

1 female found unconscious at couch, bleeding from vagina: Pelvic examination.

2 16 years old female brought by mother, her mother was concerned about alcohol abuse disorder in her daughter. Mother left the room how physician her ask about alcohol abuse disorder?

A now a days kids attend party and drink alcohol

B when I was 16 I drank alcohol

C you re not sexual active means u haven't drank alcohol. ✗

3 Female pt when asked about Alcohol usage she said Jesus I m Christian. Physician response?

A we ask these questions from every pt

B I will consider this as No

C ok we coming to this part of history later. ✗

4 Two questions on positive skew. Other answer was Mean.

5 A scenrio of Retinoblastoma and x ray of Tiblia fracture. RB gene mutation. What is pathogenensis

Cell cycle dysregulation.

6 Stab wound medial to nipple. Muffled heart sounds. Location of blood accumulation?

Pericardial sac

7 Breast feeding mother has breast tenderness without erythema. What is the cause of condition?

A Excessive breast feeding

B mastitis

8 A mother develops mastitis and started crying that she thought she would continue breast feeding for 8 months now which she cant. What should be physician response?

A why you wanted to continue breast feeding for 8 months

B Don't get upset there is treatment you can continue breast feeding

9 Female pt came with vaginal bleeding and ecchymosis on face. What should be physician response? (Actually this rape scenrio )

A Tell me what happened

B Is there any family member, I can call

C should I call police

D Do you think u might got pregnancy ✕

10 A female sexually active pt, doctor asked for vaginal examination and she blushed and said No. physician response?

A should I call female colleague who can conduct examination

B Tell me what concerns you about vaginal examination

11 Botilium toxin MOA = Prevent release of Acetylcholine

12 kaposi sarcoma = HHP 8

13 Intention to treat analysis formula ✘

14 polyps on vocal cords = HPV

15 child brought by her mother with complain of asthma exacerbation her mother ✘

16 Pt taking NSAID having blood in vomiting and oligouria, reason = Decreased Prostaglandin E2

17 male baby bilateral hydronephrosis = Posterior urethral valve.

18 hypercalcemia = Ca sensing Receptor

19 anti Tb Drug that decrease mycolic acid synthesis = Isoniazid

20 = Iron absorption = Duodenum

21 Child has bloody diarrhea and schistocytes = E Coli

22 histology of some blood cancer asking translocation I did it wrong ✘

23 C1 esterase inhibitor

24 fish poisoning epinephrine given which other drug should be given = anti histamine.

25 pt having knee pain histology showing needle shape crystal = Gout

26 Obese pt having systemic HTN suffering from Sleep apnea has loud P2 which role in pathogenesis = Endothelin

27 pt of narcolepsy which question to be asked in history = Daytime somnolence

28 Pt brought by her mother jis ma pt ko depression ki Hx thi or pt ko logo k sth maza tha per kam logo se milta tha = avoidant, antisocial, schizoid

29 female pt having endometrial cancer risk = Obesity.

30 female pt painful menstration nodule on uteroscleral ligament = Endometriosis.

31 Child with multiple fractures and grey sclera?? ✗

32 Systemic Amphotericin B given. Adverse effect due to binding to = Cholesterol.

33 Pneumothorax = decrease breath sound and decreased vocal fremitus ✗

34 Bell palsy question ✗

35 Marking of major arteries (vertebral arteries). ✗

36 pt having features of Cushing syndrome and gaining weight ( not lossing) and options were

A adrenal medulla

B Lung cancer

C anterior pituitary

37 Old age patient with UTI ( indicating sepsis) having dyspnea = ARDS

38 pt having chronic pain managed by corticosteroid infusion. Pt is having decreased vision = Lens opuaption.

39 pt suspected of poisoning brought by friends decreased vision bilaterally = Methanol

40 Rat busting waro chokro ✘

41 Macardle disease = Glycogen myophosphorylase

42 Long and very long chain fatty acid accumulation = Peroxisome.

43 pt had dyspnea went to Indiana = histoplasmosis

44 Pt has heel pain which is severe with 1st step in the morning and tender to touch. Inflammation of which of the following structure?

A Achilles tendon

B Planatar fasciae ✓

45 Two questions on Heart Sound ✗

46 HIV virus gene graph was given asking about why immunisation don't occur for it

I did Error in the DNA synthesis ✗

47 pt hospitalised his interaction was good with staff initially but it got worse, staff complained this to doctor but doctor said it's easy to work with patient. What is the defence of pt

I did splitting.

48 pic of back of baby having black patches condition seemed benign all options were indicating malignant except one

I did number of melanocytes.

49 35 year old female admitted multiple times in the hospital due to recurrent pleural effusion requiring drainage. Now pt is irritated and saying I don't want to keep this (mtlb wanted to die) ✗

50 Boy admitted in hospital due to chronic illness his behaviour was better initially but one day he got mad at staff when staff told this to doctor he went to his room and he was using mobile. Doctors response?

A something like if you re busy I can come later.

51 pt suddenly fell on floor in the kitchen and died his tracheal and heart autopsy picture was given. What is the most immediate cause of death in this pt

A Pulmonary bronchospasm ✗

52 Hypovolemic shock arrow were given

53 RTA pt came in ER with chest crepitus and 80/50 pressures. What has happened

A Splenic rupture

B Rib fracture ✓

54 Pic of internal haemorrhoids were given and pt was bleeding bright red blood. Which vessel.

A superior rectal artery ✓

B Super rectal vein

55 Abdominal X ray was showing multiple air fluid levels and pt having abdominal pain. Few years ago he went under Exp laparotomy. What is the risk factor for his condition.

A Laparotomy.

56 Pt has chest pain and later it was found to be MI. After stabilisation of pt he developed murmur on left sternal border.

A Tricuspid regurgitation

57 Histologic picture was given (difficult to identify) but scenario was say female pt with yellow discharge with malodourous smell

A Trichomonas

58 Young male pt who had sex with his gf without barrier protection and presented with STI. Physician response.

A Tell your gf about STI jaise Hum uss k investigation krwe

B next time use condom so u don't get serious illness

59

This pic came in the exam and pt had features of Huntington, was asking about which part is defective.

I did C

60 Scenario of Schizophrenia where dopaminergic activity is altered?

A Mesolimbic ✓

B nigrostratial

61 Hepatic vein thrombosis effect on liver only option which made sense was Centrilobar congestion, hemorrhage and necrosis.

62 female pt thi uss ko IDA or iron supplements le rhi thi ab usko kya dege like vitamin neech options ma vitamin k functions likhe hue the

Hydrolyation of collagen

Synthesis of heme

63 long scenario of Vit B1 def asking which biochemical function will be affected? Conversion of pyruvate to Acetyl CoA.



64 pregnancy or estrogen I don't remember properly but smt like this asked about effect on Thyroid hormones

Increase total T4, Normal free T4, Normal T3 , Normal TSH

65 long scenario in which patient was having skin lesion around the nose. Many fungus options were scenario aise tha jis ma lag rha tha leishmaniasis hai

66 female was going under premature Labour at 21 week of gestation. Physician response?

A what do you know about premature Labour

B It's very difficult for premature babies to survive but we will try our best to save the baby

67 DVT case

I did Factor V mutation due to Protein C can't bind.

68 Other DVT cases which was easy.

69 Mother brought her autistic child to your clinic she was waiting in the clinic and physician came. What should be his response?

Every option has similar greetings and how may I help you today but difference was

A Mother and child

B To mother

C to patient

70 Drug addict boy admitted in Rehab (ethics) ✕

6th August 2024

-Nnt calculation

-Pt with cardiac output 23%, multiple admissions, not a candidate of heart transplant, rejected lv assist device how should you respond: plan end of life discussion with family, have you reconsidered lv assist device, do you know how bad your heart failure is

-Pt with endometrial carcinoma, question stem with long hx and risk factors, what is her most imp risk factor: obesity, smoking, alcohol,

-Pt trying to conceive, off medroxyprogesterone but unable to why? -hx of appendiceal surgery/rupture(?), medroxyprogesterone,

-Pt trying to conceive but cant, has recent hx of dysmenorrhea beginning one week before her cycle and dyspareunia, exam shows thickening and nodularity of uterosacral ligaments, cause? Endometriosis, pelvic congestion,

-some pregnant woman at 7 or 10 weeks gestation, basically asking what developmental stage the lungs would be at... all the options were too advanced so i just chose lung bud development for the given ga imo

-patient had a laceration and now presents 2 weeks later for follow up and they had a picture, it was a lot of blood vessels and inflammatory cells i think, they were asking what is happening. Options were acute inflammation, chronic inflammation, granulation tissue...

-patient recently started breastfeeding 2 weeks ago and now presented with painful well demarcated induration medial to the left nipple and pain what is the dx? Nipple sth, dilated milk ducts sth, <- i chose this.

