

Do as much files as you can.

1 An experiment performed on a rat, the leg of it is cut off from the body. New bone formation, skin formation nerve, and arterial formation has occurred but muscle formation has not. Why is this?

Ans: Myotome migration

2. Population graph with age groups. Base had a lot of people. Narrow on very top. Question: Ans choice: high fertility, high mortality

3. Mean = 130, SD is given, SEM is given. Find the Confidence Interval. Ans: 120-140

4. Hardy Weinberg question. 1/10,000 prevalence. What is carrier frequency? (Calculate 2pq) Ans: 1/50

5. Pedigree of mitochondrial inheritance

6. At least 10 ECG questions but they are easy with vignette. (QT prolongation, hypertrophy – question asked the risk factor (ans: HTN)

7. Gerstmann. **Ans: Dominant parietal cortex** 8. Hemineglect. **Ans: Nondominant parietal cortex**

9. 5 incontinence q's (stress, urge)

10. Treatment of Urge Incontinence

11. 2 Cohort (prospective cohort)

12. Case control

13. Long Behavioral science scenario. She had a good life, but has difficulty sleeping, loss of appetite. She is restless and agitated. No anhedonia. After empathizing with patient, what is next step? Then an answer choice had more empathy lines. Options: How is your self-esteem?

14. Lady has a breech presentation, is losing a lot of blood. She's from a small town, wears a burka, is Muslim. On-call doctor is male. Her OB-GYN who is a female is 2 hours away. You've told her about the seriousness of the issue, but she still insists on seeing a female doctor. What do you do?

15. A patient came in with a family member who passed away. She begins to talk about her deceased family member. Listening to the patient talk, the medical student gets irritated and angry. Defense mechanism of the medical student?

Options: Displacement, transference, countertransference

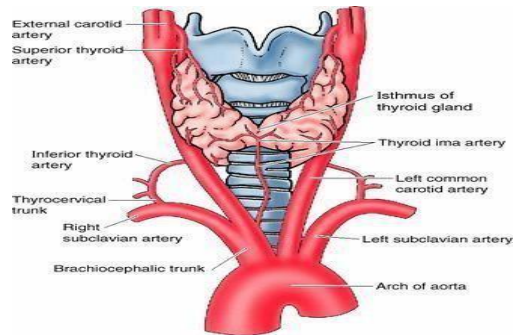
16. Opioid withdrawal. Rx? **Ans: Clonidine**

17. Buprenorphine question. Once you stabilize the patient what is used as long term?

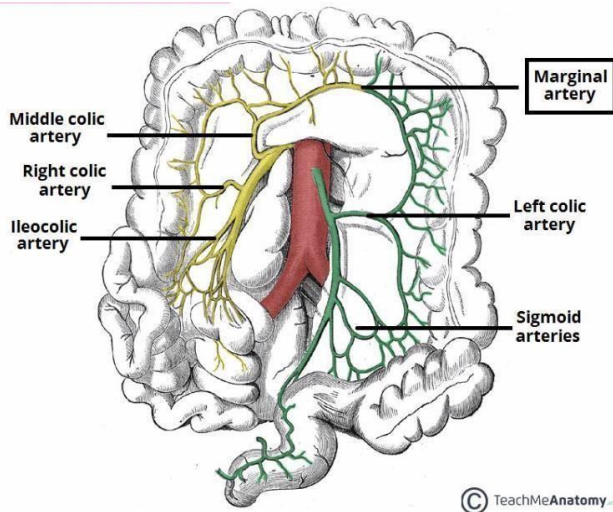
18. Pectinate line question in MILLIMETERS not centimeters. Squamous cell carcinoma.

19. Subepiglottic lymph node. Where does it drain? Options: Internal carotid, external carotid, deep cervical

20. Patient had a thyroidectomy. You accidentally severed his Superior thyroid artery. What is this artery a branch of? **Ans: External carotid** Options: vertebral, internal carotid, subclavian



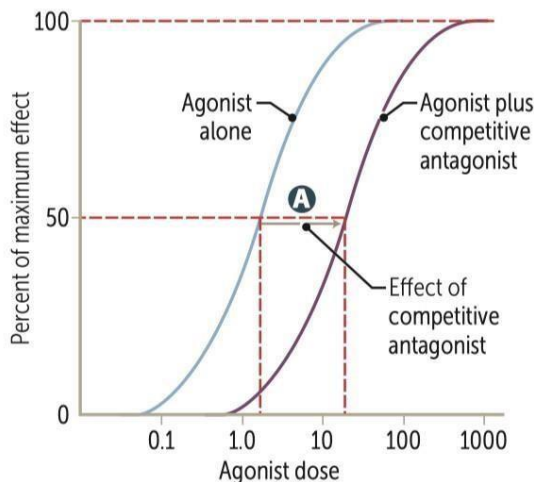
21. Posterior displacement of tibia. What artery is severed? Anterior tibial, posterior tibial, common peroneal, femoral, popliteal
22. Question: Kidney stones. It is not seen on X-ray. What is it? **Ans: Uric acid.** Other options: cystine
23. Stone is stuck at ureterovesical junction. Where in the bladder is it affected? Ans: Ureteral orifice. Other option: Trigone bladder
24. 21 alpha hydroxylase deficiency question
25. Which drug blocks beta receptors and acts on potassium channels? **Ans: Sotalol**
26. Side effect of Amiodarone? **Ans: Pulmonary Fibrosis**
27. Side effect of Methotrexate? **Ans: Hepatotoxic**
28. Isotretinoin. What receptor pathway does it act on? Options: Transcription
29. Synaptophysin positive. Cancer/Lesion in brain. Did not stain GFAP. The origin of these cells would resemble which of the following cell types? **Ans: Melanocytes** Other Options: Fibroblasts, epiblasts, endothelial cells, epithelial cells.
30. What mediates pain and fever? **Ans: IL-1** Options: TGF-B, PDF (no bradykinin, no PGE₂ there in answer choices)
31. Nutcracker syndrome vignette.
32. SMA syndrome vignette. What happens if the 3rd segment of duodenum is compressed? What artery is involved? Ans: SMA
33. Inferior mesenteric artery embolus. Descending colon has enough blood supply. Where are the collaterals coming from? **Ans: Middle Colic**



34. Eye surgery. What organism is involved? **Ans: Bacillus Cereus** 35. Malassezia furfur picture. Just had to diagnose that it's malassezia.
36. Anaerobic bacteria of GI. Treatment? **Ans: Metronidazole**
37. Lady is pregnant, on doxycycline. Congenital side effect? **Ans: Teeth discoloration**
38. Catalase negative organism, causing pneumonia. **Ans: Strep pneumonia.**
39. After 207 base pairs, there are Huntington's repeats. CAG codes for glutamic acid. This particular one has 274 base pairs. How much glutamic acid do we have? $274 - 207 = 69$. Divide by 3 = 23.

Ans: 23

Lineweaver Burk plot showing competitive antagonist. Three lines like below. With competitive antagonist. What would you expect to increase? **Ans: Km (has lesser affinity)**



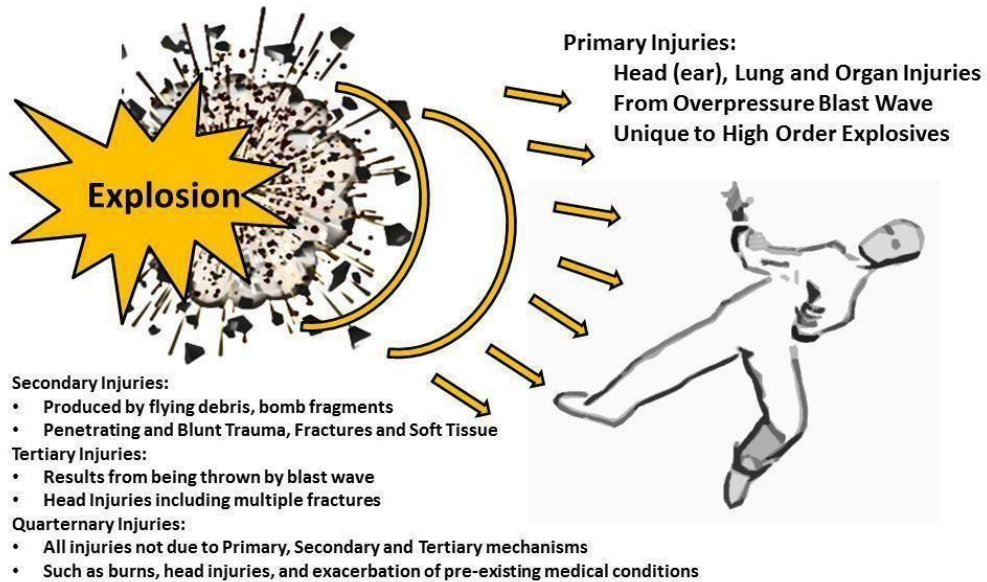
40. Kid has bilious emesis. You also see generalized abdominal distention. Child is still barely passing meconium. **Ans: Anal atresia** Options: Duodenal atresia, TEF
41. Patient after vaginal delivery has a tear posteriorly up to the rectum. Nerve injury? **Ans:**

