen More strongly than Hb.
Knowledge Level 3, System: Cardiovascular
Dr. Atif Farooq Khawaja Rawalpindi Medical College, Horizon Medical Institute, Pakistan
| 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
Hi Yield [ID 254]
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 <br> Hi Yield [ID 180]

"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 cortex layers and products
Hi Yield [ID 412]
"Get your Facts Right, Men are Glued to their Gonads":
Glomerulosa
Fasciculata
Reticularis
Mineralocorticoids
Glucocorticoids
Gonadocorticoids [androgens]
Knowledge Level 1, System: Endocrine
Anonymous Contributor
Adrenal cortex layers and products
Hi Yield [ID 553]
"Get All Fat Chicks Right Away":
Layers:
Glomerulosa
Fasciculata
Reticularis
Products:
Aldosterone
Cortisol
Androgens
Knowledge Level 1, System: Endocrine
Anonymous Contributor
Adrenal cortex layers and products
[ID 2056]
"Great Attire And Fast Cars Are Really Sexy Attributes":
Granulosa secretes Aldosterone in response to Angiotensin II.
Fasiculata secretes Cortisol in response to ACTH.
Reticularis secretes Sex steroids in response to ACTH.
Knowledge Level 1, System: Endocrine
Fydor

[^18]Adrenal gland: functions
Hi Yield [ID 1098]

## ACTH:

Adrenergic functions
Catabolism of proteins/ Carbohydrate metabolism
T cell immunomodulation
Hyper/ Hypotension (blood pressure control)
Knowledge Level 1, System: Endocrine
The Cashman University of Queensland, Australia

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
S weating
Musle wasting \& weight loss
Knowledge Level 6, System: Endocrine
Robert O'Connor University College Dublin

## Oestrogen: functions <br> Hi Yield [ID 2993]

OESTROGEN SUX:
Organ development (sex organs)
Endocrine: FSH and LH regulation
Secondary sex characteristics development
Tropic for pregnancy
Receptor synthesis (of progesterone, oestrogen, LH)
Osteoporosis decrease (inhibits bone reabsorption)
Granulosa cell development
Endocrine: increases prolactin secretion, but then blocks its effect
Nipple development
Sex drive increase
Uterine contractility increase
oXytocin sensitivity increase
Knowledge Level 3, System: Endocrine
David Colbert UWA Medicine

Oxytocin-producing nucleus of hypothalamus
Paraventricular nucleus--> Parturition (childbirth is oxytocin's most important role).
Knowledge Level 7, System: Endocrine
Usman Ahmad

## FLAGTOP:

Follicle stimulating hormone
Lutinizing hormone
Adrenocorticotropin hormone
Growth hormone
Thyroid stimulating hormone
Oxytocin
Prolactin
Alternatively: GOAT FLAP with the second 'A' for Anti-diruetic homone/vasopressin
Note: there is also melanocyte secreting homone and Lipotropin, but they are not well understood.
Knowledge Level 2, System: Endocrine
Anonymous Contributor

Pituitary: anterior hypophysis hormones
Hi Yield [ID 380]
FLATPiG:
FSH
LH
ACTH
TSH
Prolactin
ignore GH
Knowledge Level 1, System: Endocrine
Fropvd

Progesterone: actions
Hi Yield [ID 647]

## PROGESTE:

Produce cervical mucous
Relax uterine smooth muscle
Oxycotin sensitivity down
Gonadotropin [FSH, LH] secretions down
Endometrial spiral arteries and secretions up
Sustain pregnancy
Temperature up / Tit development
Excitability of myometrium down
Knowledge Level 4, System: Endocrine
Robert O'Connor University College Dublin

Prostaglandins: dilatation abilities
Prospectors keep mineshafts open:
Mineshaft 1: Patent ductus ateriosus.
Mineshaft 2: renal afferent arteriole dilatation.
Knowledge Level 1, System: Endocrine
Sameul Atom Baek-Kim

Skin vasoconstriction and temperature
When the skin needs to CONServe heat, the
blood vessels of the skin CONStrict.
When the skin is COld, the blood
vessels of the skin COnstrict.
Knowledge Level 1, System: Integumental
Rinku Uberoi Willsey Institute
" 1 from 1, 2 from 2":
Primary ending is from Group Ia.
Secondary ending from Group II. See diagram.
Knowledge Level 8, System: Muscle
Robert O'Connor University College Dublin

Balance organs


Utricle and $\mathbf{S}$ accule keep US balanced.
Knowledge Level 2, System: Nervous
Anonymous Contributor
Cochlea: inner vs. outer hair cell function
[ID 53]
"Outer cells are Out of the brain. Inner cells are Into the brain":
Outer hair cells are motor efferents to amplify signal.
Inner hair cells are sensory afferents that actually pick up the sound.
Knowledge Level 5, System: Nervous
Robert O'Connor University College Dublin