-question on doxepin sth (tca)

-one auscultation question on aortic stenosis classic vignette of old man with dyspnea and the description of the murmur, on auscultation could hear it on the carotids as well. asked to diagnose

- one auscultation qs on woman with mitral regurg, holosystolic murmur best heard at mitral area, asked which heart chamber would be dilated.
- wallenberg syndrome, asked which artery affected (pica)
- mother brought child with autism spectrum disorder, nurse tells physician that child did not let her take vitals, only temp and sth else. What should the physician do when he enters the room. 6 options; face mother and ask what brought you in today, face mother and ask can i auscultate heart and lungs, face mother and ask can i take vitals, same 3 face child and ask. I picked one with the mother not the child because he might not answer because of his condition. Dont remember what i picked.
- ^too many questions like this, i cant remember all of them. Literally like 6 of these every block.
- classic case of sarcoidosis asking why pt has elevated calcium on labs with one of the option 1 alpha hydroxylase as the answer
- classic case of HUS with child with bloody diarrhea dont remember what they asked
- Patient pre-eclampsia and there was a picture of helmet cells, with low haptoglobin and high ldh in labs, dont remember what they asked
- pt with large echymoses and some petechiae on limbs with only low platelets on labs, i picked glycoprotein 2b/3a antibodies because other options werent making sense with the vignette
- pt with sexual contact hx with a picture of lesion right on glans penis, asked which Lymph node will this part drain into; paraortic, internal iliac, external iliac, superficial inguinal, deep inguinal. I chose deep inguinal.
- Question on ATN with granular casts sth
- question on jarisch herxheimer reaction asking what cytokines mediate this reaction; il1, tnfalpa, il6.. or il3,il7.... or tgfbeta, 1l10.. il2,il12... il4 was also mentioned. There were three cytokines to every option and i think they all targeted a subtype of effector cell like cd4 cells, cd8 cells, macrophages. I just picked the first one.

- Question with a young man with a murmur at the left sternal border at 4th intercostal space, looked like hypertrophic cardiomyopathy and asking what was wrong, i dont remember the other options but i picked narrowing of subaortic area
- pt with longstanding hx of type 2 diabetes with kidney issues, dont remember the rest of the vignette but one of the options was nodular glomerulosclerosis. All other options didnt make sense.
- man ate 2 pounds of raw bear meat like a week ago sth and now presents with fatigue, nausea, vomiting, diarrhea. Asking sth about infectious agent
- another question on hemolytic anemia, pt went to sudan and came back, had lots of labs that showed hemolytic and options were a list of organisms i dont remember but the one i picked was babesia
- one question on postive skew asking which measure of central tendency will fit; mean, median, mode, accuracy. Median is the answer
- question on oculocutaneous albinism, picture of child with a massive amount of freckles and vignette saying hx of photosensitivity to sunlight and sth with eyes as well. Asking mode of inheritance; autosomal recessive, autosomal dominant, x linked, y linked
- pt collapsed/fainted 30 mins ago and revived, now alert what will his acid base status be
- question about guy exercising and then going to chill in the sauna to help with some muscular pain; which of his cardiac parameters will change, increase preload, decreased afterload, increase contractility, decreased contractility
- pt presented with mother, has severe cystic acne and mother asks if theres a drug to be given that can help. Physician knows of this drug that has gone a meta analysis of several trials or maybe it was case controls There was a graph on the side that showed all the trials listed on y axis and confidence intervals on x axis. On the left of x axis was 0.3 or 0.9, centre of x axis was 1 and right was some value more than 1. To the left of x axis was also labelled in favor of the drug and to the right was labelled in favor of placebo. Was asked to pick which trial that is significant. The only option made sense was A since it was to left and its confidence interval did not cross 1 on the x axis. All other option

either crossed 1 on the CI scale or were to right of the x axis in favor of placebo.

-what pathway affected in schizo; mesolimbic, mesocortical, nigrostriatal, tuberoinfundibular, 1 other option

-labs given like calcium, pth and phosphate too i think and asking which gene responsible for condition; fgf23, foxp3, some other genes that ive never heard of.

- question on pupillary constriction and dilation

- pt with glaucoma which drug not to give; b antagonist, a agonist, muscarinic agonist, muscarinic antagonist

- pt, male, hx of drinking a few drinks per week, with cluster headaches, asking what is predominant risk factor for him; male, alcohol, some other options

- 15 yr old girl with hx of bloody diarrhea with abdominal pain asking what is the dx with 3 pictures; one of colonoscopy, two of intestinal biopsies. Colonoscopy picture showed ulcers spotting the mucosa, biopsies showed inflammation in the mucosa; options were crohns, UC, celiac, giardia.

- pt with migratory polyarthritis and fever; what is the vector for condition; sandfly, mosquito, tick. Seemed like chikungunya or zika

- pt went to either texas or new Mexico and now has fever and cough sth, picture of a cell filled with tiny other cells, classic spherules of coccidioides Asking what this pt has; options were aspergillus, candida, crypto, coccidioides, either mucor/rhizopus.

- pt received a cadaveric renal transplant that had hyperacute rejection, pt had a chronic hx of blood transfusions; what was the mechanism of rejection/ what were the antibodies directed against; mhc of renal endothelium, mhc of renal sth, rh antigen on renal endothelium, rh of renal sth, two other option i dont remember

- pt collapsed was given naloxone by paramedics now brought to hospital and expresses concern hes withdrawing from sth. They were asking withdrawal symptoms with 3 columns; eyes miosis or mydriasis, skin dry or diaphoresis, bowel sounds hypoactive or hyperactive.

- pt with delusional and hallucination symptoms shifted from psych place to hosp to manage symptoms tell doctors that his family had symptoms of intense fever sth when given antipsychotics and to tell that to the doctor whenever you get admitted sth; which channel is affected. Looked like neuroleptic malignant syndrome. Options were Na, K, Ca, Mg. I picked Ca.
- woman, previously a college professor, admitted to hosp, nurse comes and says she acting kookoo(weird) and when physician goes to her room she screams at him to do 'sth about the bugs, theyre crawling over me' and throughout the interview shes squatting at bugs on her arms and thighs. Question asks what do you want to know about her hx to guide management of pts condition; cognitive baseline, substance abuse, some other options
- physician 1 is giving a cancer diagnosis to physician 2 who works at a diff hospital but got admitted to physician 1s hospital; whats physician 1s most appropriate response; sth about i cant even imagine how you must be feeling, sth about discussing the details of the cancer, sth about does he have an oncologist in mind, 'as doctors you know how it goes' was another option
- polycythemia vera pt itching after hot shower with labs, asking what the mutation. Jak2 was one of the options
- one question on mitochondrial inheritance asking the probability of child inheriting the disease, the chart was given mother was diseased and all 3 children before the child in question were also diseased. Options were 0%, 25%, 50%, 100%, 75%.
- question on median nerve injury, pt had lost innervation on the palmar side(i believe) of the thumb and index finger
- patient with rhabdomyosarcoma on the back of the thigh, which muscle is it most likely affecting; biceps femoris, sartorius, vastus lateralis, some other options
- brain enhancing lesion in a pt with hiv, asking the dx i think; options were primary lymphoma, toxoplasma, abscess and some others.
- pt, a kid, with a type 1 hs lesion like hives or sth, qs asking what is the primary cell responsible for this reaction; mast cell, basophil, neutrophil, eosinophil, lymphocyte.

- kaposi sarcoma qs, but they only described it. Dont remember if they have a hx for hiv positivity but asked what is responsible for it; hhv8, hhv6, other options
- pt with hematemesis with cirrhosis and asked what is the vessel which was responsible; azygous, left gastric, superior mesenteric, hepatic artery, hepatic vein
- 19 yr old with hx of thromboses, it was a long vignette. Asking what the cause was; von willebrand, factor 5 leiden, some other options too
- picture of a child with white reflection in one eye asking what the defective gene is responsible for; i think it was retinoblastoma and one of the options was E2f sth.
- pt with a mass in the left atrium asking the histology of it, one of the option was myxoid stroma sth
- one qs describing an organism that made bubbles when added to h<sub>2</sub>O<sub>2</sub>, did not coagulate blood and i think they mentioned gram positive as well(not sure) but were asking what the exotoxin for this organism was; one option was tsst, dont remember the others
- cholera antigen mechanism, described as a curved flagellated rod and pt with diarrhea; options were overactivates adenylate cyclase, camp, ef2, some other options
- qs with a ct scan of the lungs showing fibrosis, hx describing that too but dont remember the rest of the question
- o<sub>2</sub> sat levels of the all the chambers in the heart with increase from right atrium to right ventricle asking what the reason was; vsd was one of the options
- pt with bright red blood on defecation but the qs did not mention any pain. Options were; internal hemorrhoids, fistula, fissure
- child with difficulty exercising but then is okay and can exercise again after a few minutes, mcardles, asking which enzyme deficient; myophosphorylase, other options

- loss of post leg sensation, loss of achilles reflex which dermatome affected; l4, s1, s4, l2
- question on WPW, ecg given, bro i cant believe i caught that lol it was imperceptible but it was there delta waves in V1, asking what the issue was; option were accessory pathway, junctional rhythm, atria sth.
- another ecg with st elevations in v1,2,3 and asking what area of heart affected; anteroseptal, anteroapical, lateral sth
- there was gout qs with a picture of a cell with a needle shaped crystal in it, dont remember what they asked
- baby (dont remember age) presented with vomiting, they didnt describe the vomiting as bilious or anything and asked what the reason was; pyloric stenosis, duodenal atresia both were options
- qs on CREST syndrome, classic description of calcinosis cutis and esophageal symptoms; asking what the reason was for esophageal symptoms; one of the options was fibrosis/ collagen deposition
- qs on Lambert eaton, dont remember details
- qs with a woman who had a mass in the periphery of the lung, no hx of smoking but the options were weird; one was either small cell/squamous, giant cell, adenocarcinoma,
- question on renal stones, mentioned they were envelope shaped, dont remember the rest
- qs on guy with feelings that he isnt the gender he was assigned at birth, always felt better dressing in his sisters clothes and playing with dolls ir sth and now is anxious or in distress about his feeling sth; what is the reason of this. Options were he is attracted to people of his own sex, attracted to people of the opposite sex, attracted to opposite sex clothes sth, 2 other options from which i picked one but dont remember
- narcolepsy qs, described pt who collapsed with laughing
- pt with a crusty looking toe fingernail, like it was barely there, hx of hypothyroidism and he was a painter, asking whats the risk factor for this; hypothyroidism, occupation, some other options