FOR MORE RECENT AND SOLVED FILES VISIT
USMLEPROMAX.COM

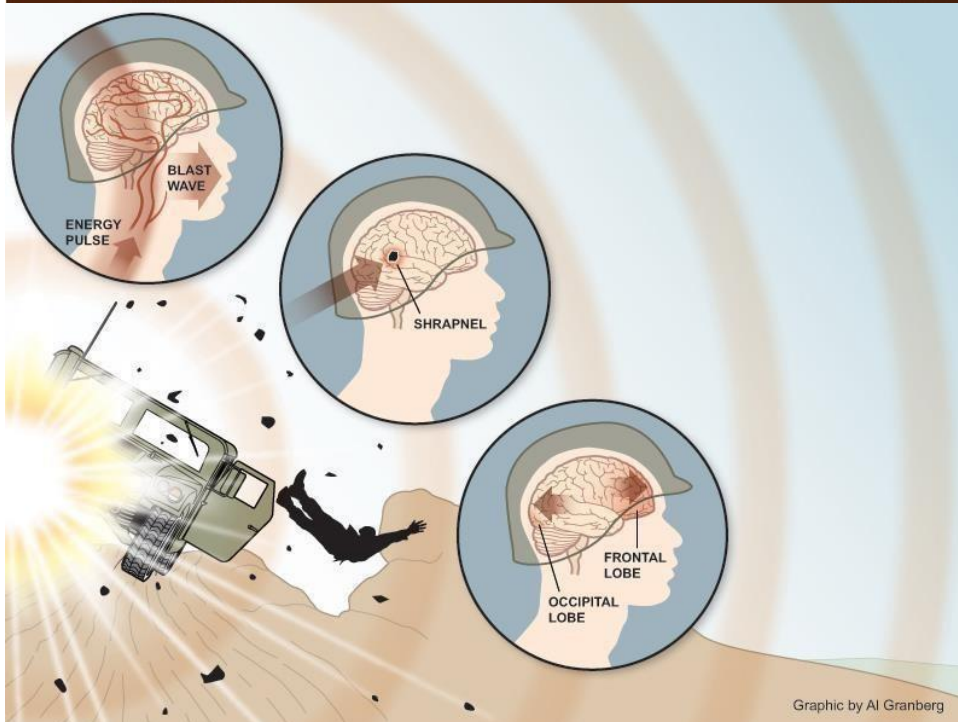
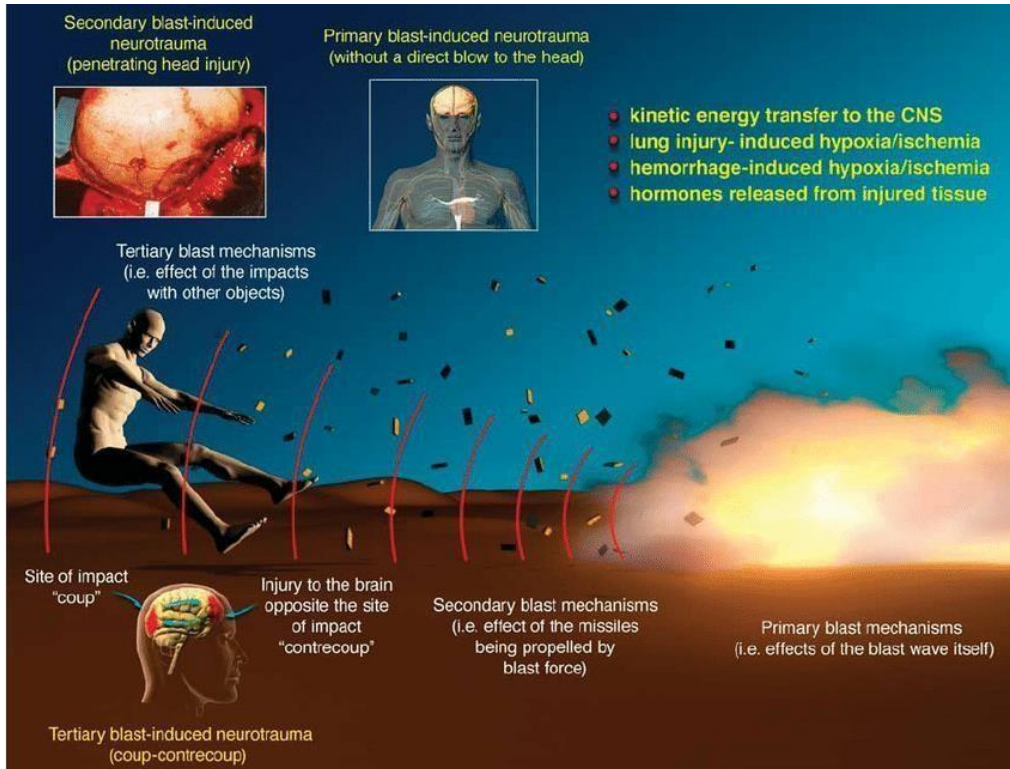
Posterior labial

42. Classic alpha-1 antitrypsin deficiency question. Where is the alpha-1 antitrypsin produced? **Ans:** Liver
43. ACE inhibitors and ARB's. Compared to the ARB, what do you see in the ACE inhibitor? **Ans: Increased Angiotensin I.**
44. Man is chronic alcoholic, has had several attacks of pancreatitis in past. But he has steatosis and frothy stools. Where is the pathology? Options: Liver, Biliary Atresia/Gallbladder, Adrenals, Cardiac, Renal
45. Lady comes in, wants to lose weight. You tell her she looks perfectly fine. She says she is competing for something, wants to get fit. BMI is 24. She wants her BMI to be 20. She is designing a calorie plan. She is exercising, and burning 500 calories. She wants to consume 2000 calories. How much weight will she lose after one week? **Ans: 2 pounds a week.**
46. Another athlete who wants to reduce calorie intake. How many grams of fat should he consume to reach this caloric goal. If he is consuming 100 grams of fat, how many calories are there? **Ans: 900 calories of fat**
1g of carb/protein = 4 cal
1g of alcohol = 7 cal
1g of fatty acid = 9 cal
47. Lady is in the desert. She has a good supply food and water. Temperature was 107. Humidity is 10%. **Ans: Evaporation** Options: Convection, Force convection, Radiation
48. CTLA-4 question mechanism – tumor cells
49. Man who was in a war who was wearing a helmet. Small parts lacerated all over his body. They missed his head and neck. The bomb created a sound wave blast. What organs of the body would be most affected? Options: Brain and Ear, Heart and Lungs, Kidneys and Liver, Heart and Kidney (gave pairs of organs)

Blast Injury Components



Adapted from: <http://www.bt.cdc.gov/masscasualties/blastinjuryfacts.asp>



50. AS heart sound
51. MR heart sound
52. MVP heart sound
53. Vignette given. Had to diagnose hereditary spherocytosis
54. Vignette given. Had to diagnose Myelodysplastic syndrome
55. Schistosomiasis
56. Sickle Cell
57. HIV transplant case. **Ans: CMV**
58. Infectious mononucleosis like syndrome. Heterophile negative. **Ans: CMV**

59. Esophagitis linear ulcers - CMV. **Ans: Intranuclear inclusions**

60. Image of penis is given. Single bleeding ulcer is in the picture. But in vignette they mention multiple ulcers with pustules. The vesicles were not tender. What was the disease? **Ans: Lymphogranuloma Venereum**

Characteristics of ulcerative sexually transmitted diseases			
Disease	Causative agent	Features of primary lesion	Initial lesion painful?
Chancroid	<i>Haemophilus ducreyi</i>	<ul style="list-style-type: none"> Multiple & deep ulcers Base may have gray to yellow exudate Organisms often clump in long parallel strands ("school of fish") 	Yes
Genital herpes	Herpes simplex virus 1 & 2	<ul style="list-style-type: none"> Multiple, small, grouped ulcers Shallow with erythematous base Multinucleated giant cells & intranuclear inclusions (Cowdry type A) 	Yes
Granuloma inguinale (donovanosis)	<i>Klebsiella granulomatis</i>	<ul style="list-style-type: none"> Extensive & progressive ulcerative lesions without lymphadenopathy Base may have granulation-like tissue Deeply staining gram-negative intracytoplasmic cysts (Donovan bodies) 	No
Syphilis	<i>Treponema pallidum</i>	<ul style="list-style-type: none"> Single, indurated, well-circumscribed ulcer Clean base Thin, delicate, corkscrew-shaped organisms on dark-field microscopy 	No
Lymphogranuloma venereum	<i>Chlamydia trachomatis</i>	<ul style="list-style-type: none"> Small & shallow ulcers Large, painful, coalesced inguinal lymph nodes ("buboes") Intracytoplasmic chlamydial inclusion bodies in epithelial cells & leukocytes 	No

61. Child has fever. No kolpik spots, no cough. Options: C diphtheria, H influenza

62. What cells kill the tumor cells? **Ans: Natural Killer cells**

63. Lung tumor (SIADH). What electrolyte abnormality do you see? **Ans: Hyponatremia**
64. Squamous cell carcinoma of lung (PTHrp) with kidney stones. What is seen in serum? **Ans: Hypercalcemia**
65. They want to excise the lymph node. If you push the trachea to the right. What do you risk excising?
Options: Phrenic nerve
66. Similar question. What lies anterior to the trachea. Options: Phrenic, Vagus nerve
67. A catheter is put into the IJV. Catheter goes down into heart. They've injected a dye. Where is the dye?
(Picture is given). Ans: Pulmonary Valve Options: Pulmonary valve, Tricuspid
68. Patient has wide split S2. Where do you put the stethoscope to hear the split? **Ans: Pulmonic**
Options: Aortic, Mitral, Tricuspid
69. Cellulitis – Staph aureus. Rx? **Ans: Vancomycin**
70. MOA of tetracycline. **Ans: Aminoacyl-tRNA**
71. MOA of macrolides. **Ans: Inhibits protein synthesis**

72. In order for B cells to switch to immunoglobulin, what cell surface marker is required. **Ans: CD 22**
Options: CD 2, CD 42, CD 80

73. Grapefruit inhibits which of the following? **Ans: 3A4**

74. Motor vehicle accident. He lost a lot of blood. Low urine specific gravity. What part of the nephron is affected the most? **Ans: Proximal convoluted tubule**

75. Man is on multiple drugs, as well as on analgesics. He has glucose, bicarb, and amino acids in the urine. What part of the nephron is affected? **Ans: Proximal convoluted tubule**

76. Hepatitis. Antibodies against surface and core antigen. **Ans: He had disease in past and is recovering.**

1. 40 year old female came to ur office for follow up, she recieved treatment for major depression from you as sertraline, she says her symptoms hav subsided sinc 3 months, she says i hve problems with the increased bowel movements due to th drud, i want u to discontinue the drug, wat is the best next step in management?

- a. shift the sertraline to paroxetine,
- b. discontinue sertraline
- c. taper the dose of sertraline call for follow up in future

2. You r resident at a tertiary care hospital, on cal resident didnt inform u about the patients due to his fatigue, u came across a 38 year old patient who reguested tubal ligation with c/section at 37th week of gestation due to obstetric indications, but u didnt do the tubal ligation at the time of c/section. how this fault can be avoided in future? a.`on call resident should have detailed conversation at the time of leaving from hospital. b. fatigue of residents should be minimized

c.inform about these kinds of mistakes to hospital admin

d.inform the patients about the resident"s fault.

1. Horse rider fell from the horse, physician mobilized the leg and told him no working for 6weeks. The patient very sad and angry and says it's impossible. What should the physician say?

- a. Let's wait for 2weeks and go from there
- b. Tell me about your job and let's see if we can compromise

C. Am sorry but 6months is

There is fire in some rural area of ur state, 10 fireworkers suffered burn injuries. ur hospital is the only hospital in the state that have specialized burn unit u have only 6 beds n dont have the extra staff for the other 4 patients, some how u managed to admit the 10 patients in the unit after transferring beds, 5 patients died dueto severe sepsis from psuedomonas, how this mortality can be improved in future?

- a. arrange extra staff temporarily in case of any emergency
- b. provide brief orientation to staff at the time of placement in the burn unit
- c. dont transfer the extra beds in burn unit
- d. dont admit extra patients to burn unit.

2. Child gets injections regularly, initially cries, runs away and goes to mom/In later appointments he was okay not crying Sensitization/Habituation? Was looking for desensitization/suppression/sublimat ion -not in options

3. Patient with minor blade wound presented to u in the e.r, wound is not deep,its clean, all imunizations are up to date, u dont give the tetanus toxoid because its not needed. patient requests another tetanum toxoid, u xplain the side effects of tetanus toxoid but patient urges to administer it. wat is the next best step in management?