Electrical conductivity of tissues
[ID 3107]
"Be Careful To Shock My Best Nerve":
In order of least conductive to most conductive:
Bones
Cartilage
Tendon
Skin
Muscle
Blood
Nerve
Knowledge Level 7, System: Nervous
Luz Ann M. Sabado Philippine Physical Therapy Association

MAO isoenzyme form locations
MAO-A in:
Adrenergic peripheral structures
Alimentary mucosa [intestine]
MAO-B in:
Brain
Blood platelets
Knowledge Level 7, System: Nervous
Archana

Mechanoreceptor types
"Frustated Muscular Mechanics Rub Her P*ssy":
Free nerve endings
Meisner's
Merkel's disc
Ruffini's
Hair end organ
Pacinian corpuscle
Knowledge Level 4, System: Nervous
Usman Ahmad KMC
|Nervous stimulus: the 4 ways to classify

| "A MILD stimulus": |
| :--- |
| Modality |
| Intensity |
| Location |
| Duration |
| Knowledge Level 6, System: Nervous |
| Robert O'Connor University College Dublin |
| Rods vs. cone function |

RoD: Dim light.
Cones: Color.
Knowledge Level 1, System: Nervous
Anonymous Contributor

Temperature control: cerebral regions
"High Power Air Conditioner":
Heating = Posterior hipothalamo [hypothalamus].
Anterior hipothalamo [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 $\mathbf{S}$ ympathetic.
Knowledge Level 1, System: Nervous
Muhammad Asif Iqbal Resident, SLU, MO

Alkalosis vs. acidosis: directions of pH and HCO 3

## ROME:

Respiratory= Opposite:
pH is high, PCO 2 is down (Alkalosis).
pH is low, PCO 2 is up (Acidosis).
Metabolic= Equal:
pH is high, HCO 3 is high (Alkalosis).
pH is low, HCO 3 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

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
Infinity

VO2 normal value is $\mathbf{2 5 0 ~ m L} / \mathrm{min}$
[ID 244]
"V02" is the numbers, just need to rearrange the order.
$\mathbf{V}$ is roman numeral for 5 , so rearrange to $2 \mathrm{V0}$, or $\mathbf{2 5 0} \mathrm{mL} / \mathrm{min}$.
Knowledge Level 7, System: Pulmonary
Robert O'Connor University College Dublin

## LH vs FSH: function in male

[ID 1427]
$\mathbf{L H}$ : Leydig cells stimulated to produce testosterone.
FSH: Spermatogenesis stimulated.
Knowledge Level 1, System: Reproductive
Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan

Prolactin and oxytocin: functions
Hi Yield [ID 3247]
PROlactin stimulates the mammary glands to PROduce milk.
Oxytocin stimulates the mammary glands to Ooze (release) milk.
Knowledge Level 1, System: Reproductive
Rinku Uberoi Willsey Institute

Osteoblast vs. osteoclast
Hi Yield [ID 2383]
OsteoBlast Builds bone.
OsteoClast Consumes bone.
Knowledge Level 1, System: Skeletal
Anonymous Contributor

## PODI ATRY

Blue toe (microembolic toe)
Hi Yield [ID 939]

## CAVEMAN:

Cholesterol embolizations
Atrial fib with electricity or digitoxin
Valvular problems
Endocarditis
Mural thrimbosis
Aneurysm/ AV fistula
Nothing
Knowledge Level 3, System: Cardiovascular
Samuel Atom Baek-Kim

Peripheral vascular diseases

## ABCDEF:

Atherlsclerosis.
Buerger's disease (TAO)
Cyanosis/ Cold agglutinin/ Connective tissue disease (Raynaud's phenomenon)
Deep vein phlebothrombosis
Embolism
inFlammation of veins
Knowledge Level 3, System: Cardiovascular
Samuel Atom Baek-Kim