- pt was a kid with a friction rub and sharp chest pain, asking for dx. Options were pericarditis, myocarditis
- consent for minor child 10 or 14 yrs old, qs asking who would you take consent from; consent from child, consent from mother, consent from child and assent from mother, consent from mother and assent from child, consent from both child and mother.
- qs on chronic granulomatous disease listed all catalase positive organisms, asking which enzyme affected; options were nadph oxidase, myeloperoxidase, superoxide dismutase, and a few others
- qs on schistosoma (i think) with pt with fatigue, abdominal pain, and sth else along the lines of either hepatomegaly/fibrosis; listed a bunch of parasites/organisms and schistoma made the most sense to me.
- otitis externa with discharge and crusting in the ear with normal tympanic membrane, asked what was the causative organism; staph aureus, pseudomonas, a bunch of other bacteria but pseudomonas made the most sense to me
- guillain barre with campylobacter jejuni infection, classic case of ascending weakness. Dont remember what the question asked or options
- female in the army, a soldier, was in a tank that went over an explosive, presented to the field hospital with multiple injuries/lacerations on the extremities, awake, what will you do first? Options were maintain airway, auscultate lungs, tend to lacerations, two other options. I picked maintain airway.
- question diabetes insipidus
- question on SIADH
- ^one of these definitely mentioned head trauma
- thumb dermatome
- Adh released from; dont remember if options mentioned hypothalamus/supraoptic nuclei or posterior pituitary together but one of them was definitely there

- arrows qs on either hypo or hyper aldosteronism asking potassium for sure and others
- trigeminal neuralgia
- qs on either PML or creutzfeldt-jacob (prion), male with recent 6 month hx of personality changes, ataxia, myoclonus
- pt, veteran, got into an accident because he was reminded of war times and is anxious, asking what is mechanism of his disorder (psych); operant conditioning, classic conditioning, extinction, negative reinforcement/punishment
- illness anxiety disorder/hypochondriac, old man presented to the ed multiple times
- stress incontinence, woman with multiple pregnancies leaks urine with cough/laugh, what is the mechanism; cystocele, urethral hypermobility, other options
- fetal alcohol syndrome
- woman used isotretinoin till 10th week of pregnancy with hx of smoking, fetus on ultrasound with hypoplastic cerebral ventricles or they were enlarged sth also limb defects I think, asking what the reason was?
- picture of nephron labelled different parts, pt with hx of renal stones asking which drug acting on which part to give to help with this? Marked on glomerulus, pct, loop of henle, dct, collecting tubule
- qs with long vignette and labs mentioned lots of protein in urine, asking which part of nephron is the reason why protein is in urine, options were glomerulus, pct, loop of henle, dct, collecting tubule
- qs on a man with substance abuse hx with skin popping, most of them oozing pus, what is the mechanism of amyloidosis in this pt? Options were al amyloidosis, aa amyloidosis, b2 microglobulin, transthyretin.
- pt with long standing hx of diabetes now presented with tingling and loss of sensation in feet, mechanism
- pt with long standing hx of long standing diabetes presented with nausea and fullness after small meals when they could tolerate large meals before, asking

mechanism? Looked like diabetic gastroparesis, one option was dysautonomia, others dont remember

- pregnant pt with hellp syndrome, dont remember the rest

- qs on kwashiorkor, i think they mentioned protein loss in urine

- pt with leukemia with t(9:22) translocation, drug to be given in this case targets which part? Tyrosin kinase was one option

- pt with starvation, now admitted in hospital where he ate loads of protein/fat rich food, which part of his pancreatic cells will be increased, options; nucleus, endoplasmic reticulum, lysosomes, golgi, mitochondria

- pt in clinical trial given a set amount of carbohydrates but 300 calories of those carbs replaced by protein/amino acids, what will be increased in this patient by the end of the trial? Options were urea cycle,

- long ass question on kid brought in by her 19 year old babysitter with hx of fall from high chair, apparently kid tried to get out of chair and leg got caught in it. Femoral fracture present, with bruises on abdomen, back and head too I think. Mother gone away on a trip with boyfriend. Ct scan of abdomen showed hematoma in liver, pt admitted in icu for management. Question asked what in hx tell us this is not an accidental injury?

Options were babysitter, truncal echymoses, boyfriend, other options

-question with one option that was inadequate leptin regulation. Dont remember the vignette clearly

-question on CMV asking the drug to be given inhibits whar? Options were protease, integrase, dna polymerase, reverse transcriptase.

- blood crossmatch question; weird ass question with list of all antibodies the pt has like b± +, b- +, a+ +, a- -, o+ +, o- - sth like that and asking which antibodies pt has

- vlcfda disease, which organelle affected also i think another question same scenario types asking what is given for managment? Medium chain fatty acids was an option

- osteogenesis imperfecta qs asking which collagen affected, options were type 1, 2, 3,4, 5

- autosomal dominant inheritance pattern dont remember asking what but variable expressivity was an option
- qs describing an study with one group with exposure and one without follwed some time for results, asking what type of study; cohort, case control, rct,
- qs in which a drug was given with a chart given next it that showed increase in heart rate, increase in av node conduction and no change in heart contractility, asking which drug does this; options were a 1 agonist, a2 agonist, b1 agonist, b2 agonist, muscarinic agonist, muscarinic antagonist
- woman with dyspareunia with erythematous and friable vaginal epithelium, asking cause i think, dont remember much about this one
- pt given a medication that interferes with gamma carboxylation of coagulation factors, i think they mentioned vit k, asking which test to be done i think; options were ptt, pt, bt,

### Step 1

- Cell cycle phases of nucleotide and mismatch repair (they gave a scenario I think it was lynch syndrome but idr)
- Peroxisome defect which organ will be affected (adrenal glands)
- Herpes scenario asked about anterograde microtubule (the ans was Kinesin)
- There was a question on the genetic terms idr the question exactly but do them well
- There was a question on a mode of inheritance also they didn't give a proper scenario just a diagram and you had to assess the mode of inheritance from the pedigree
- Duchene muscular dystrophy
- Fragile x inheritance pattern

- Raised afp in one scenario and raised carcinoembryo in another and we had to answer which cancer it was
  - Retinoblastoma/osteosarcoma
  - Klinefelter syndrome
  - Trt for CLL
  - Vitamin B deficiencies
- Tb patient w b6 symptoms what is the diagnosis (b6 deficiency was an option but I marked ethambutol adverse effects as the answer bec they specifically mentioned he was on rife therapy)
  - I think there was a vit c scenario
  - Vit d (do the mehlmann doc for endo whatever is related to vit d)
  - Vit k deficiency
  - McArdle disease
  - I think there was a carnitine cycle question also
  - What will happen if a patient is starving for 8 days
  - One of the dyslipidemias
  - Do lymphatic drainage rly well (there were like 2 questions on this)
- Just do immune well there were a couple of questions on these that weren't hard but just do it well
  - One of them was on c1 esterase
  - Hypersensitivities all of them
  - Serum sickness
  - Cytokines
  - Transplant rejection
  - Immune drugs (I think I got on azathioprine)

- Streptococci and staph
- Meningitis
- Scabies
- Azoles and candida 2 questions moa
- Gave an ebv scenario and asked the class of viruses (it was herpes family)
- Cell injury question
- Histology picture asked what was the condition (it was amyloidosis)
  - Do the oncogenes and tumour suppressor genes well I got 2-3 questions on these
    - I got a couple of arrow questions and they were mainly cardio related but prev people got a lot of them so do arrows well
    - Lots of random Biostats one of them was a case study the rest were random non numerical questions
    - Lots of ethics similar to free 120
    - 2 audio murmurs w a 2 line vignette w barely any info given (it seemed like mvp and as) (the as ans wasn't direct my answer was pulses parvus et tardus)
  - Smth on baroreceptors of the heart as well but idr
  - Tof
  - Arteriosclerosis
  - Atrial flutter
  - Torsades (smth about which electrolyte was deficient it was magnesium)
  - Hcm
  - Myxoma location

- lipid agents moa idr which one
- There was a rilly weird question on meds that lowered triglycerides but raised the rest and the only right answer seemed like omega 3 fatty acids but idk
- Anti arrhythmics
- Ace and arbs
- A lot of pharma moas
- Lots of endo just do all of it well lots of adrenal and Cushing questions
- Siadh
- Lots of git anatomy and patho
- Lots of msk (musculocutaneous, 2 questions on peroneal nerve, iliohypogastric or inguinal I'm not sure, and reflexes) learn Dermatomes well I got 2-3 questions
- I think there was a pcl injury as well but I'm not sure
- Osteoporosis and osteomalacia
- Paget's disease of bone
- Gout
- Sle
- Kawasaki but they gave a picture and asked what other physical findings will be there (ans was strawberry tongue)
- Churg straus syndrome
- Myasthenia and lem syndrome both
- Raynaud phenomena/scleroderma
- Bullous and pemphigoid vulgaris both
- Acetaminophen overdose (ans was lowers glutathione)
- Allopurinol (less 6mp)