- a. refer the patient to other hospital
- b. give the tetanus toxoid and tell the patients that he will hospital will not be responsible for side effects
- c. avoid the extra dose of tetanus n toxoid and again explain the risk
- d. tell the patient to other resident in e.r for administring the tetanus toxoid

4. Thinning of the basement membrane. What is defective Fibrillin. Ans Collagen 5. CRISPR

6. baby with micrognathia, twisted last three fingers, intellectual disability

- a. monosomy
- b. trisomy and others

7. Vit A def (2 questions) – cornea clouding, bitot spots

8. Newborn delivered at home with ecchymosis – Vit k - deficiency of **carboxylatio n**

9. Phytanic acid – V **LCF** A

10. Duchenne MD, Mode of inheritance **x**
linked recessive

16.

19) Vit E question

41. A 40-year-old girl with cystic fibrosis is brought to the physician because of a 3-week history of generalized weakness, numbness and tingling of her arms and difficulty walking. She has not adhered to her medication regimen during the past 6 months. She appears alert and oriented. Her vital signs are within normal limits. Physical examination shows bilateral weakness and decreased deep tendon reflexes in the upper and lower extremities. She walks with an "steppage" gait. Most likely cause of these findings is a deficiency of which of the following?

- A) Folic acid
- B) Vitamin A
- C) Vitamin B₁₂ (cobalamin)
- D) Vitamin D
- E) Vitamin E**

Correct Answer: E.

Vitamin E is an antioxidant that protects erythrocytes and cells from free radical damage. Deficiency may present with hemolytic anemia and generalized muscle weakness (as have a similar presentation to vitamin B₁₂ (cobalamin) deficiency with posterior column and spinocerebellar tract demyelination. In contrast to vitamin B₁₂ deficiency patients do not have neurological deficits, hypomyelinated neuropathy, or increased serum methylmalonic acid concentrations. On peripheral smear, patients with vit E deficiency may have acanthocytes.

Incorrect Answers: A, B, C, and D.

Folic acid (Choice A) is converted to tetrahydrofolic acid and used as a coenzyme in the synthesis of nucleotides and nucleic acids. Folate is contained in leafy vegetables abundant in the diet. Folate deficiency is often seen in patients with malnutrition, alcoholism, and patients taking anti-folate medications (eg, praziquantel, methotrexate). Megaloblastic anemia occurs in the setting of impaired DNA synthesis.

Vitamin A (Choice B) is an antioxidant necessary for differentiation of epithelial cells into specialized tissue. Deficiency is characterized by ocular manifestations including night blindness, corneal degeneration, Bitot spots on the conjunctiva, dry skin, and immunosuppression.

Vitamin B₁₂ (cobalamin) (Choice C) deficiency limits synthesis of histamine, hemoglobin, and neurotransmitters including calcitonin, norepinephrine, dopamine, serotonin, and GABA. Deficiency commonly presents with peripheral neuropathy, dermatitis, sideroblastic anemia, glossitis, and diarrhea (especially in the setting of terminal ileitis).

Vitamin D (Choice D) deficiency commonly causes bone loss due to impaired bone deposition by UV radiation and low dietary vitamin D intake. Fat malabsorption syndromes such as celiac disease or cystic fibrosis can impair absorption of vitamin D in the gastrointestinal tract. Patients will experience symptoms of low bone mineral density (eg, vertebral bowing of the osteoporosis) or hypocalcemia (eg, tetany, muscle spasms). Hypoplastic teeth and multiple fractures can result, as mineralization of dentin is impaired.

15. High TG paracentesis - **thoracic duct defect** (probably due to **underlying malignancy**)

- **Chylothorax**: Lymphatic fluid accumulation in pleural space. Most commonly a complication of a **malignant process** (lymphoma) or secondary to **trauma**.

17.

18. NK cell and CD8+T cell functon:
granzyme

19. Patent with fever, neck stiffness and similar history in past too, cause: **C7 deficiency**

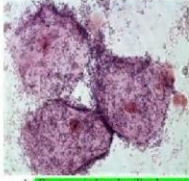
20. LPS in saline: **Release of cytokines** 21. Patient had PPD of greater than 15, confirmed mycobacterial tb infection.

What IL is responsible

- a. IL4
- b. IL5
- c. IL 10

22. Exact question

55 A lady comes to the clinic to you, with vaginal discharge that smells weird, and you obtain a pap smear. It was a short question only. What is the initial infecting factor that caused her infection?



Went for A. The picture they gave, it was filled with cbc cells!

- A. **Decrease in lactobacillus bacteria growth**
- B. Sexually transmitted infection

Source: usmle.org

23. Picture of Terminal spine with history of African Man :
Schistosoma hematobium

female patient with o.c.d, she says i dont wat a drug that causes weight gain. best next0 step?

- a. olanzapine
- b. flouxetine
- c. amitriptyline

x.ray of mass in apex of lung, patient complainig of weakness n atrophy in hand muscles, diagnosis?

- a. bronchogenic carcinoma
- b. t.b

24. Silver methamine stain, CD4 count was 145. Chest Xray also give.
Pneumocystic Jiroveci

25. Gram stain of a fungus called **Penicillium marneffeii** .

d. 1L 15

Baby with 26. hearing problem, on examination, looks alert but does not responds to sound cause:

CM^v

27. How does polio survives in the environment: lack of envelope

intestine

- a. Low bioavailability. due to extensive first pass metabolism
- b. And some other options

157. HIV patient, multiple purple colored lesions on the leg. What is the causative

organism?

- a) HHV-8
- b) HHV-6
- c) CMV

Kaposi Sarcoma

29.

30. Exact picture

178

It's an experimental question in which people get infected with polio even though they have been vaccinated after gene extraction there is gene X which belong to some enterovirus, which make polio gene virulence? What's this?

- A) Reassortment
- B) Recombination

31. Contaminated saline - fever - cytokines release

32. Diphtheria CV - virulence factor - exotoxin

33. Hiking trip, drank lake water, now diarrhea - Giardia

34. Case of cirrhosis patient, undergoing TIPS, which vein should be diverted to? IVC, azygous, gastric vein.

35. EHEC patient, MOA of toxin? Inhibit protein synthesis

36. Woman with UTE, Gram stain of Staph Saprophyticus

37. Heart sounds. Normal findings

38. Heart sound - aortic stenosis. Patient was pass.....it

with SOB: degenerative

scan

44.

24. Type one antiarrhythmic action potential change (cardio pharma)

Antiarrhythmics—sodium channel blockers (class I)	Slow or block conduction (especially in depolarized cells). ↓ slope of phase 0 depolarization. ↑ action at faster HR. State dependent ↑ HR → shorter diastole, Na ⁺ channels spend less time in resting state (drugs dissociate during this state) → less time for drug to dissociate from receptor. Effect most pronounced in IC ₂ > IC _{1A} > IC _{1B} due to relative binding strength. Fast test CAB.
Class IA	Quinidine, procainamide, disopyramide. "The queen proclaims Diso's pyramide."
Mechanism	Moderate Na ⁺ channel blockade. ↑ AP duration, ↑ effective refractory period (ERP) in ventricular action potential, ↑ QT interval, some potassium channel blocking effects.

45. Old man after MI can't hold

(Q) (CVC):

- Elderly pt. with asthma, Atrial fib, type 2 DM, under medications came to you with mild p (1) L lower limb; heart rate: 132/min (irregular) BP: 126/84 mmHg; complaining of shortness of b she mentions she forgot to get a refill of her m and hasn't been on any medications since last w o/r except one present bll extending from basal upto middle lobe; what is the diagnosis?

- (i) Congestive heart failure
- (ii) Pulmonary embolism
- (iii) MI.

erection, (very long vignette)

- a. Depression
- b. Erectile dysfunction
- c. Hates his wife

46. Hypovolemic shock - CVP ↓, CO ↓, SVR ↑

42) Heart Sound, I think it was of A-S

What will be seen in Auscultation.

- a) Bifid carotid pulse
- b) Delayed carotid pulse

47.

43. identify Paraumbilical vein in CT

old

changes in aortic valve

48. balanced but when eyes are closed, she falls to one side while walking. What part of the structure is damaged?

- a. Lateral
- b. vermis

49. (A) Where is maximum of MIP density heard?
 (i) **left midclavicular line 5th ICS** loudest just before S2
 (ii) Right " " " "
 (iii) **left parasternal line 4th ICS.**
 (iv) " " " "

49.

50. Patient with weightloss, tumor markers revealed HMB – 45 and S100 is positive and spindle cells positive, what tumor?
- Renal cell carcinoma
 - Metastatic melanoma**
 - Spindle cell metastasis
 - Squamous carcinoma

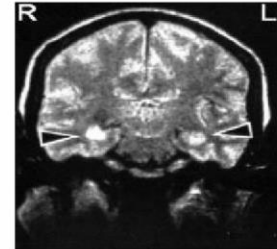
51. What drug for Pain does? **Reduces PGE2**

52. 60 year old woman was brought into the ED confused stating that she was a prostitute and that she was trying to go home. 10minutes later she denied saying so and requested they call her next kin. When the daughter came in, her daughter reported that she re cently has been losing memory.
- Dementia
 - Alcohol intoxication**
 - Delirium

53. Mechanism of Dantrolene asked **inhibitor of ryanodine receptor**

54. 13 years with nystagmus, gait abnormalities, when eyes are opened she is

59.



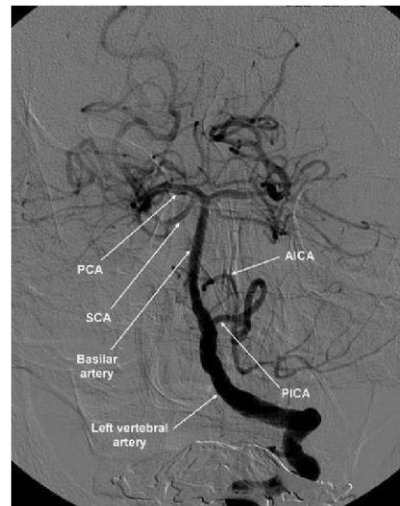
70-year-old woman brought to ER 30 minute after being found unresponsive at home. Arrowheads indicate abnormalities. Q: Which of the following would be present months later? A: Inability to learn and recall new facts. (arrowheads pointing to hippocampal cortex which is vulnerable to ischemic damage in anoxic brain injury)

60. what is still developing 6 year: **alveolar sac**

61. Patient with homonymous hemianopsia, gave an arteriogram of the circle of willis, had to identify the PCA

62. Radial migration - **Double cortex**

63.



64.

- 113 A 3 month/year old boy brought for normal follow up. What is the neural process that is still happening at this age?
 A. **Myelination**
 B. Neural tube formation

65. Patient who had surgery, foramen magnum affected,
what structure will be affected?

a. Tongue deviation

a. A.

b. B.

c. C.

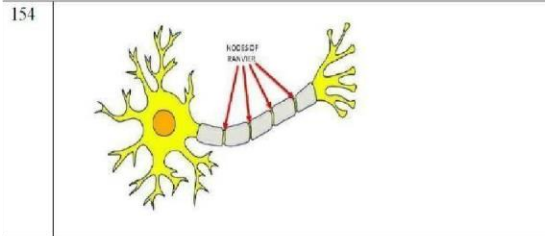
b. Cant elevate shoulder

c. Cant swallow

d. D.

e.