TIA: internal carotid vs. vertebrobasilar

## MD vs. DPM

Internal carotid:
Monocular blindness (amaurox fugax)
Dominant hemisphere (apahsia)
The weakness or numbness is still less in the legs.
Vetebrobasilar:
Diplopia/ Double blindness
Paralysis (quadriplesia)
Motor weakness (ipsilateral)
Ataxia is characteristic in veterbrobasilar lesions.
Knowledge Level 1, System: Cardiovascular
Samuel Atom Baek-Kim Tuckahoe, New York

| White toe (arterial insufficiency toe) | [ID 938] |
| :--- | :--- |

## 5 P's:

Pale coloration
Pain (excruciating)
Paresthesia
Pulselessness
Warm compression and vasodilatory Patch to Proximal area
Knowledge Level 2, System: Cardiovascular
Samuel Atom Baek-Kim

| Diabetic neuropathy types | [ID 1407] |
| :--- | :--- |

DPM:
Distal, symmetric, polyneuropathy
Proximal diabetic neuropathy
Mononeuritis muliplex
Knowledge Level 1, System: Endocrine
Samuel Atom Baek-Kim Tuckahoe, New York

| Coritcal vs. subcortical brain disease | [ID 1346] |
| :--- | :--- | :--- |

"MD vs. DPM":
Coritcal brain:
Memory
Discrimination (2 point)
Subcortical brain:
Devoid of seizure
Primary sensation through thalamus
Movement disorders (most)
Lower extremities manifestations are characteristic of the subcortical brain lesions.
Knowledge Level 2, System: Nervous
Samuel Atom Baek-Kim

Proprioception and stereognosis deficits: causes

## D.P.M.:

Tabes Dorsalis
Pernicious anemia
Mutiple sclerosis
Knowledge Level 2, System: Nervous
Samuel Atom Baek-Kim

## "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 insenisitivity to pain
Syringomyelia/ Spina bifida
Alcoholism
Hansen's disease
Diabetes mellitus
Peripheral nerve injury
Menigomyelocele
Knowledge Level 1, System: Skeletal
Samuel Mae Baek-Kim

Skeletal disease: differential diagnosis
VITAMIN:
Vascular disease
Infection
Tumor
Arthritis
Metabolic bone disease
Injury
Neurodevelopmental disorders
Knowledge Level 1, System: Skeletal
Samuel Atom Baek-Kim

## PSYCHI ATRY

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
Importuniing (whingeing, complaining)
Nihilistic
Endogenous
Secondary (ie cancer at the head of the pancreas, bronchogenic cancer)
Syndromal
Knowledge Level 5, System: Nervous
Peter Loa Medical Student at Adelaide University

Depression criteria/symptoms

## A SAD FACES

Appetite, weight changes
Sleep changes
Anhedonia
Dysphoria (low mood)
Fatigue
Agitation (psychomotor)
Concentration
Esteem
Suicide
Knowledge Level 1, System: Nervous
The Fifth Year Kids at Wgtn School of Medicine Wgtn School of Med, Univ. of Otago

Depression: major depression criteria
Hi Yield [ID 2649]

## DEAD SWAMP:

Depressed mood most of the day
Energy loss or fatigue
Anhedonia
Death thoughts (recurrent), suicidal ideation or attempts
Sleep disturbances (insomnia, hypersomnia)
Worthlessness or excessive guilt
Appetite or weight change
Mentation decreased (ability to think or concentrate, indecisiveness)
Psychomotor agitation or retardation
Knowledge Level 1, System: Nervous
Dr. Mike de Beer GP

Depression: melancholic features (DSM IV)
[ID 2003]
MELANcholic:
Morning worsening of symptoms/ psychoMotor agitation, retardation/ early Morning wakening
Excessive guilt
Loss of emotional reactivity
ANorexia/ ANhedonia
Knowledge Level 5, System: Nervous
Anthony Chan

Mania: cardinal symptoms
[ID 2456]

## DIG FAST:

Distractibility
Indiscretion (DSM-IV's "excessive involvement in pleasurable activities")
Grandiosity
Flight of ideas
Activity increase
Sleep deficit (decreased need for sleep)
Talkativeness (pressured speech)
Knowledge Level 1, System: Nervous
Anonymous Contributor

Mania: diagnostic criteria
Hi Yield [ID 3029]
Must have 3 of MANIAC:
Mouth (pressure of speech)/ Moodl
Activity increased
Naughty (disinhibition)
Insomnia
Attention (distractability)
Confidence (grandiose ideas)
Knowledge Level 1, System: Nervous
Waqar Ahmed Queens University, Belfast

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

Substance dependence: features (DSM IV)
Hi Yield [ID 2004]
"WITHDraw IT":
3 of 7 within 12 month period:
Withdrawal
Interest or Important activities given up or reduced
Tolerance
Harm to physical and psychosocial known but continue to use
Desire to cut down, control
Intended time, amount exceeded
Time spent too much
Knowledge Level 3, System: Nervous
Anthony Chan

Biological symptoms in psychiatry
[ID 1326]
SCALED:
Sleep disturbance
Concentration
Appetite
Libido
Energy
Diurnal mood variation
Knowledge Level 5, System: Other/Miscellaneous
Diablo Royal Free Hospital Medical School
Conduct disorder vs. Antisocial personality disorder
Conduct disorder is seen in Children.
Antisocial personality disorder is seen in Adults.
Knowledge Level 3, System: Other/Miscellaneous
Anonymous Contributor