- Infliximab

- 2 Questions about Osteogenesis imperfecta study from FA
- Repeated Qs Female Case with BRCA mutation and family history of cancer why doesn't have cancer? Incomplete penetrance
- Case about mitochondrial myopathy cause? Maternal Heteroplasmy
- Typical case of pyloric stenosis asking for diagnosis
- Ulcerative colitis case picture showing crypt abscess
- Mickels diverticulum question forgot the scenario
- An infant that has been fed rice milk for months comes with kwashiorkor symptoms and signs asking about diagnosis which is kwashiorkor
- Many vitamin excess and deficiency Qs read first aid
- For example A patient wife died and he only eat something like tea and toast diet develops signs and symptoms of scurvy what is the vit deficiency ? Vit C
- Many Questions on type 1 hypersensitivity like what molecules and cells are involved mast cells histamine etc
- Patient with mucocutaneous candidiasis shows Absent cutaneous reaction to Candida antigens while mother has reaction what is the cause: defect in type 4 delayed T cell mediated immunity
- Few questions about gene and mechanism of allergen desensitization therapy I was just guessing random answers as the topic wasn't on first aid so review it
- Case of vibrio cholera what does the toxin activates exactly? Activates GS to increase CAMP,
- Which neurotransmitter release is blocked by c.tetani? GABA and glycine
- Case of otitis externa swimmer child with External ear canal erythema and other symptoms what is the cause? Pseudomonas aeruginosa
- Case of syphilis is treated and presents with herxheimer reaction symptoms and then Asks about the reaction's exact cause in terms of immunology and micro
- Clue cells gardnerella vaginalis
- Coccidioidomycosis Spherules picture
- Repeated Nurse with needle stick injury only Anti-HBs is positive what does it mean? Vaccinated
- Person with removable white patches from tongue basically Oral candidiasis due to Inhaled steroids
- Repeated Question about Bradford hell criteria



- Question about a child 12 years old or around the age with a disease and you want the child to enroll him in the research what you should obtain? Parent consent and child assent
- You admit a female patient forgot why but in history she tells you she was sexually abused by the step father during night time as a child, next day the night shift staff complain of her hostility towards them although you and the morning team find her respectful and cooperative, what is the defense mechanism?
- Classic conditioning scenario about child and vaccine I think
- Murmur in a patient post MI cause? Posteromedial Papillary muscle rupture
- Patient on anti hypertension drug developed edema which med caused it? It was a Dihydropyridine CCB forgot the exact one
- Few Questions about ADH MOA, release from hypothalamus nucleus and receptors check FA
- Repeated question about TBG and thyroid hormone levels
- How do you know if the high insulin is exogenous or not in suspected Munchausen syndrome ? C peptide levels
- One question about hexokinize vs glucokinize check FA
- Men 2 syndromes read FA
- Pancreas histology in Type 2 DM will show? Amyloid deposits
- Tracheoesophageal fistula scenario asking about embryology problem? Problem of septum formation between the structures
- Newborn boy lung hypoplasia and hydronephrosis / posterior urethral valve
- Know the murmurs got some Qs they were vague and audio not very clear
- Know the PH O<sub>2</sub> and PCO<sub>2</sub> in pulmonary embolism
- Know the physical exam findings in pneumonia dullness etc
- Where do thiazide diuretics work? You will have to point the tubule portion
- Question mentioned granular casts/ ATN

... child came cry but after few visits....habituation

2.. altruism- female with cancer don't won't treatment will help other who has Breast cancer

...denial- easy one

.. MDD with atypical features

. MVP (audio based diagnosis)

...mitral ring dilation ( dilated heart failure diagnosed on basis of audio)

Audio was confusing one was normal

. giardia berries

. aids patient cd4 less than 50... mycobacterium avium.

.. crohn patient give inflixmab additional drug to prevent infection (tb )....drug given for such prophylaxis asked on basis of MOA ...(mycolic acid inhibition)..

. infection some drug amoxill...MOA of drug.

. odds ration solve krna tha

. confidence interval sample size increase .... width decrease.

.. case control

.. genital warts

.. crohns diseas ( perianal fissures and long term bleeding given in stem)

. Beta cystathione deficiency

. pyruvate carboxylase... other carboxylase given.. give biotin

.. bloody diarrhea child... uncooked beef

.. benzocaine applied for ulcer ...heme oxidation.

.. mentype 1 gene mutation asked

. ovarian mass left side .... ovarian vessel

. prolonged QT interval given.. disopyramide

. horse shoe shaped kidney ascent failure due to... inferior mesenteric artery

. Klinefelter asked in tricky way...

extra X chromosome copy.

... lymphatic system develop from which embryologic ..... mesoderm

... MSH1 mutation ....

27.. endometrial cancer caused by... estrogen

... confounding yes... modified effect no

alcohol and smoking tabe form ma

.. man go on moon astronaut ...

bone mass . urine camp ( recall wala)

. pseudohypothyroidism arrows for pth and phosphorus arrows

31.. paget disease ka asan sa tha like sound nhi sun sqta + skull size increase ..

osteoarthritis.. risk factor..age

34.. metastatic lung cancer slide easy ...renal cell cancer

35.. dilated pelvis slide pic.... obstructive uropathy

.. hypertriglyceridemia... pancreatitis.

.. pain mediator... bradykinin

.. rampril effect..arrows

...hyperreninemia manifestation

.. ret mutation men2  
.. pancreatotomy.....25 hydroxycalciferol def  
...interoperator telephone call  
.. 11 year child brought by mother doctor asked for hpv vaccine ...  
so guide detail explanation etc wala option  
...female came for additional drug to control diabetes...some but easy one ..  
...mites....permethrin...drug.....dopaminergic activity...  
stroke pons....contralateral hyperreflexia..  
cerebellum related lesion....shown..ipsilateral side effects given in stem  
..cerebral aqueduct diagram given...  
so blockage cause dilation of lateral and 3rd ventricle  
.. hippocampus damage so medial temporal chose.  
.. pic of cerebellum given... recall mcq( medial geniculate  
..vit A toxicity mcq  
53... ADHD mcq  
...heroin toxicity  
..methadone...withdrawal of opioids symptoms  
... alcohol overuse ... alcohol dependency  
..rett syndrome  
...pneumothorax .. venous compression  
.. cardiogenic shock arrows  
...pneumonia ...neutrophils...increase  
...cml ... drug bcr abl wali.  
..nesseria meningitidis... C7 def  
..jak stat mutation mcq...  
...Beta integrin defect....wbc 80k LADdefect  
... 100 % oxygen use which enzyme accelerated.. myeloperoxidase .. good mcq  
... potency efficacy graph  
66....zero order drug graph characteristic  
Worst ROC for diagnostic related ... ROC curve used.  
...phase 1 clinical trial..  
...fungi...azoles for infection  
..testes pain came to clinic best risk factor in history....female partner having  
infection ...( clamadidia was also in option but that was 6 months back)..girlfriend k  
sath recent sti tha so i chose this.  
.. inalation .. coccidioides lung infection. plus erythem  
.. contraceptive causes... erythema nodosum  
...TGFb .... fibrosis  
... collage defect

... hand contracture...dupuyten contracture  
... C5 root defect.... supraspinatus  
..pitcher sport .... infraspinatus..  
...axillary nerve... shoulder abduction  
... median nerve compressment in hypothyroidism... glycosaminoglycans deposition  
... psammoma .... papillary cancer  
...lateral epicondylitis...extensor wrist action  
...appendix damage ... artery superior mesenteric  
.. mesenteric ischemia.  
. factor V mutation cleavage defect  
...alpha thalassemia minor  
..diabetic gastroparesis git  
.. constipation child .. hirschsprung  
...pyloric stenosis scenario  
..Alcohol overuse... acute pancreatitis  
... hepatitis A ....but asked in indirect way  
.. common bile duct blockage..liver enzymes raised etc etc easyone  
... diaphragm irritation... shoulder pain C345  
...iliotibial band....sports practice..  
... pelvic ischemia mcq exercise buttock pain  
...tibial tuberosity pain  
... risk factor ask old age female with family history breast cancer sugar control no  
other problems etc etc very bizarre mcq... what you check ist.  
...infective endocarditis.. viridans  
.... joint infection nisseria  
101-jaw ear pain.... vagus nerve.  
rickets related mcq xray given rotic rosary give ..answer calcification defect  
102  
72 year old lady with severe headache ( sudden was not mention) pain start 1 hour  
ago with neck **pain no fever diagnosis**  
- subarachnoid hemorrhage  
Meningitis bacterial was also option  
103  
Population pyramid answer was more death rate  
104- Ret poisoning ask about blood finding answer will same as warfarin effect on  
clotting factor  
105hirschsprung child- failure to migrate  
106 horseshoe kidney ask which process failed to occur embryonic stage answer was

failure of metanephric duct to differentiate -failure to ascend kidney Due to artery was also meant

General principles:

most imp are biochem and immunology:

Do all genetic diseases

There's a page that has examples of autosomal dominant and recessive diseases.

Revise them. (A good way to memorize is that most enzyme deficiencies are recessive while most structural protein problems are dominant. Also the imp tumor and cancer syndromes are also dominant)

Do inheritance patterns (pedigrees)

Do imp cytokines (IL1 IL2 IL4 IL6 IL10 IL12 TGF-B TNF-a)

Do the 2 pages of inherited immunodeficiencies.

types of transplant rejection

types of hypersensitivity.

functions of histamine, bradykinin, PGE2

TB related (how granuloma forms, how is it maintained, what type of hypersensitivity lead to BCG scar and the swelling of PPD test. patho and pharma v basic stuff. mainly. I didn't revise.

Public health:

Do all formulae of biostat. But remember that a lot of biostat questions are common sense calculations instead of hard formulae. A few of them would be kind of impossible as well so don't get frustrated.

Ethics obviously

Legal stuff (not very detailed)

Pro tip for ethics vs legal questions:

if it's a question of legality, choose the most by the book kind of answer.

if it's a question of ethics/communication, choose the option that seems very patient focused (i.e. focusing on the family members is wrong), focus on patient's mental wellbeing, their motivations, thoughts etc. Don't ask close ended questions. If in the scenario, someone in the hospital has made a mistake, don't try to explain yourself, don't get into blame game etc. Simply apologise. Similarly if the patient has a condition that you are experienced in treating, admit your inexperience while assuring the patient that you'll do your best.