66.



Arrow was given on the node of Ranvier, and asked what channels are present maximum here?

- A. Voltage gated sodium channel
- B. Voltage gated calcium channel
- C. Voltage gated potassium channel

67.

68. Population pyramid of 2 different years, five years apart. Only difference is the population of children under 5 years is increased after a duration of 5 years.

- a. Immigration of middle class
- b. More under 5 years vaccine provided

69. Receiving operative curve diagram labeled A, B, C, D, E. what area will you pick if you were to flip a coin?

d. Down and out eyes

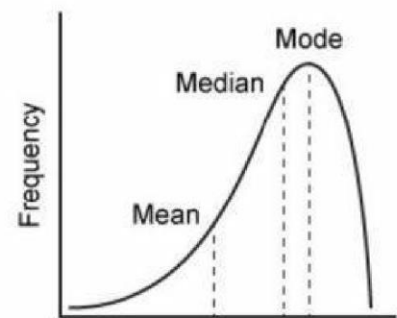
- a. Stratification
- b. Random selection

73. Kaplan curve with three different graph about Nicotine use (please learn Kaplan meier curve)

74. Gave this picture but there were like bar charts and asked which one of this is true

a. Left skewed

b. Total mean is equal to mode



Negatively skewed

75.

159 A boy, is brought with aniridia and a mass in abdomen, on CT it was a renal mass, what is the defect here?

- A. WT1
- B. RET

70. Strategies to reduce confounding.

71. Case-control study

72. Cohort study


76. mode of inheritance of PCKD

77. Volume of distribution – calculation
(pls learn the unit conversion..
screwed it up my brain froze) 78.

79. Alport hx & bx / what is the
defect/ collagen.

38. A male mid-aged has chronic renal failure and the Kidney biopsy is done. The picture was of ADPKD. Clear cystic spaces seen. What is the complication or other feature associated with this

A. **Brain aneurysm** ✓
B. Stippled optosis




Marked A

16. A 55-year-old army veteran that has not seen the doctor in a long time. He presents to the hospital with flank pain. He has no hematuria and no urinary frequency, no fever. MRI showed a calculus in the left renal pelvis which dilated both the pelvis and calyces. They removed the left kidney and an image of the left kidney was shown. It looked thick and had holes (?). What findings will you see on kidney histology?

A. Atrophy (ans)
B. Hyperplasia
C. Metaplasia

GROSS

- Kidney may have slight to massive enlargement
- Earlier features are those of simple dilation of the pelvis and calyces
- In far-advanced cases, kidney may become transformed into a thin-walled cystic structure having a diameter of up to 15 to 20 cm with striking parenchymal atrophy, total obliteration of the pyramids, and thinning of the cortex.




Hydronephrosis of kidney, with marks dilation of the pelvis and calyces and thinning of the renal parenchyma.

80. Exact Picture.. they asked what was the cause?

RENAL

(86) Not exactly same, but similar; make out system. Cause:
• Bifurcation of Metaneph



81. Patient with pain after eating, more during the night, similar history in the family too:

- a. **H. pylori**

25. Alcoholic homeless man with hx of liver failure which veins tend to have high pressure/ sup rectal

84. 2 years old child with blood in diaper M **eckel**

85. Painless hemorrhoids – vein responsible?

86. It was an image of the left hand, and had an arrow at SL. Asked to identify name of the ligament

- b. Autoimmune
- c. spicy food

82. Ascending colon blood supply 83.

87. Erlenmeyer flask

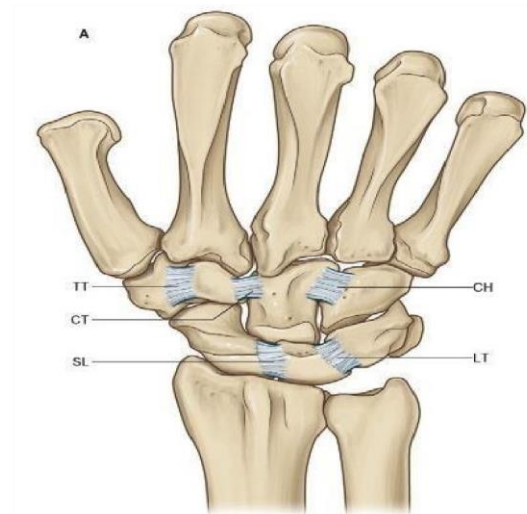
88. Paint spilt **stratum corneum**

89. Patient comes with her girlfriend, when asked about injury looks at GF and looks down: Look for **eccymoses**

90. CI - channel defect **resorption/osteoclast**

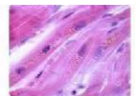
91. A picture of brachial plexus with lesion shown in the ulnar nerve. They asked which of the following will be affected?

- a. **Abduction of the index finger at MCP** (ans)
- b. Flexion of index finger at MCP
- c. Extension of index finger at MCP
- d. Opposition of thumb
- e. Flexion of thumb



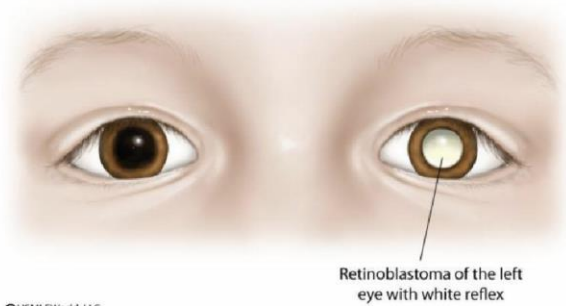
92. Light criteria: exudate and blood tinged: **malignancy**

17. Old lady dies of some disease on autopsy heart image shown similar to this. Which of the following is the reason for this given finding.
A. Aging
B. Hemochromatosis
C. Asbestosis

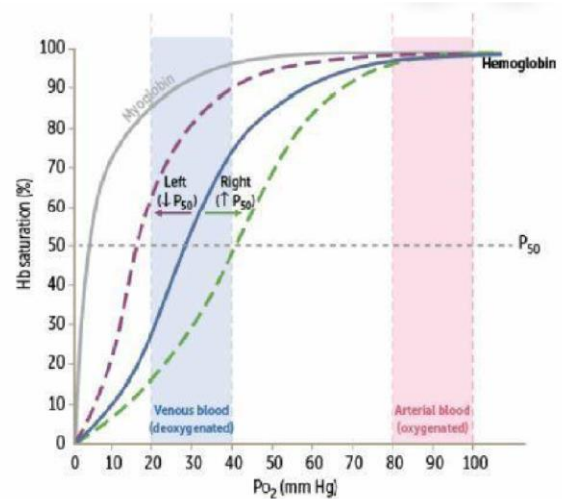
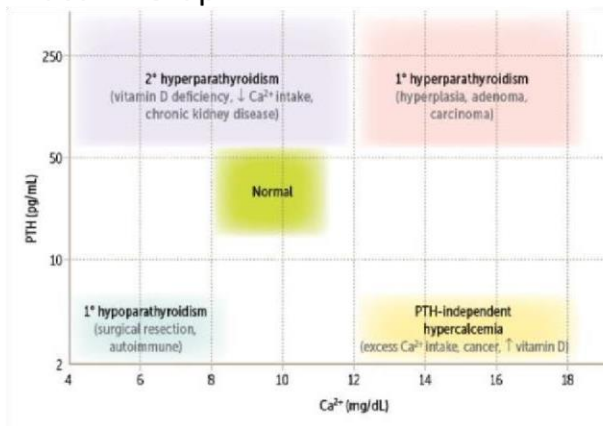


93. What area of cell cycle is affected?

55. Tactile fremitus Picture of red reflex/tumor marker
Retinoblastoma white reflex



94. Secondary hyperparathyroidism
 Exact FA Graph



Left shift (↓ O ₂ unloading to tissue) Left = lower	Right shift (↑ O ₂ unloading to tissues) ACE BATs right handed
↓ H ⁺ (↑ pH, base) ↓ Pco ₂ ↓ 2,3-BPG ↓ Temperature ↑ CO ↑ MetHb ↑ HbF	↑ H ⁺ (↓ pH, Acid) ↑ Pco ₂ Exercise ↑ 2,3-BPG High Altitude ↑ Temperature

100. Question was asking about high co₂..
 pls learn diagram well. They tried to make it confusing.

**FOR MORE RECENT AND SOLVED FILES VISIT
USMLEPROMAX.COM**

134. A man comes with increase foot size, hand size signs of increase growth hormone basically. Labs are ordered, his GH is increased, and IGF-1 is also found to be increased. Where is the problem?
 A. IGF-1 receptor
 B. GH receptor
 C. 2 more

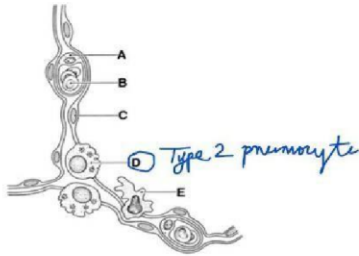
96. pneumothorax

97.

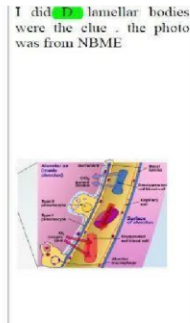
98. 102. Man with lhalitosis and all the

symptoms of zenkers diverticulum.
Where is it located?

99. Exact picture (yang file)



A) B) C) D) E)



- a. Upper esophagus
- b. Mid esophagus
- c. Distal esophagus
- d. Lower esophagus
- e. Esophageal sphincter or something like that

103. Three questions was on celiac disease
- Celiac hypovitaminosis -

Fat soluble,

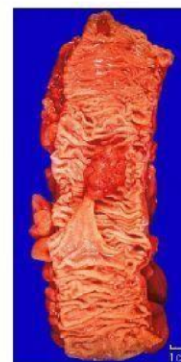
- a. Villous Adenoma
- b. FAP
- c. Tubular adenoma
- d. adenocarcinoma

the skin manifestation of celiac and part of the GI where celiac disease commonly occurs.