Dementia: main causes
[ID 2063]
VITAMIN D VEST:
Vitamin deficiency (B12, folate, thiamine)
Intracranial tumour
Trauma (head injury)
Anoxia
Metabolic (diabetes)
Infection (postencephalitis, HIV)
Normal pressure hydrocephalus
Degenerative (Alzheimer's, Huntington's, CJD, etc)
Vascular (multi infarct dementia)
Endocrine (hypothyroid)
S pace occupying lesion (chronic subdural haematoma)
Toxic (alcohol)
Knowledge Level 3, System: Other/Miscellaneous
Mark P UWCM, UK
|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

Hi Yield [ID 969]
"The sad tale of Erikson Motors":
The stages in order by age group:
Mr. Trust and MsTrust had an auto they were ashamed of. She took the initiative to find the guilty party. She found the industry was inferior. They were making cars with dents [identity] and rolling fuses [role confusion]. Mr. N.T. Macy [intimacy] isolated the problem, General TVT absorbed the cost. In the end, they found the tires were just gritty and the should have used de- spare!
Knowledge Level 1, System: Other/Miscellaneous
VTF SN, NHCC, Texas


Parasomnias: time of onset
Hi Yield [ID 1071]
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, obssessive-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
Diverticuliis
Esophageal web
Familial
Knowledge Level 6, System: Alimentary
Lau Yue Young Geoffrey HKU

TIGAN (Trimethobenzamide hydrochloride): indication
[ID 2652]

## TIGAN:

This Is Good Against Nausea
Knowledge Level 1, System: Alimentary
Sabrina

## "Go Look For the Adenoma Please":

Tropic hormones affected by growth tumor are:
GnRH
LSH
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
MR imaging/ spectroscopy: important metabolites
[ID 2093]
"Lying Lazy No Good Crooks Collected My insurance":
Lipid: abnormal
Lactate: abnormal
NAA
Glutamine/glutamate
Creatinine/phosphocreatinine
Choline containing compounds
Myoinositol
Knowledge Level 7, System: Nervous
Berlin Go

Chest radiograph: checklist to examine

## ABCDEFGHI:

Aorta
Bronchus
Cord, spinal
Diaphragm (look for hyperinflation)
Eosphagus (look for foreign body)
Fracture (ribs)
Gas (look for pneumothorax)
Heart (look for cardiomegaly)
Iatrogenic (subclavian line, pacemakers)
Knowledge Level 3, System: Other/Miscellaneous
Vince Yamashiroya
| Dermatomyositis or polymyositis: risk of underlying malignancy

Risk is $\mathbf{3 0} \%$ at age $\mathbf{3 0}$.
Risk is $\mathbf{4 0} \%$ at age $\mathbf{4 0}$, and so on.
Knowledge Level 6, System: Other/Miscellaneous
Anonymous Contributor

Prognotic factors for cancer: general
[ID 1107]

## PROGNOSIS:

Presentation (time \& course)
Response to treatment
Old (bad prog.)
Good intervention (i.e. early)
Non-compliance with treatment
Order of differentiation ( $>1$ cell type)
Stage of disease
Ill health
Spread (diffuse)
Knowledge Level 2, System: Other/Miscellaneous
Cashman, Reidy, Motty, BB University of Queensland, Australia

T2 vs. T1 MRI scan
[ID 1724]
"WW 2" (World War II):
Water is White in a T2 scan.
Conversely, a T1 scan shows fat as being whiter.
Knowledge Level 2, System: Other/Miscellaneous
Jason Galarneau Flinders University School of Medicine, South Australia

Chest radiograph: checklist to examine
[ID 605]
"Pamela Found Our Rotation Particularly Exciting; Very Highly Commended Mainly 'Cus She Arouses":
Patient details
Film details
Objects (eg. lines, electrodes)
Rotation
Penetration
Expansion
Vessels
Hila
Costophrenic angles
Mediastinum
Cardiothoracic Ratio
Soft tissues and bones
Air (diaphragm, pneumothorax, subcut. emphysema)
Knowledge Level 4, System: Pulmonary
Andrew Booshan
Chest X-ray interpretation
[ID 2900]
Preliminary is ABCDEF:
AP or PA
Body position
Confirm name
Date
Exposure
Films for comparison
Analysis is ABCDEF:
Airways (hilar adenopathy or enlargement)
Breast shadows/ Bones (rib fractures, lytic bone lesions)
Cardiac silhoutte (cardiac enlargement)/ Costophrenic angles (pleural effusions)
Diaphragm (evidence of free air)/ Digestive tract
Edges (apices for fibrosis, pneumothorax, pleural thickening or plaques)/ Extrathoracic tissues
Fields (evidence of alveolar filling)/ Failure (alveolar air space disease with prominent vascularity with or without pleural effusions)
Knowledge Level 6, System: Pulmonary