The options of referring the patient to someone else are almost always wrong, and so are the options of consulting the ethics committee.

Finally for the systems. You don't have enough time to revise everything so

1. Focus on systems that you're weak in.
2. Do heart sounds as I told you before. EVERYONE gets two MCQs from there.
3. Do Neuro strokes and hemorrhages. 2-3 MCQs are a must. Plus usually it needs some revision as well. (At least that was my experience)

High yield topics:

One thing I missed is micro. Micro is very imp. Mostly sketchy. One topic outside of sketchy is v imp....The rickettsial diseases like ehrlichia and anaplasma.

Other than that imp stuff from micro is interpretation of HBV serology, differences in the types of malaria (patterns of fever and lab findings). Also babesia lab findings.

Also a thing I forgot from Immunology: theres a table near the start of the chapter where lymphatic drainage is given. From that table do drainage of stomach, gonadal, genital and anal regions.

Speaking of these regions also open your Repro chapter. There note that clitoris, head of penis and anal region (superficial part at least) have the same nerve supply (branches of pudendal)

From the Endo:

Do pseudohypoparathyroidism presentation (short 3rd 4th digits) and its lab values. Also administration of PTH in such individuals will have no change in the lab values  
From thyroid: postpartum thyroiditis, subacute one and fibrosing one.

From insulin: remember that c peptide is used to differentiate between endogenous production and exogenous administration. Someone may be malingering.

Also a kid with DKA, and autoimmune conditions and family Hx of T2 DM. the more important risk factor for kid's DM is his autoimmunity and not the fam Hx of T2 (since the child has T1)

From gastro

H. pylori is the most imp risk factor of peptic ulcer whether duodenal or gastric. Presentation. H2 test. Treatment.

Gallstones types. Radiolucent vs opaque also the colour and causes

Contents of gastroduodenal ligament and pringle maneuver

From cardio: cardiomyopathies presentation and cause. Drugs causing torsades.

Form hema: ristocetin test.

TTP, ITP, HUS comparison labs etc

From MSK:

Giant cell tumour, osteoid osteoma, osteoblastoma, osteosarcoma, ewing

sarcoma

All tests for knee ligament injuries. Varus force, valgus force etc.

Pemphigus vulgaris vs bullous pemphigoid.

Scv vs bcc appearance.

Melanoma has the most metastatic potential of the three iguess.

Osteoarthritis vs RA.

Osteo has involvement of DIP; RA doesn't

Gout vs pseudo gout lab i.e negative vs positive birefringence. Pseudo is related to hemochromatosis.

From Neuro:

Do headache types.

Do alzheimers, frontotemporal dementia, parkinsons. Do their histopath from nbme pictures pdf.

Psych (already discussed)

Renal:

RCC histo

Transitional cell carcinoma and squamous cell carcinoma of bladder risk factors.

Acute tubular necrosis. Brown casts. Causes according to types.

Reproductive:

Ligaments of ovary and uterus esp the one containing vessels.

Seminoma/dysgerminoma, krunkenberg tumour,

Respiratory:

Emphysema (normal oxygenation) and chronic bronchitis (cyanotic).

Presentations esp how to differentiate between two presentations.

**Review::against odds I got the same questions**

1. ristocetin negative >> vWB factor deficiency

2. A guy went to a high altitude .. after a while what do you expect his acid-base balance to be?

respiratory alkalosis with metabolic acidosis

3. Tetanus .. where does it bind? Synaptobrevin

4. What is the cause of coma in DKA? Something like the sugar was too high

5. A patient taking statins .. where are they metabolized? CYP3A4
6. Thalassemia pt .. a lot of transfusions .. a dark pigment in macrophages .. what is it related to? Hemoglobin
7. Sickle cell pt .. he got severe back pain and warmth .. you give him antibiotics .. what is the next step? I chose MRI of spine .. there was bone testing and cooling the area
8. A picture of *Diphilobothrium Latum* and they asked about the drug? Praziquantel
9. Picture of patient with tinea capitis .. but it was some other name "phyton" .. sorry I forgot exactly what it was
10. A pt with kidney problems .. how do you know it is in the kidney and not like pre-renal? I chose  $NA > 40$
11. A pt who got in an accident or operation .. after a couple of days he got oligourea .. where is the damage most likely? PCT
12. If you change the diet from carbs to fat .. what changes in total cholesterol, LDL, HDL? Up, up "higher", down
13. A pt who starting exercising but eats fast food 6 times a week .. if he doesn't change the diet what will happen? Decrease glucose, Increase insulin, Increase LDL, increase cholesterol, increase HDL I chose insulin
14. A pt with pheochromocytoma .. arrows: hematocrit, glucose, insulin



I put up up down “there was no all up btw”

15. CML pt taking imatinib .. what drug will decrease its plasma concentration?  
I chose rifampin

16. A patient with hand pain and unable to extend PIP joint in ring finger ..  
when the doctor

extended it it gave a popping sound ..... I chose stenosing tenosynovitis ... there  
was also RA

17. A microscopic picture of a heart after MI and they wanted to know when it  
happened..

18. 6 year old visited her grandparents, they live in a farm and the water  
source is intoxicated

...then after 2 days she became cyanotic , Po2 normal , Pco2 normal o2 content  
low ... the

blood was brown even after using filtration paper? There was accumulation of  
bad

hemoglobin, unbalanced alpha and beta chains, increased activity of HMP  
shunt, I forgot

the rest

I was thinking hemolysis but later I realized it could have been arsenic  
poisoning .. sorry I

don't remember if there was an answer for it

19. A new home HIV test .. they want the least amount of false negatives  
possible .. they gave

values for sensitivity and specificity >>> 99% sensitivity, 70% specificity ... we  
need the

highest sensitivity.

20. Pt with relapsed Lymphoma with 5% chance of surviving 6 months, doctor  
offers to join a

new clinical trial, pt refuses, wife begs to enroll him

try and convince him

Tell the wife that pursuing the clinical trial more is not advisable "I chose .. I didn't want to

try to convince him"

(other options were to enroll him, call his kids, put his power of attorney in effect. The

question stem didn't show signs of depression)

21. Experiment on Pts with Down syndrome and Alzheimers. 5 mRNA found on chromosome

21 that inhibit Methyl-CpG-Binding Protein 2 (MeCP2), which has control over other gene

expression that control neuronal maturation. What is expected in Down syndrome pts? I

chose unregulated expression of the neuronal genes .. other options were (overexpression of

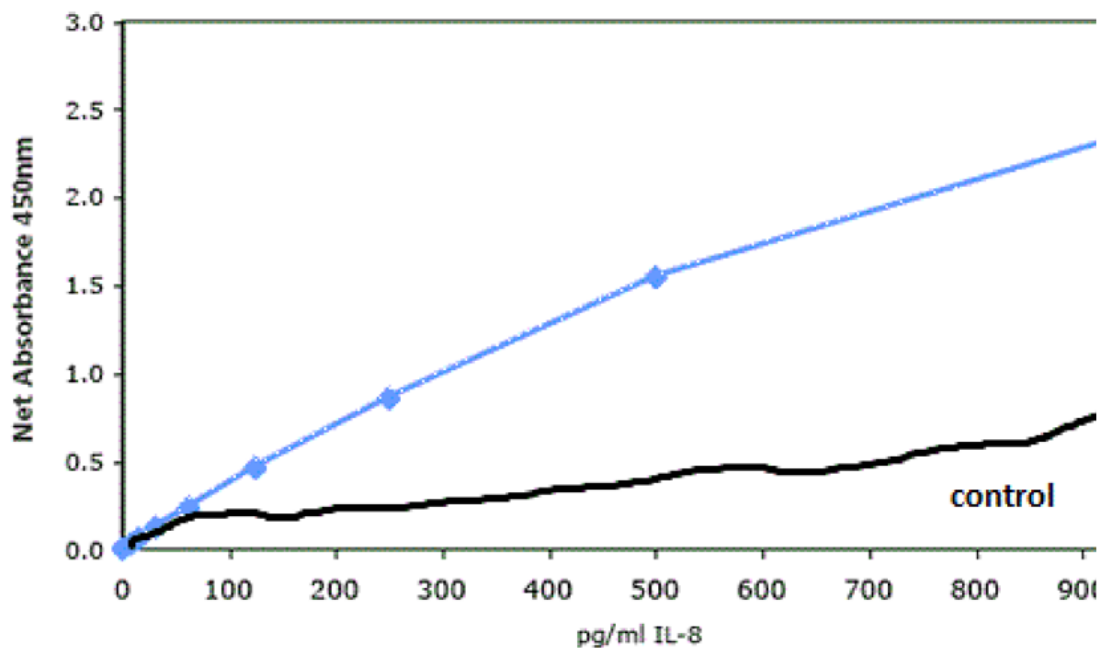
MeCP2, absence of the mRNAs, less neuronal genes .. one other I forgot but it was more in

line with less expression of the genes)

22. An experiment with a lot of useless information about different genes being mutated in a

disease .. then they asked about one of those genes which had mutation in a non-coding

region >>> it was pointing to it having an effect on gene expression



23. Direct ELISA explained, chart with fluorescence readings increasing with concentration of

substrate The answer was concentration-dependent something. .. looks like this .. but a bit

more complex.