104. Hyperammonemia
treatment
acidification of colonic contents

105. Exact image and question.

Asked for diagnosis



Repeat from older NBME. Q mentions that patient had been undergoing eval for occult blood in the stool. What is the most likely diagnosis? A: Tubular adenoma

106. Ascending colon blood supply

- Right colic artery

107. A patient had crohns disease and

had a history of fatty stools. The abortion...mifepristone 112.
patient had to get an ileal
resection. Which enzyme action

- a. HMG coA reductase (ans)
- b. Ketoacid enzymes
- c. LCAT

108. Picture of a woman with this.
Asked what else will she present
with. I chose anovulation



109. Phase of uterine stromal edema
glycogen rich with graph of
hormones, pick prog surge

110. Testis firm mass bx with clear
cyto prom Nuclei/ choices yolk
sac/seminoma.....

116. Question on nerves in lower leg that
is affected in compartment syndrome
of lateral compartment ...if they
have mentioned lateral compartment
thn it is superficial peroneal nerve .
otherwise compartment syndrome id
more common in ant compartment of
leg
that is by deep peroneal nerve

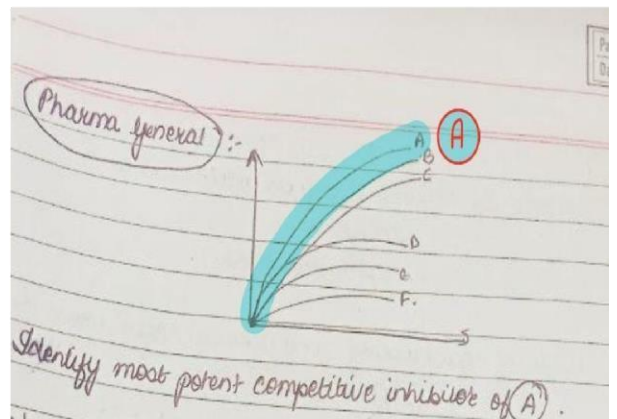
117. Dimpled skin in breast cancer patient
will be increased in this patient?
111. Antiprogesterin for

Female patient is using tampons

113. Shock patient give like
epinephrine HR & BP graphs in
pharma chapter

114. They were testing maximum
tolerated dose of a new hypertension
drug on a 60 healthy subjects – what
phase of clinical trials

115.



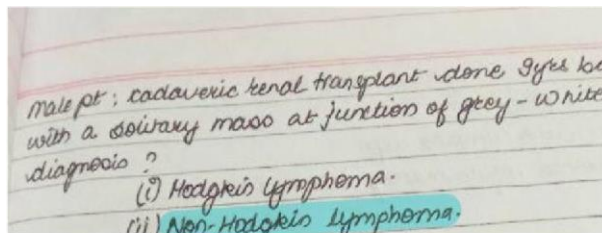
but she is still bleeding. Why? A:
Uterine didelphA. pectoralis

118. Question on Medial Collateral Ligament causes
- Genu valgum
 - Genu varum

119. 2 question on scabies: Excoriations between the fingers, whats the diagnosis and second question: Drugs for treating scabies

120. Anti Kell - woman with AB or something (its in pqs) 121. DIC (Arrow question)

122.



123.

- (103) A patient with depression and smoking addi
ddopamine ✓

**FOR MORE RECENT AND SOLVED FILES VISIT
USMLEPROMAX.COM**

Immune :

hyper acute-within minutes-kidney disease-pre existing antibodies of recipient

Eczema-WATER CGD anti venom-

type 3 hypersensitivity good

pasture- type 2

Rheumatoid arthritis pharma -tnf alpha

PNH-eculizimab- moa

BASIC PATHO:

Cerebellum- ataxia- purkinjee

Amyloidosis

Aging compare to 20 yr old

adrenal gland--- pheocromocytoma

BRAF----melenoma---mechanism

Basic Pharma:

BPH---Alpha 1 anatagonist sildenafil---PDE5

and PDE6 inhibitor in retina biostats 10

bias important ethics 4 to 5 each block 21

alpha hydroxylase high bmi ----- high leptin

central diabetes+accident+thirsty+nucleus damage?---- supraoptic

nucleus primary parahyperthyroidism diabetes type 2+aged

pt+mechanism **GIT:**

parietal cell pic nbme (histo) accident+pain on throat
while swallowing---laryngeopapillo barret esophagus----
metaplasia celiac disease+iron deficiency----anti
transluminate Crhons disease+creeping fat pic-----
appendicitis-- lynch syndrome-----mlh1 msh2
jaundice+total bilirubin increase+conjunctiva pain

pancreatic insufficiency--- acinar cells ka masla
calcium carbonate pills----milk alkali masla
ORS

BLOOD:

Anti kell---hemolytic disease(transfusion reaction)
hereditary spherocytosis---ankyrin
Anemia of chronic disease-- pt with RA anemia cause asked
polycythemia ----itching after bath jak 2----erythrocytosis
high amyloidosis+kidney-----multiple myeloma

Non-hodgkin lymphoma

MSK:

infantile hemangioma thumb index and middle finger compression-
--medial nerve ankle reflex decrease L5-S1 developmental
displacement clunk sound---one limb long other short dignosis of
developmental displacement clunk sound+one limb short other
long----- hip displasia osteopetrosis----increase bone density osteoid
osteoma---nsaid say improve

20yr old female rash on cheeks and chin what more history to
ask Psoriasis pic what to take more in history peripheral artery
disease+ulcer in foot+low pulse-----ejaculation problem/erectile
dysfunction before infusion of Influximab---tb test reactive
glycolysis--astrocytes neural crest cell---schwann cells sleep walking
patient--- stages of non rem parkinson---- tremors-----alpha
synuclein 14-3-3---spongiform vacuolation multiple sclerosis
presentation-----oligodendrocytes weber and rinne test short
acting benzo inhaled mechanism of anesthetic

PSYCH:

11 month child+19yr sister babysit+fractured hand and feet+mother

Manic episode---pressured speech

Anxiety disorder+ssri given what other drug given buspiron mechanism

Factitious with ready to have lots of lab work

somatic with body complain

Patient presented with loss of vision after stressfull event. No other symptoms no other complains ---

CONVERSION Disorder. PCP--nystagmus opioid withdrawal---pupillary dilation

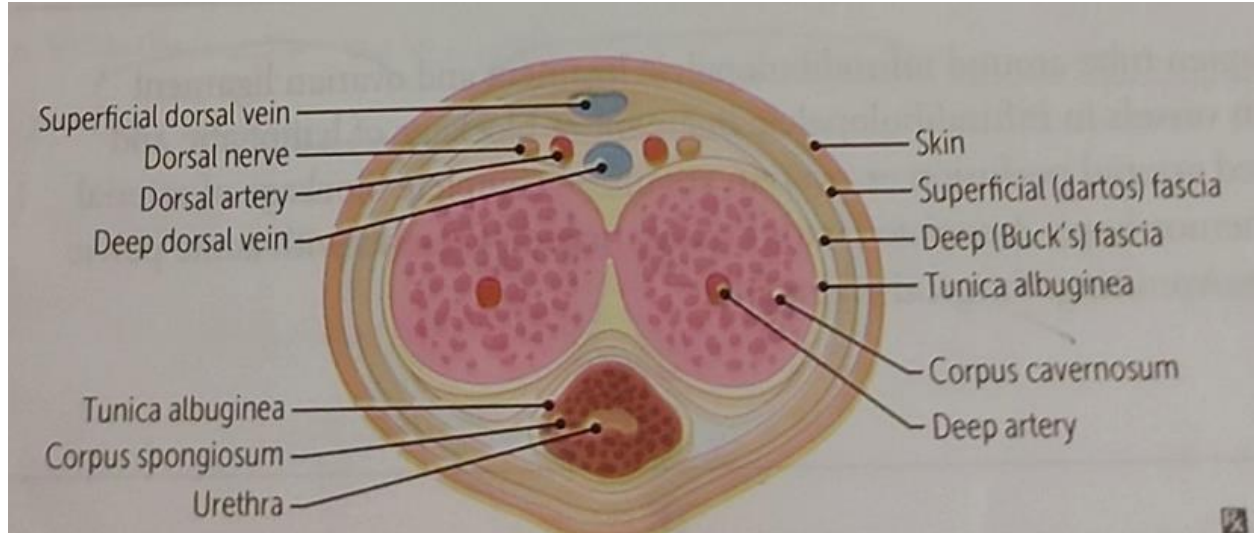
RENAL:

acute interstitial nephritis---rash + sulfa drug berry aneurysm---

subarachnoid hem. what to ask on history--renal issue

2-3 questions fetal alcohol syndrome----smooth phillirum

baby with ielium and umblicus patency--vitilline duct



Kallmaan--diencephalon---thalamus pt

hemmaroid+bleeding----thrombosis of vessels

RESPIRATORY:

A-a gradient aspirin use---metabolic acidosis-

--how to treat COPD+smoker---hyperplasia of

mucous gland PO295%---cynaide poisoning or

methmaglobin asbestosis--lower lobe

clubbing fa pic---auscultate the chest

BIOCHEM:

vitamin c---echomyosis vitamin b12-----

numbness+pancreatic insufficiency

MICRO:

diphtheria--- exotoxin chlamydia---aerosol clue cells bacterial

vaginosis---metronidazol isonizaid ast alt injection user tb+---

drug effect as no peridoxone hhv8-kaposi sarcoma dengue---

retro-orbital pain platelet count low PJP drug used----folate

inhibitor tmp used black ascar--mucor---amphoterin b---cell

membrane ergosterol **CVS:**

pt with mvp----standing per increase squatting pr decrease auscultation--

-

2 murmurs

ECG---a fib + a flutter

Aflutter--- Right atrium

T wave inversion---mitral regurgitation

Dilated cardiomyopathy+s3+s4 sound---dilated ventriclesor lv hypertrophy

HMG CO reductas

- Maccardle lactate level same after exercise,enzyme was ask phosphryalzy
- Pts has unilateral pain and tendor breast during breastfeeding and breastfeeding stop;
pharmacotherapy cell wall inhibitor
- Same scenario like above Dx bacterimia
- Ethic,Pregnant women come for antenatal visit and you find the fetus is die, how to deliver the news

Say... I have bad news, there is demise of fetus. Give time to process the news and then
discussthe delivery options etc koch ta

Same other option but missing the time for processing the news.