Chest X-ray: cavitating lesions differential
[ID 2626]
"If you see HOLES on chest X-ray, they are WEIRD":
Wegener's syndrome
Embolic (pulmonary, septic)
Infection (anaerobes, pneumocystis, TB)
Rheumatoid (necrobiotic nodules)
Developmental cysts (sequestration)
Histiocytosis
Oncological
Lymphangioleiomyomatosis
Environmental, occupational
Sarcoid
Alternatively: L=Left atrial myxoma
Knowledge Level 6, System: Pulmonary
LW Mason, and Anonymous Contributor 4th Year Medical Student and Not Specified

Chest x-ray: differential diagnoses of shadow on the upper zones of lung fields
5 Ts :
Thymoma
Thyroid (retrosternal)
Tuberculosis
Terrible lymphoma
Teratoma
Knowledge Level 6, System: Pulmonary
Kok Fai Kong Final Year Medical Student, University of Auckland, New Zealand

Lung cancer: main sites for distant metastases
BLAB:
Bone
Liver
Adrenals
Brain
Knowledge Level 1, System: Pulmonary
Ian Silver Queen's University School of Medicine, Kingston, ON, Canada

Lung cancer: notorious consequences
Hi Yield [ID 2256]
SPEECH:
Superior vena cava syndrome
Paralysis of diaphragm (Phrenic nerve)
Ectopic hormones
Eaton-Lambert syndrome
Clubbing
Horner syndrome/ Hoarseness
Knowledge Level 1, System: Pulmonary
Rinku Uberoi

Upper lobe shadowing: causes
Hi Yield [ID 931]

## BREASTS:

Beryllium
Radiation
Extrinsic allergic alveolitis
Ankylosing spondylitis
Sarcoidosis
TB
Siliconiosis
Knowledge Level 4, System: Reproductive
A Bywaters

## CRITOE:

Capitellum
Radial head
Internal epicondyle
Trochlea
Olecranon
External epicondyle
In order: appear at $\mathbf{1 , 3 , 5 , 7 , 9}, \mathbf{1 1}$ years; each closes 2 years later.
Knowledge Level 4, System: Skeletal
Vince Yamashiroya

Mole: signs of trouble
Hi Yield [ID 225]
ABCDE:
Asymmetry
Border irregular
Colour irregular
Diameter usually $>0.5 \mathrm{~cm}$
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 Hi Yield [ID 1916]

## LOSS:

Loss of joint space
Osteopyhtes
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 (ARA criteria)

## DAMP AS RHINO:

Discoid rash
ANA (+)
Malar rash
Photosensitivity
Arthritis
Serositis (pleural, pericardial)
Renal involvement
Hematologic abnormality
Immunologic abnormality
Neurologic abnormality (seizures, psychosis)
Oral / nasal ulcer, Observed
Knowledge Level 4, System: Integumental
Thomas K. Vaughan MD Madigan Army Medical Center, Washington

## "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
Hi Yield [ID 1864]
SANTA:
Splenomegaly
Anaemia
Neutropenia
Thrombocytopenia
Arthritis (rheumatoid)
Knowledge Level 2, System: Lymphoid
Dr. Harsh Sharma BJMC, Pune, India

Carpal tunnel syndrome
Hi Yield [ID 2275]
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
Hi Yield [ID 1765]

## 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
Hi Yield [ID 514]
ASTHMA:
Adrenergics
Steroids
Theophylline
Hydration
Mask [O2 at 24\%]
Antibiotics
Knowledge Level 4, System: Pulmonary
Anonymous Contributor

6 A's:
Atlanto-axial subluxation
Anterior uveitis
Apical lung fibrosis
Aortic incompetence
Amyloidosis (kidneys)
Autoimmune bowel disease (UC)
Knowledge Level 5, System: Skeletal
Matt Smith Birmingham Medical School

Arthritis: juvenile idiopathic: differential
[ID 1777]
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
Hi Yield [ID 2292]

## PEAR:

Psoriatic arthritis
Enteropathic arthritis
Ankylosing sponylitis
Reiter's/ Reactive
Knowledge Level 1, System: Skeletal
Dave Hassan
Gout: drugs and foods raising uric acid levels
[ID 3126]
Drugs are FACT:
Frusemide
Aspirin/ Alcohol
Cytotoxic drugs
Thiazide diuretics
Foods are SALTS:
Shellfish
Anchovies
Liver and kidney
Turkey
S ardines
Knowledge Level 5, System: Skeletal
Sushant Varma Junior Doctor