24. Before starting treatment with Cetuximab, what gene should we assess its function? RAS

25. 14 mo is not walking yet, can stand by holding a table -> I chose normal .. other option from

dawat was Duchenne .. but he is too young for it I think

26. How does B12 def. Cause megaloblastic anemia -> (options included increased

Homocysteine, abnormal DNA synthesis "I chose .. thinking that lack of b12 leads to less

folate therefor lack of nucleotides")

27. Decreased 1,25VitD3 with normal 25VitD3, pt is 70 something, takes a lot of Vit D

supplements, what do you expect -> (options included decreased 24hour urine creatinine,

increased urine phosphorus, and other options with phosphorus and calcium) I

chose creatinine .. thinking of kidney damage

28. Kid with Nieman-Pick type C, accumulation of unesterified cholesterol, where in the cell?

lysosomes

visit medcrucal.com for more

29. Pt with increased Km of HGPRT compared to PPRT -> there was no decreased purine

salvage .. so I chose increase production

30. Old Pt (60s) with 3-4 episodes of exploding diarrhea everyday for months, normal B12, low

folate and iron -> (Celiac disease, disaccharidase def., Zollinger Ellison .. dont remember the

other options)

31. Kid had cough and died, they show picture of what they took out of his throat (the

pseudomembrane), organ affected -> Heart

32. Bloody diarrhea, negative stool culture, colonoscopy showed ulcers with inflammation,

treatment -> I picked Metronidazole .. probably amebiasis

33. Researcher wants virus that doesn't integrate in genome -> adenovirus

34. Old pt with dementia (I think Alzheimer) gets scared from the tv, but crosses street without

fear of cars, lesion? I picked amygdala (other options: insula, thalamus, hippocampus)

35. Cardiac cycle chart, decreased ESV and decreased afterload, what drug was administered ->

CCB

36. Hydronephrosis d/t ureteral obstruction at pelvic rim -> common/internal iliac aneurysm

37. Picture of calcium oxalate stone .. I think urine PH was 7 (there was also struvite, calcium

phosphate, calcium oxalate and phosphate) ..

38. Pregnant with BP 140/90 what test to confirm the diagnosis? There was liver function test,

kidney function, urinalysis .. not sure

39. Skin nodules, hematuria, and other symptoms, multiple aneurysms in the renal artery

polyarteritis Nodosa

40. What hormone would be higher in a healthy 75 yo than a 25 yo? FSH

41. Pt with AF, Hyperthyroidism, and 180/140 BP, they gave him Propranolol and asked what

would be also given? I picked Radioactive iodine (other options, propylthiouracil, lithium,

amiodarone, and I think methimazole too)

42. decreased Gastrin -> decreased histamine from enterochromaffin cells

43. RUQ pain from a little time before food till 2-3 hours after, biliary sludge, what

neurotransmitter caused the onset of the pain? I picked Substance P ... there was also Ach

44. 14 yo, he lost all his teeth at age of 4, he doesn't brush or visit dentist, the exam today

showed normal number and distribution for his age, now he has gingivitis and malocclusion,

reason of malocclusion?

45. I chose early start of permanent teeth .. there was also dental caries on permanent teeth

which some of the recall chose before

46. Fall on outstretched hand .. xray -> lunate dislocation

47. A picture that shows loss of bilateral visual fields .. where is the problem -> optic chiasm

48. Lower left quadrantanopia -> right parietal lesion of the optic tract

49. Pain elicited when brushing teeth or shaving -> trigeminal neuralgia

50. Respiratory distress in neonate -> decrease production of dipalmitoylphosphatidylcholine ..

there was also decrease surfactant protein D .. don't let this one confuse you

51. Nipple hemorrhage, intraductal tumor, keratin positive, it had epithelial and myoepithelial

cells. Not sure .. Options were (Adenocarcinoma, Squamous cell carcinoma, papilloma,

Fibroma (I think) and one more option)

52. Rate-limiting step in axonal regeneration. slow anterograde transport

54. HIV pt with esophageal lesions, organism? HSV

53. 3 mo can lift his head, doesn't smile, and he doesn't coo or make sounds -> motor normal,

social and cognitive delayed

55. 14 yo male, has lesion on his face with picture, they say prednisone but didn't work.

diagnosis? I picked acne "It looked like mild acne to me .. not like FA", eczema was an

option.

56. A kid was bitten by a bat and given rabies antitoxin, 12 days later he comes with fever, lack

of appetite, and physical shows coryza. (not sure whether he had cervical adenopathy). there

was serum sickness, rhinovirus, allergies ... probably rhino

57. Ovarian mass, what would be associated with it? ascites "the exact answer was shifting

dullness"

58. Classic history of carpal tunnel syndrome, asks what test would elicit the pain? flexing the

wrist (Phalen's maneuver). There was tapping on the cubital fossa .. don't get it confused

with tinnel's sign "tapping on the wrist"

59. comparing between the knees of patients with septic arthritis and Osteoarthritis? lower

glucose

60. There was a question about colchicine >> inhibiting leukocyte migration to the joint

61. A person who got his mouth stuck in open position .. you need to relax which muscle ->

lateral pterygoid

62. I had the question "I was told it is from recalls" about problems defecating where the woman

has only one or two bowel movements a week .. she tried more fiber but didn't help,

colonoscopy showed many diverticuli but nothing else, she said she has to push the wall of

the vagina to help the process, what is the cause of low bowel movement? -

Problems with rectovaginal wall "recall answer" - Wall inflammation "I chose"

- Loss of gastrocolic reflex - Loss of the ganglia in colon - Sorry forgot the last one

63. white couple brought their African American daughter ( they adopted her from the foster 3

years ago), she is at Tanner stage 2 for both breast and pubic hair.....what is your initial

response? -black girls usually go to puberty before whites. "the answer .. also Hispanics" -Assess her pituitary gland function because you suspect a tumor - tell them that is possible since she had been abused when she was in the foster.

64. one of the physicians smells alcohol, he has been going through a stressful situation recently

and he got divorced recently, but otherwise he is a great doctor and they call him for

complicated cases...what should you do? - report him

65. long question ,they give you symptoms of CN7 injury only in upper face, and they

mentioned that there is no hearing loss, tinnitus, but there is a small swelling just anterior to

the mastoid , Where is the lesion?

I chose parotid gland ... there was also stylohyoid foramen - external auditory internal

auditory

66. An experiment of activation CCK-B?

stimulate ECL cells to release more histamine

67. drug abuser after rehabilitation, he is going to see his friends that he used to smoke with

them, but he is afraid if he sees them, he'll crave for Heroin, What happened in his brain? -High dopamine in nucleus Accumbens - Low Dopamine in Nucleus Accumbens -Low GABA in cortex - High GABA in Cortex



forgot the other 2

Visit [medcrucial.com](http://medcrucial.com) for more

68. a study on 5000 pregnant women, 39 of them had HSV during pregnancy, only 7 babies had

congenital HSV, after that they divided the women into 3 groups: ( percent of pregnant

women, percent of babies who had congenital HSV) - active lesions during delivery ( 58% , 45%) - premature membrane rupture ( 28% , 25%) - women who didn't take treatment (14% , 84%) - what is the greatest risk factor to develop congenital HSV? treatment

69. nerve responsible for hiccups ( Vagus or phrenic).

70. An experiment, we knocked out a gene in mice "homozygous for it", the 1st gen was normal

phenotypically, however 6th gen had problems with spermatogenesis and blood cell

proliferation, when checking the leukocytes we found 37% aneuploidy.. what does the knock

out gene do?

Telomerase "recall"

Kinetochores "I chose because of the aneuploidy"

71. pedigree and southern blot., I will try to describe it as much as I can .....the mother is

healthy and she has the highest piece on the gel .....the father has a lower piece, and the 2

children have even lower pieces .. the disease had something to do with bone marrow I chose

telomerase

72. a woman who had an injury after she while she was serving in a tennis game, then they show

you an MRI at elbow with ligament in the anterior that is ruptured, what is defect(I think it

was the biceps) - supination - elbow flexion -extension

73. patient had Myxoma of left atrium so we want to remove it through the right Atrium "I think

they said through right atriotomy", when getting to the left atrium, which part, if got

injured, could affect the conduction system? - posteroinferior region of the interatrial septum near the opening of the coronary

sinus

"word for word from moore's anatomy for AV node" - the other choices were around the fossa ovalis and the limbus

74. a patient with CF then they found a hypochlorous acid "hypochlorite" during bronchial

lavage...what is the source of the acid?

I chose Neutrophils .. there was macrophages and bacteria

75. pt with axillary petechia ,chest pain after coronary angiogram?

Atheroscleroma – Thromboembolism ... not sure .. sorry forgot the others

76. pt with asymptomatic hypercalcemia what is the best next step? -order PTH

77. patient with PDA which artery has the lowest Oxygen???? -right pulmonary - Left pulmonary -right subclavian - internal iliac

78. pt has MI in LAD then gives you: Cardiac output= 3.5, systolic blood pressure= 120,

diastolic= 80, left ventricle pressure= 15, then asks you what is the maximal force that

moves the blood from LDA to the endocardium? 65 ... there were 80, 120, 95 .. and others

79. 77 year old patient with h/o heart failure just dead due to Pulmonary edema, what are you

gonna see in the autopsy?

I chose increase in both lungs weight ... there was also venous engorgement and dilation

80. young patient with HTN ?

fibromuscular hyperplasia - atherosclerosis in the renal artery .. there was also stenosis of

renal VEIN .. I almost didn't notice

81. patient had radiation when he was younger then he developed lymph node sclerosis then

show you 2 xrays lateral and anterioposterior...locate the lesion?

I saw a shadow in the anterior mediastinum .. there was also right helium -left helium

and others

IL-12

2. Given values (0.8, 0.8, 0.9, 1.0, 1.1, 1.3, 8.0) and said if the first 0.8 was recorded as 8.0 what

effect would happen to mode, median and mean -> all increase

3. Study to compare hypertension prevalence between USA and Europe -> Cross-sectional

4. Big number of patients divided into two groups one receiving the drug and the other placebo >

Phase 3 clinical trial

5. In a community 15% were found to have a disease -> prevalence

6. Study of risk with Odds ratio of 2.0 and Confidence Interval 95% of (1.2-3.0) -> Exposure

associated with increased risk

7. Bigger sample, table of three column (Chance of type I error, Type II error, Statistical power) >

no change in Type I error, decreased chance of type II and increased statistical power

8. Pt with living will that says don't save her life if she's gonna be dependent (or smthng like that),

doctors estimate she has a reasonable chance of full recovery -> leave her intubated

10.