- Shistasoma mansoni how to eradicate, local program koch ta but main thing was to eradicate
the water snails...
- Giardia simple dx simple ta

- Patient with CF foul diarrhoea etc long scenario was simple I direct come to question and ask about the defect koch ta Lipas enzyme was answer
- Waskot Aldrich and CGD k simple dx
- Hemangioma pic nbme and ask origin cell Endothial cell
- Kaposi sarcoma pic ask about herpes virus , type 8 or type VIII, koch estara dye hoty don't confuse type 1 type 2 etc
- Cyclin D 1 phosphyrate etc pora pathway dya ta FA Biochem sy answer RB

BARCA mutation graph ie breast etc cancer koch dya ta ask about mechanism, homologous analogous koch han FA Biochem me han

- Medial nerve dx simple scenario mention thumb and index me numbness koch ta which nerve compressed
- Thoracentesis location asked
- A stroke Given --- alot of risk factor but main atrial fibrillation (atrial fibrillation > HTN> smoke this is for stroke)
- Movements related Koch disorders dya ty cerebellar was involved which cell of cerebellum defect? I choose purkinje
- Moderate long scenario lab me MCV 105 ty clear pata chalta vit b 12 which defect etc pocha
Ans DNAsynthesis
- Info given about Meckel diverticul indirectly which cell present there now Gastric not given directly ,but parietal cell are there so I choose that
- Shoulder and different bone me defect ta legnthly scenario I was confused but end mention about Congo birfringence in kidney became very clear, Ans multiple Myloma
- Blood on brochoscopy and renal defect etc what will find in renal or kidney related thing asked Antibody against membrane ta or type II sensitivity ie antibody against basement membrane
- Hodgkin lymphoma was there CD 15 and 30 mentioned but I forgot what was asked
- CML treatment I think was asked like anti tyrosinase activity type something don't confuse with AML of retinoic acid
- Polycythimia 2 mcqs no need to read scenario direct check Hb and HCT ,, in one Hb 19 and in second 22,
- In one asked about memutationpocha JAK2 and 2nd question me simple dx
- Inflixamab or IF alpha trt started , which prior test I choose for TB test

- Rheumatoid Arthritis scenario trt will be targeted against TNF (TNF inhibitor was there)
- Osteosarcoma triangle of bone mention long scenario risk factor ask not sure but I chose chemotherapy as pts was treated for ALL .
- Histology and also gross pathology of HPV describes in scenario in URT Ans papillomatosis of respiratory koch ta
- HIV patients CD4 koch 105 given a single ring in brain picture, CNS primary lymphoma
- Acyclovir resistance, Thymidine kinase
- Influenza vaccine last year effective but not now long scenario

Irrelevant option given main answer was alteration (A word) in neuroaminidase (genetic) don't know the exact word but very easy

- In portal hypertension treatment option of shunt to which vein I chose Superior vena cava (inferior vena cava not in option)
- Copper build up scenario confuse between decrease synthesis of ceruloplasmin or defective incorporation in ceruloplasmin
- Defect in medial and 3rd part of renal artery

Ans fibroplasia koch word ta (1st part me atherosclerosis in free 120)

- I was not sure but scenario like Burkitt lymphoma was given and ask where you have to look for or examine I chose abdominal mass
- Telephone interpreter I think 2 or 3 mcqs ans contact hospital professional interpreter through smart phone
- Ethics where doable not was like ppl create hype about it or may be I practice more on it but was moderate.

- Pts Hx of molar pregnancy or abortion she underwent hysterectomy koch but not come for follow up and now blood etc or mass presentation in lung hcg very raise ans

Choriocarcinoma

- Holosystolic murmur increase in child I guess VSD from vignettes reason why increase koch
- aysa I chose right ventricular outflow obstruction

- 86 year old man hand pic petechia shown reason of presentation
Prolin hydroxylation (Vit C)
- Other same scenario koch ta in old age female
Senile purpura
- Baby came due to leg fracture by baby-sitter lady call baby's calls mom to take hers consent
lya she was with boy friend in other place or country stuff like this is given main thing is
examinationper multiple injuries which thing should be concerned
Ans multiple injuries or fracture ta (child abuse i guess)
- Patient with pneumonia, gram positive cocci: cell wavy inhibitor. □ Machine worker,
cutaneous lesion: vibrio vulnifus
- Hypercholesterlomia 700mg, corneal clouding, taking Atrovastatin plus ezetimibe, activation
of 7 alpha dehydrozylase, deaction of ppar ?
- Biopsy gastric parietal cell?
- Git milk alkali
- Sle picture plus multiple rashes plus water, ANA negative : risk factor: alcohol? Rosacea
- Melanoma vemurifenab MOA
- Schistosoma mansoni: snail
- Chagas: insomnia?

- 21 hydroxylase bp 7p low na, ambiguous genitalia clitoromegaly
- Schizophreniform presentation 3 weeks, patient hiding knife under pillow

Prostaglandin eye lashes iris

- Glaucoma: beta blocker
- Sildenafil : blue eyes PDE6
- DM : erectile dysfunction
- Diarrhea ABGs
- Ipilimumab : side effect?
- Benzo short life : ATOM
- Romberg sign : pyramidal cells of cerebellum
- Temporal lobe/ tonic clonic seizure effect on hippocampus
- Decrease in brachioradialis reflex and dorsum of thumb sensation what nerve : radial
- Rheumatoid : tnf inhibitor
- AIN dx

ATN: contrast dye admitted to hospital dx

- SLE DPGN
- GOOD PASTURE dx on histo antibody told
- Hyperacute transplant preformed antibodies
- Bordetella pertussis virulence factor

- Rinne test vs weber arrows question
- 2 questions on EBV one was primary CNS lymphoma main CT scan
- Sleep walking in which stage of sleep
- Glaucoma drug
- Beta errors sample size increases α beta error Decrease
- Confidence intervals for biostats like in first aid there was written if odd ratio or relative risk includes 1 α this is not significant they give random values and a long stem..these are the main things.... values I recommend randy neil must
- Ethics dirty medicine a bit hard klu u will get something

- And one was rectal prolapse bcz of constipation bleeding waghera scenioro
- Hodgkin's lymphoma they mentioned CD15 and CD30
One was wiskot aldreich eczema etc in stem

Eczema
- Risk factors 6 to 8 questions very long stem for it use mehlamn pdf
- Growth graph don't remember what was that khu complicated graph wo stem na kedo
- Strep pyogens cellulitis
- HIV NRTIs lactic acidosis side effects but they asked why is it acidosis so maybe because of mitochondriaal DNA inhibition I put that don't know the answer
- Thyroid ups and downs questions T3 T4 TSH
- McArdle disease long stem bs muscle cramps in exercise glycogen phosphorylase
- Biochemistry was a bit easy
- Aw bal acute transplant rejection
- Immunology questions were most are like which cells play major role macrophages eosinophils etc
- Candida albicans scenario
- Trichomonas treatment
- Protozoas larvas and pictures in first aid
- Schistosoma mansoni pic snail in water wala answer wo wrki
- Immunology MHC 2 presentation (endosomes) was the answer
- Granulomatous disease
- Bal neisseria meningitis scenioro but they asked about risk factor and I was bs between cirrhosis and splene removal
- Resistant due to HSV thymidine kinase

- Scenario of a fungus azole was used and they asked about mechanism of action and the options were cellwall cell membrane etc and it's cell membrane
- Age related aortic stenosis long stem but main clue was age and murmur
- And one was aortic regurgitation but they asked about where will you hear it the best and the diagram was given
One was angiography of pulmonary and aorta long stem but the main thing was pulmonary artery runs behind so a bit difficult
- Aortic regurgitation heart sound
- Histology of pulmonary edema blood in os and the answer was due to severe MI
- Post MI complications 2 questions
- NRDS related one scenioro
- Pneumonia related 3 to 4 questions
- Chest X rays +++
- Entamoeba histolytica 2 questions one was flask shape ulcer
- N. Mening... risk factor
- Telephone interpreter 4mcq
- Foot drop
- g6pd def
- Malaria smear mcq
- Acute rejection
- Blood transfusion reaction
- Thymidine kinase resistance
- Lactic acid was normal... glycogen stroge disease
- Starry sky appearance histology
- Rinne test vs weber

- PPV
- Relative risk
- Absolute risk reduction
- NNT
- Many mcqs were on antibiotics moa
Starving mcq after 2 weeks

HPV scc
- Complicated mcs on germ cell tumor
- Brca mutation
- Sarcapto scabie mcq
- Biochemistry total 9 mcq but was easy
- Every blovk compromised of 5 to 7 mcqs
- Can't say what was tested but I can tell you what I would do if I could

- Biostats was straightforward!! Make sure you can interpret confidence intervals and p values - not a lot of math more interpreting!! Learn your odds ratio and relative risk (definitions and how to interpret the values)!! Otherwise not bad - save time w these questions by going straight to the questions. Something you don't need to read the entire thing bc the table is easy to read.

- Do some ethics practice

- Try to do a few timed uw sets!! Glance over the biochem especially the ones that have pathology associated w them.

- PLEASE! Learn your vitamins - b12 (goes without saying) and vitamin d, folate and iron. I mean learn everything ab them
- Calcium homeostasis - know everything ab it this includes vitamin d. And all the granulomatous diseases that have hypercalcemia and why — and cancers that cause it. Everything ab pth!!!
- Learn your circle of Willis - gross and otherwise. Do the mehlman neuroanat doc if you get a chance.

Murmurs 🤔! If you can't hear them to save your life learn the symptomology of each and the pt profile maybe you can get away with it. Different things that decrease or increase the murmur sometimes that'll be all they give to know the diagnosis.

- That's all I can come up with rn!! Will add more as I think of it
- Gardnella veginosi tx

BIOCHEMISTRY

1. Patient with fragile X syndrome clinical presentation i.e macrorchidism, long stature; effect? A)Demethylation B)acetylation C)Deacetylation D)Hypermethylation ✓
2. Retrograde movement through which protein? Dynein
3. Anterograde movement through which protein? Kinesin
4. Mitochondrial myopathy pedigree
5. Another pedigree...? Autosomal dominant
6. Mitochondrial myopathy question
7. Why doctors prescribe essential fatty acids? 😞 A) bcz they are not synthesized ✓ B) bcz not absorbed C) bcz not saturated
8. Vit B1 question
9. What type of nutrient will you recommend to Pyruvate carboxylase deficiency patient? Decreased carbs, normal/inc fats & proteins????? 🤔🤔
10. Question on glucagon & insulin mechanism
11. A person is starving for 3 days, what biochemical process would have been stopped? Glycogenolysis
12. Patient with muscle cramps during exercise, when he runs again the lactate levels are normal, which organelle pathology? Glycogen (dx mcardle disease)
13. Similar presentation, which enzyme deficiency? Muscle Glycogen 6 phosphatase

14. patient with very long chain fatty acids (VLCFA) elevated, pathology where? Peroxisome
15. Patient LDL elevated only, cause? LDL receptor dysfunction

IMMUNOLOGY

16. Neutrophil mechanism of destruction other than respiratory burst 🤔🤔???
17. Candida & S aureus chronic granulomatosis disease; what process defective? Inability to produce O₂-superoxide 😞
18. Patient goes to forest for 3 days & develops vesicles quickly; which cell? A) mast cell ✓ b. histiocytes
19. After 3 years of kidney transplant it is hypercholesterolemic; cause? Chronic transplant rejection
20. Patient on HIV therapy; which cells will inc? a) CD4 b) CD3 C) both ✓
21. TB case, mechanism? I chose inability to kill by phagolysosome in macrophage???? 🤔

22. Pt with pneumocystis jirovecii, cd 37 gene defect; which cells affected? A) B lymphocytes b) T lymphocytes????

MICROBIOLOGY

23. How influenza infection facilitates S aureus? Damaging epithelium

24. . Neonate with inc inspiratory stridor, no edemate, (no wheeze was mentioned as per my memory); cause? A) epiglottitis B) asthma C) pulmonary infection(I thought RSV infection) confirm again..