Joint pain causes

## SOFTER TISSUE:

Sepsis
Osteoarthritis
Fractures
Tendon/muscle
Epiphyseal
Referred
Tumor
Ischaemia
Seropositive arthritides
Seronegative arthritides

Urate
Extra-articular rheumatism (such as polymylagia)
Knowledge Level 4, System: Skeletal
Anonymous Contributor

Osteoporosis risk factors
Hi Yield [ID 1115]

## ACCESS:

Alcohol
Corticosteroid
Calcium low
Estrogen low
Smoking
Sedentary lifestyle
Knowledge Level 1, System: Skeletal
Lum

## SURGERY

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

Pancreatitis: treatment

## MACHINES:

Monitor vital signs
Analgesia/ Antibiotics
Calcium gluconate (if deemed necessary)
H2 receptor antagonist
IV access/ IV fluids
Nil by mouth
Empty gastric contents
Surgery if required/Senior review
Knowledge Level 3, System: Alimentary
Sushant Varma Junior Doctor

AAA ( $\mathbf{3} \mathrm{A}$ 's) is sometimes due to a defect in the gene encoding for type III procollagen.
Knowledge Level 6, System: Cardiovascular
Anonymous Contributor

GI bleeding: causes
Hi Yield [ID 1021]

## 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
Haematocele: etiology
[ID 2793]
3T's and 2 H 's:
Tumor
Torsion
Trauma
Hydrocele as a complication
Haemophilia (blood diseases)
Knowledge Level 2, System: Cardiovascular
Zeinab Abd El Shafy Aboud 6th year medical student, University of Alexandria, Egypt
Varicose veins: symptoms
Hi Yield [ID 3080]

## AEIOU:

Aching
Eczema
Itching
Oedema
Ulceration/ Ugly (LDS, haemosiderin, varicosities)
Knowledge Level 2, System: Cardiovascular
Jamal Khan Birmingham University Medical Student

Melanoma sites
Hi Yield [ID 1262]
"Mel SEA" (Pronounced "Mel C" from the Spice Girls)
Melanoma sites, in order of frequency:
Skin
Eyes
Anus
Knowledge Level 3, System: Integumental
Lior Greenberg Technion Faculty of Medicine, Haifa, Israel
Ulcers: edge types
[ID 3083]

## F PURE:

Flat (eg venous)
Punched-out (eg trophic, arterial)
Undetermined (eg pressure, TB)
Rolled (eg BCC)
Everted (eg SCC)
Knowledge Level 2, System: Integumental
Jamal Khan Birmingham University Medical Student

Six W's:
Wind: pulmonary system is primary source of fever first 48 hours, may have pneumonia
Wound: infection at surgical site
Water: check IV for phlebitis
Walk: deep venous thrombosis, due to pelvic pooling or restricted mobility related to pain and fatigue
Whiz: urinary tract infection if urinary catheterization
Wonder drugs: drug-induced fever
Knowledge Level 4, System: Lymphoid
Anonymous Contributor

Abdomen: inspection
[ID 3077]
5 S's:
Size
Shape
Scars
Skin lesions
Stoma
Knowledge Level 1, System: Other/Miscellaneous
Jamal Khan Birmingham University Medical Student

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

Disease description: organization of answer
[ID 2502]
"In A Surgeon's Gown, Physicians May Make Some Clinical Progress":
Incidence
Age
Sex
Geography
Predisposing factors
Macroscopic appearance
Microscopic appearance
Spread
Clinical features
Prognosis
Knowledge Level 3, System: Other/Miscellaneous
Anonymous Contributor

Fistulas: conditions preventing closure

## FETID:

Foreign body
Epithelialization
Tumor
Infection
Distal obstruction
Knowledge Level 5, System: Other/Miscellaneous
Anonymous Contributor
"Hernias Very Much Like To S well":
Hernias (inguinal, femoral)
Vascular (femoral aneurysm, sapheno varyx)
Muscle (psoas abscess)
Lymph nodes
Testicle (ectopic, undescended)
Spermatic cord (lipoma, hydrocoele)
Knowledge Level 4, System: Other/Miscellaneous
Josh Brostoff University of Birmingham Med School, UK
Oedema causes: generalised
[ID 868]
'HILARI IS SAVE" (Hilary):
Heart failure
Iatrogenic
Liver causes
Aldosterone increased/ ADH increased
Renal cause
Inadequate protein in blood (hypoalbuminaemia)
Causes for the inadequate protein in blood are:
Intake Inadequate (Kwashiorkor)
Secretion fro pancreas decreased (pancreatitis)
Synthesis decreased (liver failure)
Absorption decreased (Crohn's disease)
Vomit (pyloric stenosis)
Excretion increased (nephrotic)
Knowledge Level 6, System: Other/Miscellaneous
Lau Yue Young Geoffrey Medical Student '03, Hong Kong University
Oedema causes: localised
[ID 869]
ALIVE:
Allergic (angio-oedema)
Lymphatic (elephantiasis)
Inflammatory (infection, injury)
VEnous (DVT, chronic venous insufficiency)
Knowledge Level 6, System: Other/Miscellaneous
Lau Yue Young Geoffrey Medical Student '03, Hong Kong University