17 yo tells you she wants contraception when her mom is waiting outside -> I picked to

ask her what she knows about safe sex practices (other option was to educate her about

effectiveness of different contraception methods)

11.

Pt has an autoshop, develops renal failure and tells you he can't pay for it -> Medicare

(there were two options with Medicaid, one had declaring bankruptcy, and the other was also

unreasonable)

12.

Daughter of old pt says he got lost twice recently, he does his own chores -> interview pt

alone with full cognitive exam.

14. Increase of Uric acid -> Purines

15. Increased Adenosine in cells (ADA) -> absent B and T cells

18. Pedigree with X-linked Dominant inheritance (all daughters of males have it, half the kids of

females)

20. There was another question with PTEN and other proto and oncogenes in the options but can't

remember it, sorry.

21. Kid with mental retardation, very nice behavior, chromosome 15 -> maternal deletion +

paternal methylation (Angelman)

22. Hardy-Weinberg.  $Q^2 = 1/2500$ , what is the incidence of heterozygotes -> 3.9%

23. Short limbs, big forehead -> FGFR3

24. Heart sounds, Murmur on mitral auscultation, tall and other marfan signs -> MVP

25. CT of abdomen, renal mass, polycythemia, Jak-2 negative -> VHL

26. Recurrent pulmonary infections, Fatty stool -> defective trans-membrane ion regulator (CF)

28. Picture with multiple skin lesions, history of travel to the middle east -> Leishmania major.

30.

Calcium and PTH chart, it was at increased PTH and decreased Calcium -> I picked

Osteomalacia

31.

ADH and serum Osmolality chart in nephrogenic diabetes insipidus from lithium -> I

picked increased ADH and Osmolality

33. Metronidazole + Alcohol, how does Metronidazole cause disulfiram reaction? Inhibiting

aldehyde dehydrogenase (another option was inhibiting CYP 2E1)

34. Lead poisoning, increased zinc protoporphyrin. How long after treatment does zinc

protoporphyrin go back to normal? 120 days

35. Burn of entire upper extremity, what percentage of body? 9% (rule of 9s, head and upper

extremity each 9%, lower extremity 18%)

[https://en.wikipedia.org/wiki/Total\\_body\\_surface\\_area](https://en.wikipedia.org/wiki/Total_body_surface_area)

36. Female with Menorrhagia, bleeding from gums after dental procedure, decreased ristocetin

agglutination -> vWD def.

37. Infant has Von Gierke symptoms -> glucose-6-phosphatase

38. Infant with heart enlargement, lethargy -> Pompe -> Acid maltase def.

39. Kid with Gaucher, site of accumulations? Lysosomes

41. Site of modification of Insulin receptor (I think) -> there was no Golgi, I picked ER

43. Uncoupling in mitochondria -> Increased energy consumption at rest (another option was

decreased electron transport)

44. Pt has decreased superoxide in his neutrophil -> NADPH oxidase def.

45. Dihydrohodamine test -> NADPH (I don't remember if it was in the same question before or

in a different one)

46. pt with DM, toe gangrene caused by -> Mitochondrial superoxide dismutase

49. A nevus, origin of cells -> neural crest

47. Picture of a blood vessel with neutrophil attached to the wall, history of inflammation ->

Integrin (ICAM)

50. Injection of Fatty acids into proximal intestine -> CCK
51. Pt on statin and (not sure Niacin or ezetimibe), LDL still high -> cholestyramine
52. Pt taking lipid lowering agent has flushing and other symptoms (Niacin) -> give aspirin
53. North Carolina, rash on palms and feet -> Rocky mountain spotted fever
54. Pt with rusty red sputum, picture of what looked like aspergillus (not sure)
55. Kid had recent sore throat developed symptoms of rheumatic fever and died -> carditis
56. Yellow urethral discharge, picture of gram stain -> N.gonorrhea
58. Influenza binding to cells -> Hemagglutinin
59. Undercooked meat -> E.coli O157:H7
60. Pt after surgery has muscle weakness, has lung mass, and a table of values (End-Plate potential decreased, Minimum End-Plate Potential and ACh binding are Normal) -> LambertEaton
62. 93 yo Pt with picture of alveoli with massive infiltration, reason -> Aspiration
63. middle aged male pt with symptoms of isolation lack of affect and not speaking, over short period, brain biopsy looked somehow like this  
"<http://i2.cdn.turner.com/cnn/dam/assets/130905140549-creutzfeldt-jakob-disease-storytop.gif>"-creutzfeldt jakob-disease-story-top.gif, sorry can't remember the other options but I picked PrP (Creutzfeldt Jacob) there wasn't any psychiatric options.
64. Central line, infection, S.epidermis wasn't in options, I picked S.aureus

65. infant with SCID, we used a virus to add a missing enzyme, pt developed monoclonal T-cell

Leukemia -> I picked virus integrated next to oncogene

66. Kid with axillary lymph node enlargement and papule on his hand, I picked Bartonella

67. Facial nerve palsy, hiking -> Borrelia (the answer was spirochete infection)

68. Pt with Syphilis -> Jarisch-Herxheimer reaction

69. Picture of leukocoria, what gene -> responsible about something with E2F (Rb gene)

70. History of travel to Africa, Picture with RBC inclusions (very few), question was about drug

used to prevent recurrence -> Primaquine

72. Newborn with chorioretinitis and brain calcification (congenital toxo), route of infection of

mother -> I picked undercooked meat

73. Picture of Diphylobothrium latum -> Prizaquantel

76. Cells infected with EBV -> CD21

77. CCR5 -> macrophages

78. Tennis injury while serving, saggital MRI at elbow with ligament in the anterior that is

ruptured, what is defected -> options: pronation, supination, elbow flexion, extension. The

picture is just like this one with what I remember as the biceps tendon ruptured

79. Jersey finger, Pt grabs another players jersey with his ring finger -> ulnar nerve

80. A question about PID and chlamydia, can't remember exactly

81. Pt given ribavirin and another drug -> HCV



82. female Pt with episodes of blindness that resolved, weakness in lower limb (MS), treatment?

> Inf-B

83. Tenofovir -> available orally in active form

84. Loss of MHC-II -> loss of positive selection of CD4

85. 28 yo Pt with Sickle cell, risk of infection with -> S.pneumo

86. Male Pt got marrow transplant from his sister with the same HLA-A,B,C,D... started getting

GI symptoms and rash -> I picked graft vs host, another option was graft rejection

87. We found IL1,2,4,5,10,12 what kind of cells are there? T-cells and macrophages

88. Thyroid tumor with amyloid (medullary), monitor with-> calcitonin

89. Pt with asthma, which mab? Omalizumab

90. Osteosarcoma, what mutation -> I picked p53

91. Most mortality tumor in women -> lung

92. Ileus after surgery -> M3 agonist

93. pt with schizophrenia symptoms, treatment -> D2 antagonist

94. Gynecomastia with diuretic -> K-sparing

95. Pt with seizures you describe Phenytoin, you have to alert him not to -> I picked drive

96. Hypovolemic shock -> decreased CO and increased TPR

98. Mitral regurg. -> squatting increases murmur, and hand grip increases murmur

99. Hydronephrosis -> atrophy

102. Membranous VSD, what is prone to injury during repair? options: AV bundle, tricuspid cusp

103. Purulent discharge from umbilicus, infraumbilical fluid filled structure -> Allantois

105. DM type II, what is seen in urine indication diabetic nephropathy? Albumin

106. Polycythemia Vera, abdominal pain, splenomegaly -> Budd-Chiari

108. Picture of hepatic cavernous hemangioma

<http://classconnection.s3.amazonaws.com/747/flashcards/1392747/jpg/133a1336058459838.jpg>

109. Adenosine anti-arrhythmic MOA -> K channels

Visit medcrucal for more

111. Male infant with penis but no testicles outside, testosterone levels are not detectable, what

cells defective? Leydig

113. Congenital diaphragm hernia x-ray

115. Epigastric pain and hypermotility, what nerves? I picked Celiac splanchnic trunk

(there was superior mesenteric and other similar options)

116. Pt with chronic pancreatitis, fatty stool, treatment? Pancreatic enzyme

117. female Pt went to Brazil, has T.Cruzi, what organs will get damaged? GI and heart

118. Pt with asthma takes Aspirin for joint pain, has asthmatic attack that doesn't respond to B

agonists -> Leukotriens receptor blocker (Montelukast)

119. Pt with increased indirect bilirubin -> Decreased UDP-glucuronyl transferase activity

122. Chronic blood loss, what is elevated -> transferrin

123. Heparin toxicity -> Protamine sulfate

124. Lytic Bone lesions, what cells implicated? Plasma cells

127. To get to the brachial plexus -> between scalene anterior and middle scalene

129. Prostaglandin causing fever -> PGE2

125. What stage in cell cycle does bleomycin (history of pulmonary fibrosis) play his effect? G2

130. Meningocele at T12 -> defect in primary neurulation

131. Aphasia, intact comprehension and impaired repetition -> Broca

132. COPD then JVD and RHF symptoms, reason -> hypoxia induced pulmonary vasoconstriction

135.

Normal pressure hydrocephalus, gave us symptoms of ataxia and cognition, what else

would you expect? Decreased inhibition of detrusor (urinary incontinence)

136.