25. Hepatomegaly, jaundice; causative pathogen? Leptospirosis

26. Common bile duct infection by a pathogen, which other pathogen can also cause? Enterococcus fecalis

27. Giardia case & pic, how will it cause disease? A) attach epithelium B) invade epithelium

28. Patient with hx of injury has crepitus, caused by ? Gram +ve anaerobic bacilli(clostridium perfringens) 😞

29. S aureus question

30. Patient with thrombocytopeni, kidney injury, hemolytic anemia; causative organism? E coli

31. Pathogen causes diarrhea, it has lipid bilayer, dna, rna; what is it? a) protozia b) virus c) bacteria d) fungi

32. Schistosoma picture with lateral spine; what is its reservoir? Snail

33. Infectious mononucleosis with heterophile antibodies +ve, virus belongs to? Herpesvirus (EBV) 😞

54. Someone's daughter went to party last night & found unconscious, glucose levels greater than 500 mg/dl, her parents suspect of substance abuse; what will you say to her parents. Further reports are waiting; what will you say to parents? A) It is one of the possibilities that she is intoxicated B) your daughter has DKA

55. Another easier question on interpretor

CARDIOLOGY

56. Injury on chest near sternum; which structure damaged? Right ventricle

57. S2 wide fixed splitting; dx? A) ASD B) VSD C) PDA

58. Murmur increases with squatting and decreases upon standing????, 😞😞

59. Mitral stenosis murmur auscultation

60. Patient with high arched palate, auscultation given? I chose Mitral valve prolapse. (High arched palate = marfan syndrome= MVP

61. Pale heart on autopsy; histopathology will show? Macrophages 😞

62. Vignette, diastolic snap after S2; location of mas? Left atrium

63. ECG strip showing bradycardia i.e slow RR waves; which structure pathology? SA node

64. Torsades de pointes ECG strip; which channelopathy? Potassium

65. HOCM autopsy picture, which protein mutation? Beta myosin heavy chain

66. Infective endocarditis causative organism? A) S mitis B) S aureus ????? 😞😞

33. Infectious mononucleosis with heterophile antibodies +ve, virus belongs to? Herpesvirus 😞 (EBV)

PATHOLOGY.

34. Malignancy spread to multiple lymph nodes; which protein dysfunction? E-cadherin

35. Wound healing after 3 weeks? Granulation

36. colorectal cancer marker? CEA

PHARMACOLOGY

37. Drug given 50 mg, plasma conc 10 micro g; calculate Vd?

38. Inverse agonist graph question

39. Non comp inhibitor graph question

40. Patient with urge incontinence; tx MOA? Antimuscarinic

41. ADHD drug MOA? Utilize vesicular monoamine transporter (VMAT) (memorize 238 pg synapse pic 😞)

42. Drug X first dec HR inc PVR; after drug Y HR same PVR inc; what are drugs X & Y?



43. Sweating which neurotransmitter? Acetylcholine

PUBLIC HEALTH SCIENCES

Biostats

44. Vague Question on type of study

45. NNT calculation

46. True negative calculation

78. Patient with lots of adhesions in intestine; cause? a) multiple surgeries (I think correct but confirm it. b) diverticulosis

79. Familial adenomatous polyposis dx

80. Lynch syndrome case; which gene mutation? MLH1

81. Patient with hepatic encephalopathy, lactulose is given; it's MOA ? a) dec pH ✓
b) kill bacteria c) dec absorption bla bla

82. Something wrong with Cornea & patient has tremors; pathology of which mineral? Copper

83. Hemochromatosis classical presentstun i.e hepatitis, bronze diabetes bla bla; which gene mutation? HFE

84. LFTs elevated with histology of testis; what will be seen in testis histologically? Testicular atrophy (liver damage+testicular atrophy =hemochromatosis

85. Cholelithiasis case; cause? Dec chenodeoxycholic acid production (confirm it)

86. Acute pancreatitis risk factor? Alcoholism

87. RUQ pain radiating to back(pancreatitis) ; cause of malabsorption? Don't remember options properly...

88. Patient on cisplatin chemotherapy; another drug administered, MOA? Decreased 5-HT3

67. Rheumatic fever case given; cause? A) autoimmune B) postinfectious ✓

68. Apgar score 9, what will happen to Left atrial pressure & pulmonary vascular resistance? LA pressure inc pulmonary resistance dec

GASTROENTEROLOGY

69. Duodenal ulcer; bleeding from which artery? Ceiac

70. Portal HTN case; bleeding from? Left gastric artery

71. Patient on acetaminophen; hepatotoxicity mechanism? Decreased glutathione available

72. mass in inguinal area that is reducible lateral to inferior epigastric artery; most common content? A) Small intestine (right) B) vas deferens

73. Diaphragmatic hernia case; what defective? Pleuroperitoneal membrane

74. Beak shaped pic on barium swallow; which neurotransmitter defective a) ach b) NO ✓

75. Patient not able to swallow; (something wrong with upper 2/3 of esophagus; histologically what? A) squamous metaplasia ✓ b) adenocarcinoma

76. Patient with Celiac disease features; which primary cell is involved in pathogenesis? a) T lymphocytes ✓ b) B lymphocytes 😞

ENDOCRINE

90. Glucagon, insulin (maybe glucose) production inc at night by which hormone? Growth hormone

91. Cortisol increases glucose production by? Inc glycogenolysis

92 Nephrogenic DI

93. Pregnant female with symptoms of hyperthyroidism, low TSH, dec thyroid iodine uptake, exophthalmus absent; cause? Release of preformed hormones (dx hashimoto)

94. Hyperparathyroidism case

95. Patient in 30s with elevated glucose levels; cause? a) insulin resistance ✓ b) loss of Beta pancreatic cells

96. Patient cortisol production dec on low dexamethasone suppression test; pathology location? Adrenal gland

97. Patient cortisol production dec on high dexamethasone suppression test; pathology location? Pituitary gland

98. Pheochromocytoma features i.e episodic headache, HTN location? Adrenal gland

99. MEN 2B presentation; which gene mutation? RET

10:06 PM

HEMATOLOGY & ONCOLOGY

100. Why do we give anti RhD IgG? A) to prevent antibodies formation in fetus in 1st pregnancy B) to prevent antibodies production in fetus in 2nd pregnancy c) to prevent antibodies formation in mother in 1st pregnancy d) to prevent antibody

HEMATOLOGY & ONCOLOGY

100. Why do we give anti RhD IgG? A) to prevent antibodies formation in fetus in 1st pregnancy B) to prevent antibodies production in fetus in 2nd pregnancy c) to prevent antibodies formation in mother in 1st pregnancy d) to prevent antibody formation in 2nd pregnancy
101. Hereditary spherocytosis case
102. Lab findings of iron deficiency anemia i.e MCV dec TIBC inc & some other. Big stem & then asked what indicates iron deficiency? Options were related to patient's behavior; ? I chose eating behavior (bcz it reminded me of pica)
103. Von willbrand disease case
104. Purpura pic on leg, question? Maybe idiopathic thrombocytopenia pupura???? 😞
105. Waxing & waning lymphadenopathy, BCR-ABL 14;18 fusion; what will be affected? Inhibits apoptosis
106. Single ring enhancing lesion on MRI; causative organism? a)toxoplasma b)EBV (EBV bcz primary CNS lymphoma =single ring enhancing) (toxoplasma gonadi=many
107. CML case presentation (not told that pt has CML) & asked tx MOA? A) vitamin A causing differentiation B) tyrosine kinase inhibitors
108. Polycythemia vera case; what mutation? JAK STAT
109. Another question on polycythemia v (something like patient has itching while showering rbc's elevated, why? Quite similar to previous) I think it was like

122. Same description, loss of red reflex, (cause of this eye pathology aisa hee kuch)?
Loss of heterozygosity (thought osteosarcoma associated with retinoblastoma).

1 ya 2 aur qs thay tumors mein sey.

123. Osteoarthritis risk factor?

124. X ray of elbow joint & foot, edema etc... at distal medial part of foot and elbow, what will be seen on aspiration analysis?

a) Monosodium urate crystals b) calcium pyrophosphate.

125. Leukocytes elevated in synovial fluid analysis no organism seen. Also something wrong at other place. What is the mechanism/pathway for problem in joint?
Hematogenous seeding.

126. Inflammation of tendons, what else will be found or you will ask for (sausage fingers were also given but not confirm about this)?
A) dryness of eyes B) hx of rheumatoid arthritis

127. Female, Pain while walking upstairs or standing from chair, multiple points muscle soreness? A) polymyalgia rheumatica B) fibromyalgia c) polymyositis d) dermatomyositis?

128. Renal + msk mix q; Cryoglobulins + renal pathology, cause? Hep C

129. Patient eye gets fatigued after staring a while? (Myasthenia gravis tha answer ya shayad antibodies developed against nicotinic receptors)

130. Patient eyes not relax, oral dryness, hilar mass? A) myasthenia gravis B) Lambert

115. Patient has current like sensation throughout the leg & (maybe they also mentioned disc herniation bla bla bla but nahi parha usko ache sey) loss of dorsiflexion & sensation between toes, which nerve root? L3-L4, L4-L5, L5-S1.

116. Patient on sevoflurane develops fever & muscle rigidity, what is defective?
Ryanodine receptors (dx malignant hyperthermia).

117. Patient had something wrong with lateral epicondyle, what will you see on examination? (a) loss of sensation of dorsum of hand b) pain while extending wrist. B right hai most probably 99%.

118. Patient had young age, multiple difficulties with lower limb movements i.e. adduction medial rotation lateral rotation waghera & something like pt felt crack while fixing the femur (exact aisa nahi tha but aisa kuch) what is dx slipped capital femoral epiphysis. (Iska risk factor bhi yad karlen BMI).

119. Patient has point tenderness at knee & vertebrae, what will be mechanism of tx?
Cutaneous vit D metabolism (exact word yeh nahi tha but matlab yahee tha). (Point tenderness = osteoporosis)

120. Patient has large head size, hearing loss, alkaline phosphatase elevated, erythema surrounding joint/bone, dx?
Osteitis deformans/paget disease.

121. Periosteal reaction triangle elevation, risk factor for developing this condition?

122. Same description, loss of red reflex

130. Patient eyes not relax, oral dryness, hilar mass? A) myasthenia gravis B) Lambert Eaton syndrome

131. Melanoma pic was given? Dx melanoma

132. Kaposi sarcoma pic was given, caused by which virus? HHV 6, HHV 8 etc..

133. Capillary hemangioma pic, what is the origin of this hemangioma? Mesoderm
Maybe varicella zoster virus question.

134. Ring type lesion was given? Which organism? a) tinea ka specie b) mallasezia....

135. Cold & pale skin, hair loss, dec pulses, cause? Atherosclerosis

136. 1st & 2nd degree burn, what caused it? A) NH₃ ingestion/inhalation, b) phenyephine subcutaneous rest options don't remember.

137. Patient on aspirin, asthma exacerbated, cause, inhibition of COX1 causing pathway to get more leukotrienes.

138. Patient room had acetaminophen bottle empty, cause of hepatic failure? Decreased glutathione.

139. Patient has been given azathioprine & then allupurinol develops more myelosuppression? Accumulation of 6-MP metabolites.