| Post-operative complications (immediate) | Hi Yield [ID 350] |
| :--- | :--- |

"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

Swollen leg: unilateral swelling causes
Hi Yield [ID 3081]

## TV BAIL:

Trauma
Venous (varicose veins, DVT, venous insufficiency)
Baker's cyst
Allergy
Inflammation (cellulitis)
Lymphoedema
Knowledge Level 3, System: Other/Miscellaneous
Jamal Khan Birmingham University Medical Student

## THE THEATRES:

## Torsion

Hernia
Epididymytis, orchitis
Trauma
Hydrocoele, varicocele, hematoma
Edema
Appendix testes (torsion, hemorrhage)
Tumour
Recurrent leukemia
Epididymal cyst
Syphilis, TB
Knowledge Level 2, System: Reproductive
Noam Kurtis Sackler School of Medicine, Tel Aviv

Compartment syndrome: signs and symptoms
Hi Yield [ID 2014]
5 P's:
Pain
Palor
P ulseless
Paresethesia
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
Hi Yield [ID 1838]

## SHAPE:

Sclerderma
HIV nephropathy
Amyloidosis
Polycystic kidney disease
Endocrinophathy (diabetes)
Knowledge Level 5, System: Kidney/Urine
Dino Santoro University of Manitoba
Glomerular disease with a reduced complement level

## PELICAN:

Post-streptococcal glomerulonephritis
Endocarditis (sub-acute)
Lupus erythematosus
Idiopatic membranoproliferative glomerulonephritis
Cryoglobulinemia
Abscess (visceral)
Nephritis
Knowledge Level 4, System: Kidney/Urine
Alexandre de Freitas Miranda Federal University of Rio de Janeiro -Brazil -RJ
"S\#!T":
Stones/ S ystemic 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
Hi Yield [ID 1611]
Unilateral is PACT:
Pelvic-uteric obstruction (congenital or acquired)
Aberrant renal vessels
Calculi
Tumours of renal pelvis
Bilateral is SUPER:
Stenosis of the urethra
Urethral valve
Prostatic enlargement
Extensive bladder tumour
Retro-peritoneal fibrosis
Knowledge Level 3, System: Kidney/Urine
Sushant Varma Medical student, University of Sheffield, UK

Metabolic waste products retention: clinical features
[ID 3204]
ABCDEFGHI:
Apathy/ Anorexia/ Anemia
Bleeding
Confusion/ Coma
Dizziness
Emesis/ Edema of the lung
Fits
Gastrointestinal bleeding
Hiccups
Infection
Knowledge Level 4, System: Kidney/Urine
Seyi Kayode College of Health Sciences, Obafemi Awolowo University, Ile-ife, Osun State, Nigeria

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
Hi Yield [ID 1892]
" $\mathbf{P}$ " 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 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)
Immunodeficienct
NIDDM, IDDM
Urinary obstuction
Pregnant
Acute pyelonephritis heals by scarrin' up the area (pyelonephritic scar).
Knowledge Level 4, System: Kidney/Urine
Yazeed A. Oqaili King Saud University Medical College

Renal Cell Cancer (RCC): genetic marker
Hi Yield [ID 1891]
"RCC" equals three. Or, "C" is the third letter of the alphabet.
RCC is associated with genetic abberations on the third chromosome (VHL gene)
Knowledge Level 5, System: Kidney/Urine
Thomas B. Edmunds, Jr, MD Chief Resident at SUNY Stony Brook

Renal failure: symptoms/signs
Hi Yield [ID 1084]
"My Big Nob Vibrates Gently In Her Purulent Pelvis":
Malaise
Breathlessness
Nausea
Vomiting
GI motility
Headache
Pruritis
Pigmentation
Knowledge Level 3, System: Kidney/Urine
Daniel Clarke University of Queensland
Renal tubular acidosis: type with common nephrocalcinosis
[ID 3101]
The stONE (nephrocalcinosis) is common in type ONE.
Knowledge Level 4, System: Kidney/Urine
Dr. Sharad Chandra Pediatrics

Urinary incontinence: causes of acute and reversible

## DRIP:

Delirium
Restricted mobility/ Retention
Inflammation / Infection/ Impaction [fecal]
Pharmaceuticals / Polyuria
"Drip" is convenient since it is urinary incontinence, so urine only drips out.
Knowledge Level 3, System: Kidney/Urine
Anonymous Contributor
| Urinary incontinence: differential

## DIAPERS:

Delirium
Infection
Atrophic urethritis and vaginitis
Pharmaceuticals/ Psychologic
Excessive urine output
Restricted mobility
Stool impaction
Knowledge Level 4, System: Kidney/Urine
Cheah Soon Keat 4th year medical student, UNIMAS, Malaysia

## Epididmyitis: bacterial causes

CENT:
Chlamydia trachomatis
E. coli

Nisseria gonorrhoeae
Tuberculos bacteria
Knowledge Level 2, System: Reproductive
Dr. Atif Farooq Khawaja Rawalpindi Medical College, Pakistan, Gujrnwala

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


[^0]:    "S ome Anatomists Like $\mathbf{F}^{*} \#$ 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

[^1]:    "S ome Aberdeen Ladies F\#ck, Others Prefer Manual Stimulation": From inferior to superior:
    Superior thyroid
    Ascending pharyngeal
    Lingual
    Facial
    Occipital
    Posterior auricular
    Maxillary
    Superficial temporal
    Knowledge Level 2, System: Cardiovascular
    Anonymous Contributor

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

[^3]:    "MAP OF Sciatic":
    Medial compartment: Obturator
    Anterior compartment: Femoral
    Posterior compartment: Sciatic
    So all the thigh muscles in that compartment get innervated by that nerve.
    Knowledge Level 1, System: Nervous
    Anonymous Contributor

[^4]:    "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, IsraeI

[^5]:    "Anteflexed and Anteverted both bend toward Anterior".
    The "V" words go together: Verted is for the cerVix (therefore flexed must be uterus).
    Knowledge Level 4, System: Reproductive
    Robert O'Connor University College Dublin

[^6]:    "Fraternity Parties Occasionally Teach Spam Etiquette":
    The first two letters of each bone:

[^7]:    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

[^8]:    "Oh My, Such Good Apple Pie, S weet As Sugar!":
    Oxalic
    Malonic
    Succinic
    Glutaric
    Adipic
    Pimelic
    Suberic
    Azelaic
    Sebacic
    Knowledge Level 8, System: Other/Miscellaneous
    Anonymous Contributor

[^9]:    "Maggie May Does Not Smoke":
    Mutations
    Migration
    Drift
    Non-random mating
    Selection
    Knowledge Level 8, System: Other/Miscellaneous
    Anonymous Contributor

[^10]:    "Come, Let's Get Sun Burned":
    From superficial to deep:
    Corneum
    Lucidum
    Granulosum
    Spinosum
    Basale [Germinativum]
    Alternatively: "Can Lori Get Some Gas?"
    Alternatively: "Can Little Girls Speak German?"
    Alternatively: "Can Larry Get Some Beer?"
    Knowledge Level 1, System: Integumental
    Marcus Lee and Jon Markley and Twinkle and Lea Riche and Anonymous Contributor IMU and Medical student and Nursing Student

[^11]:    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

[^12]:    "My Cat Eats Mice":
    Mononucleosis-like illness
    Chorioretinits/ Congenital infection
    Encephalitis
    Myocarditis
    Knowledge Level 3, System: Nervous
    Anonymous Contributor

[^13]:    "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

[^14]:    "S ome S ay 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

[^15]:    "Particular Tumours Love Killing Bone":
    Prostate
    Thyroid
    Lung
    Kidney
    Breast
    Knowledge Level 3, System: Skeleta
    Ben Campbell University of Otago Medical School, Dunedin, New Zealand

[^16]:    "Anesthesiologists Enjoy S \& M":
    Analgesia
    Excitement
    Surgical anesthesia
    Medullary paralysis
    Knowledge Level 1, System: Nervous
    Robert O'Connor University College Dublin

[^17]:    "Military General Attacked Weary Fighters Pronouncing 'Veni Vedi Veci' After Crushing Enemies": Epilepsy types:

[^18]:    "Get My Freakin' Gun Right Away":
    Glomerulosa: Mineralcorticoid (aldosterone)
    Fasiculata: Glucocorticoid (cortisol)
    Reticularis: Androgens
    Knowledge Level 1, System: Endocrine
    Thomas B. Edmunds, Jr Chief Urology Resident at SUNY @ Stony Brook