NEUROLOGY:

140. Hippocampus excitation injury due to which neurotransmitter : NMDA

141. After months of injury glial reaction , which cell: astrocytes

142. ADH synthesized in which nucleus: c
of option was from supraoptic or paraventricular

154. Patient with intellectual disability, angiomyolipoma, rhabdomyoma; what else will be seen? subependymal nodules.

155. MRI showing mass in cerebellum with description of ataxia..... what will be seen on histology? Rosenthal fibers.

156. Subacute combined degeneration case but mixed with hx of alcohol use & ataxia bla bla bla: a) Subacute combined degeneration b) mamillary body

157. Patient with localization to side in weber test & rinne test shows Air conduction greater than bone conduction: a) cochlear nerve b) medial geniculate nucleus other options were related to anatomical defects (but air conduction greater=sensorineural)

158. AV nicking patient has lost eye vision: a) HTN b) angle closure glaucoma c) open angle glaucoma

159. Abducens nerve palsy: a) esotropia of ipsilateral b) exotropia of ipsilateral c) eso of contra d) exotropia of contralateral

160. Patient when looks left, there is abduction of left eye but can't adduct rt eye, when he looks right, can abduct rt eye & adduct left eye, (some other description): a) abducens nerve b) left medial longitudinal fasciculus c) rt medial longitudinal fasciculus.

161. Patient on sevoflurane develops fever, muscle rigidity, dx: Malignant hyperthermia

162. Patient with muscle rigidity, drug MOA: GABA B agonist.

163. Tramadol adverse effect:

164. Alcohol affects which drug metabolism:

143. Patient has fear, something feeling, & then loss of awareness, this seizure arises from which lobe: temporal lobe

144. Loss of contralateral sensation: thalamus

145. MCA case...

146. Patient walks without clothes & some other features, what will be further finding?

A) cognition B) visuospatial disorientation

147. Midbrain infarction picture was given, contralateral hemiparesis & some other description, what will you see further? Loss of accommodation

148. Larynx pic given & pt in pain, which nerves transmit this? A) IX & V B) X & XI

149. Patient has Unilateral loss of vision & then gets normal again: a) amaurosis fugax b) atrial fibrillation

150. Cluster headache classical presentation: patient has unilateral autonomic symptoms with pain surrounding eye

151. Alzheimer dementia case

152. Gait ataxia + cognitive decline + urinary incontinence, cause: normal pressure hydrocephalus (not remember if this question was asked or not)

153. Patient with multiple sclerosis can maintain balance with open eyes but can't with closed eyes: a) Multiple nerve roots b) cerebellar vermis c) dorsal column medial lemniscus

154. Patient with intellectual disability, angiomyolipoma, rhabdomyoma; what else will be seen? subependymal nodules.

155. MRI showing mass in cerebellum with

164. Alcohol affects which drug metabolism: NSAIDs in option: midazolam.

PSYCHIATRY

165. Patient admitted to hospital says other nurses & doctors should not treat her, only 1 resident treat her, which ego defense? Splitting

166. 3 month old infant some features were given, what will be other finding? I chose pincer grasp

167. Child abuse case, what is the most accurate finding to show it as child abuse? I chose Bruises & injuries at multiple stages

168. Auditory hallucinations & some other features (seemed schizophrenia spectrum) for 1 day: dx a) brief psychotic disorder b) schizophrenia

169. 80 years old patient feels I don't want to live & has cerebrovascular accident, risk factor for suicide: a) anhedonia b) cerebrovascular event

170. Nystagmus + violation, which substance abuse? Phencyclidine

171. Patient on olanzapine, (stem was given with some other factors) got weight gain: cause? Medication

172. Patient with normal BMI had bulimia nervosa features & she had amenorrhea. question asked cause of amenorrhea? Hypogonadotropic hypogonadism.

172. Patient with normal BMI had bulimia nervosa features & she had amenorrhea. question asked cause of amenorrhea? Hypogonadotropic hypogonadism.
173. Anorexia nervosa features & asked what other physical exam findings..

174. Patient had empty bottle of tablet in room, dec glucose concentration, condition improved after orange juice, C peptides were low. What is dx? A. Factitious disorder B. Insulinoma C. Diabetes related option.

175. Chronic fatigue syndrome case

RENAL

176. NBME hydronephrosis picture. What is the cause? Posterior urethral wall sphincters

177. GFR is decreased by a drug, what is the MOA of that drug? A. Afferent dilation b. Efferent constriction c. Afferent constriction d. Efferent dilation.

178. Long stem with lots of labs.(after calculating electrolytes it was non anion gap)Cl elevated pH dec HCO₃ dec Cause: renal tubular acidosis b. DKA c. Lactic acidosis bla bla bla.

179. IgA nephropathy like presentation, which type of hypersensitivity? Type 3

180. Patient with malar rash, anti dsdna +ve, wire loop capillaries; which type of hypersensitivity? Type 3

181. Renal pathology (maybe glomerulonephritis) & cryoglobulinemia; what is the cause? Hepatitis C.

182. Long stem question with lots of labs &

182. Long stem question with lots of labs & one of labs revealed hexagonal crystals; Type of stone? Cysteine

183. Patient unable to do urination & then it flows its own? Cause? Pelvic splanchnic nerve damage.

184. Patient with cystitis findings i.e urinary urgency, suprapubic pain bla bla bla. What is the mechanism of drug of choice? A. DNA gyrase inhibition B. Protein synthesis inhibition C. Dihydrofolate to tetrahydrofolate inhibition (correct)

185. Fever, pain in flanks, no rebound tenderness, WBC & RBC casts; dx? Acute pyelonephritis

186. Question showing before desmopressin & after desmopressin test labs (like they tried to confuse with polydipsia, nephrogenic DI & central DI. Maine dil mein kaha Aise hum bhi confuse hone wale nai 😊). Patient also had hx of DI; labs seemed to be prerenal azotemia; cause of patient's renal pathology? Loss of fluid in GI.

187. Long stem showing Patient on vancomycin & another drug was given then developed some renal related pathology; eosinophils were elevated in labs; dx? Interstitial nephritis

188. Renal pathology; physical exam shows abdominal bruit; what is mechanism of renal injury? Ischemic bcz I thought abdominal bruit=renal artery stenosis

189. ACE inhibitor arrow question. Patient is on a drug & also has dry cough. Physical

189. ACE inhibitor arrow question. Patient is on a drug & also has dry cough. Physical exam reveals lungs clear no wheezes bla bla. What are the lab findings in relation to renin, AG 1, AG 2, Aldosterone?

190. Patient developed pre renal azotemia; also has hx of cocaine intake, cause? I chose cocaine toxicity?????

191. Patient with edema. Na & Cl levels decreased were normal. I chose fluid in other compartment. Other choice was decreased ADH secretion but urine osmolality was normal

REPRODUCTIVE

192. Vitelline duct question: (i think answer was ectopic parietal cell)

193. Ectopic palatine tonsil origin: 2nd pharyngeal pouch

194. Y shaped uterus with 2024 FA pg 640 pic B; cause? Incomplete fusion of paramesonephric duct

195. Glans penis nerve supply: genitofemoral nerve L1-L2

196. Blood accumulate in lower abdomen & some other description; (options were related to genitourinary trauma) location: Bladder neck

197. Turner syndrome question

198. Turner syndrome question

199. Androgen insensitivity syndrome question

200. loss of smell & amenorrhea; dx? Kallman syndrome

201. Pregnant female+low platelet count+liver enzymes elevated; what will you see on

phosphatidylcholine

210. Patient aspirated peanut (no other clue), it go to which lobe? (I chose right lower lobe but not confirm)

211. Pt with pH elevated, pCO2 dec, spO2 dec; cause? A) Rt to left shunt b) ventilation perfusion mismatch I chose.

212. Pulmonary embolism & dvt 2-3 questions. One was like S1Q3T3 with hx of flight, cause? Factor V leiden deficiency b. Factor VIII prothrombin deficiency bla bla



213. Patient working in shipbuilding with subpleural thickening; which lobe will be affected? Lower lobe

214. Patient with nodular calcifications in lung; cause? Silicosis

215. Patient with hx of RTA to abdomen develops hypotension & hyperresonance, CXR showed tracheal deviation; cause?

Splenic rupture or fractured ribs?? 😞

216. Patient with hx of pulmonary htn receives Beta agonists for bronchodilation. He doesn't respond well to it, a drug which acts upon G protein coupled receptor for bronchodilation, what is that drug?

A) theophylline B) tiotropium 😞

217. hamartoma in lung biopsy picture? a)

hamartoma ✓ b) adenocarcinoma 10:30 PM

Parathyroidectomy patient. Artery to superior part ligated; collaterals from which artery supply then? External carotid artery



10:35 PM

201. Pregnant female+low platelet count+ liver enzymes elevated; what will you see on blood smear? Schistocytes (bcz I thought HELLP syndrome)

202. Picture showing Lesion on vagina with erythematous base & was painful; causative organism? I chose haemophilus ducrei (others were treponema hsv bla bla bla.

203. E7 on which type of epithelium (almost similar statement): columnar epithelium

204. Fibrocystic changes question...

205. Mother breastfeeding baby & then stops breastfeeding due to pain in medial to nipple, cause? A) Bacteremia B) nipple injury



206. Patient with mobile mass (some other description) in breast; dx? Fibroadenoma

207. Testicular cancer major risk factor: klinefelter syndrome

208. 😞 Feeling of some mass+ does not transilluminate? A) epididymitis B) varicocele C) hydrocele

RESPIRATORY SYSTEM

209. Question on surfactant, (don't remember properly but it was like which substance is most important?)

phosphatidylcholine

210. Patient aspirated peanut (no other clue), it go to which lobe? (I chose right lower lobe but not confirm)

211. Pt with pH elevated, pCO2 dec, spO2 dec; cause? A) Rt to left shunt b) ventilation perfusion mismatch I chose.



- Q → ADHD (Attention deficit hyperactivity disorder) Treatment -
- Q → Membranoproliferative glomerulonephritis.
- Q → Common brain lesions (Empoatomal),
- Q → Myasthenia gravis -
- Q → Intracytoplasmic & Intramuclear ~~inclusions~~
Inclusions Rx: —
- Q → Chronic granulomatous disease.
- Q → Hypersensitivity.
- Q → Kaposi sarcoma.
- Q → Bacterial vaginal infection.
- Q → Drug → In DNA Synthesis.
- Q → TB drug side effect.
- Q → Acute pancreatitis. Necrosis -
- Q → Cystic fibrosis → ~~which channel~~
- Q → Hernia (Indirect),
- Q → Tension Pneumothorax
- Q → Complete / Partial mole.

Date: _____

Parathyroid ~~form~~ Hormone, Vit D
Lymph node Testis, Penis
Cushing syndrome.
Osteoarthritis -
Rheumatoid arthritis.
Winging of scapula. → Nerve
Lynch Syndrome.
Gout arthritis → crystal deposit.
Wernicke Korsakoff.
Vit B12 deficiency.
Kwashiorkor.
Vit A → dry skin (thick).
Old age 1st change on skin.
Circle of Willis.
cluster headache (Risk factor).
Alzheimer's Huntington / Parkinson's difference.
Behavioral changes which lobe involve.
Brain tumor → women → ~~ep~~ → meningioma
Mean / Median / Mode +ve
-ve
Tension Pneumothorax.
Aortic murmur.
ECG → QRS Prolonged
ST elevation -
Fragile X Syndrome.