Bilateral schwannoma, abnormal neurofibromin 2 protein, usually located on membrane,

normal function? contact inhibition of growth

138. in surgery on 17 yo, anesthesiologist chose to use rocuronium, why? faster onset of action

139. Two questions on MAOs (Phenelzine) and hypertensive crisis.

140. Doctor dismisses pts saying he stopped drinking, as the doctor had an irresponsible brother

> Countertransference

141. After telling pt of mass found on x-ray, she goes back to ask you about her cough > denial

142. Mother of DM type I kid, she says that the readings she get every morning are

hypoglycemic, when downloaded, the readings are different than what the mom recorded ->

Factitious by proxy

143. female Pt cuts wrists after breaking up -> borderline

144. Bulimia -> SSRI

145. Twin embryos found dead d/t cord enlargement -> Mono/Mono

147. Recent sore throat, hematuria -> Immune-complex deposition

148. Ischemia leads to oliguria, defect location? PCT

- Graph of 2 drugs, they have the same  $K_m$  but different  $V_{max}$ . - partial agonist

2- question about a man who wants to change his diet from chicken and meat to fish, what should you tell him, you will see 5 funny answers :- salmon, Tuna and cold water fish have the highest omega 3 (I chose) - answer about sardine - fish is better than chicken, even fried fish still better than boiled chicken.

8- diagram comparing the Kidney and skeletal muscle during exercise (AV gradient) .....you will see that the muscle AV gradient will lower, while kidney is stable ...why?? - stable ion movement system (I chose) - blood shifts from cortex to medulla during exercise - kidney doesn't produce LDH

20- media question: 66 year old male 2 syncopal episodes and chest pain on exertion .....how to relieve his symptoms? - valve replacement

21- media: marfan patient .....> MVP

24- pt had a gun shot and massive bleeding then asks you about cardiac output and TPR?

25- another female pt has a hemorrhage ...then she had orthostatic hypotension

... why she has tachycardi?

.- decreased preload - increased PVR -decreased PVR

26-female had breast cancer , osteosarcoma and Leukemia ? - p53 -BRCA-1 - BRCA-2

27- pt after a car accident with multiple rib fractures and hypotension then show

you CT, What is the source of bleeding? - spleen - pancreas - stomach  
duodenum - liver

28 , 29-guys please review the locations of the valves on ( Xray and CT) I got two

questions about the aortic valve.

30-pt with history of resected lymphoma and Epilepsy, she takes seizure medication she came today with some lymph nodes that are swollen , the doctor

suspect that her lymphoma didn't recur ....what should he stop? - valproic acid - phenytoin

32-a young woman with MS , tx ? interferon beta

36- patient can't lift thumb from the table ...extensor pollicis longus

38-60 year old female with history of Osteoarthritis, what do you see arthroscopically? -synovial cartilage destruction - increase synovial fluid

39-68 female pt has urgency she has to go to the rest room 7-8 times during the

day , 3 times during the night , no history of infections ..tx? -anti M3

46-A nurse inserted the needle more than usual in the cubital fossa during a transfusion session , so the patient had pulsatile bleeding, Which artery? - brachial

artery

52- African American pt with DM and HTN you prescribed him Insulin and HCTZ ,

he came back after 6 weeks with HBA1c 5.5% and elevated blood pressure ,when

you asked him if he is taking his blood pressure medication ...he avoid to answer...what is your initial response?. - please take your medications and comeback after 6 weeks .

- do you know that blood pressure would kill you also as DM would do. - what do you know about HTN . - why it is too hard to take your medications.

55- a picture of both feet then asks you what does the patient do? - lifeguard in a pool - gas refinery

58- pt with story of acute appendicitis and gives you elevated WBC then asks you

what do u find else? - CRP elevated

59- long history you can solve the question only when you look to the labs :  
LDH

elevated and anion gap metabolic acidosis ...>>>small inetstine infarction

62-pt takes simvastatin then had hematuria and rhabdomyolysis , so You stopped

the Simvastatin, what test you should order also?.....order TSH

63-3 months old child with cough , 50 times/day, he is not Immunized  
....>>>Bordetella

64-bloody diarrhea , in a family they like to eat hamburger?

enterohemorrhagic

E.coli

66- Hiv patients with neurological symptoms and a lesion in the white matter?

.....Hiv encephalitis

67-( NBME 15 question) Pt after surgery has muscle weakness , he has small lung

cell carcinoma, and a table of values (End-Plate

potential decreased, Minimum End-Plate Potential and ACh binding are Normal) -- -Lambert-Eaton Myastheni( the choice was like this ) - Myasthenia gravis

69-subclavian line, infection and erythema in the site of injection.? Staph.A

73- young female with PID then ask you about treatment....ceftriaxone

77- anorexia nervosa best initial treatment : - SSRI - atypical antipsychotics

82 - pt with palpitation weight loss, tremor .....Hyperthyroidism

83- Gastric Ulcer and patient taking Aspirin what is the best treatment ? - PPI

84- pt with ZE and ulcers on the first portion of the duodenum.....best

Treatment? -PPI

89- a women comes to you due to failure to concieve, assume her ovulation happens only at day 14 of her period ....then asks you about the hormone levels in

day 13? ( FSH , LH , Estrogen)

92-long question then they meintion Dihydrodamine test....>>>>CGD

97- ISoretinoinn mechanism.....stimulate differintiation of epithelial cell

98-patient with restrictive lung disease pattern, then then found birefrengent lesion ? sillicosis

99-pain increase with respiration and PR prolongation ? pericarditis

100-Duchenne, what is the normal function of the missing protein ? . - connection to extracellular matrix

101-patient with lymphoma you decided to start him on steroid....what is the mechanism of action ?? - binds to intranuclear receptors

102-low WBC after chemo.....tx: filgrastim

104-patient with HTN and low K what else are you gonna see? - low renin level.

105-pharmaceutical company invented new drug, and one physician who is affiliated with some hospital would like to use the new drug, he has to have permission from????

I chose National institution of health..... there was also -committee ethics

107-a diver and his assistant provided him mistakenly with another gas  
....so he

had some confusion and seizure when he came up back to the surface

...which gas is responsible????

O<sub>2</sub> - Helium -CO<sub>2</sub> -nitrogen

108-gross picture of skull, then gave you symptoms of CNV1, CN 4, CN6) you should locate the superior orbital foramen.

109-a Vegetarian from 5 years and macrocytic anemia ....b12

111- young female had a radiation therapy then she didn't have any periods for 8

months, hormone levels.....(FSH, LH, estrogen)

112- patient had E. coli infection then developed septic shock .....which virulence

factor is responsible? -Lipid A

113- rash after delivery which drug is used in anesthesia.....morphine

114- absence seizure and taking valproate, where does it work?

t- tubule thalamus

115- young female she had episiotomy on the midline then she developed bowel

incontinence .....branches of pudendal



116- African American male who developed HTN recently, but he otherwise healthy, what is the best initial treatment...>>>> HCTZ

- >aeroplane travel presented with leg swelling?--> DVT
- >categorical data comparison in cycling with helmet and without helmet cases-chi square to choose
- >phase II of clinical trial
- >case series
- >ibuprofen MOA
- >hyper TG what to give a fibrates
- >radiolabelled hormone acting on cell surface prolactin/growth factor/steroid
- >abd aortic aneurysm risk d/t atherosclerosis
- >BPH- which pathway increases a testosterone to dihydrotestosterone
- >graph of pantoprazole and cimetidine
- >AML treatment-ATRA MOA a maturation
- >staghorn pie-risk factor for this infection
- >patient on acetazolamide blood !HCO<sub>3</sub>, !PH, !CO<sub>2</sub>
- >question on infertility due to PID
- >prick on buttock developing lesion that has crepitus on palpation necrotizing fasciitis
- >Jarisch-Herxheimer reaction- syphilis pt given penicillin develops fever chills rash
- >fungal lesion on perineal area of a baby in pie-caused by trichophyton
- >tetanus C/V- how toxin reach CNS-a dynein
- >CT image of subdural hemorrhage-bleeding from which vein a bridging vein
- >CT showing infarction-Posterior cerebral artery area involved >NADPH deficiency
- >one question on margination
- >MI patient- elevated enzyme is due to plasma membrane lysis/mitochondrial/nuclear
- >CCF- pleural fluid----caused by increased hydrostatic

pressure

>neural tube defect-what might also present-

excessive daytime sleep, looks fresh restless leg syndrome

not in option, no any other feature suggestive of narcolepsy

described-choose hypersomnolance disorder >C/V staring f/b

jerky movement of a limb a complex partial seizure to choose

>MOA of methimazole- inhibits peroxidase enzyme

>HIV with cortical atrophy hydrocephalus ex-vacuo

>patient telling doc you are too nice idealization

>alzheimer due to which neurotransmitter Ach

>C/V of delirium

>anorexia nervosa, risk for what hypokalemia in option

>increased homocystine, decreased methionine def of what?

Vit b12 in option

>increased homocystine, increased methionine what to give?

Vit b6 in option

>loss of husband, low mood most of the time, crying, plays

with pet sometimes but the duration was 2 years adx

depression

>c/v of panic disorder

>2 Q of brain pie to identify the area of involvement for the  
neurological feature described in vignette

>RTA- excessive blood loss, appropriately managed on 2<sup>nd</sup> day

oliguria-what u expect in urinalysis a granular tubular cast

>graph of pressure recorded over time in GIT a earliest wave

seen in small intestine and then stomach-Q was where does that

wave start a no superior mesenteric plexus in option, ticked

celiac plexus

>conservation of volume develops in what age?--> 11 years

>ossification center in elbow, not in kneea whats this?

Normal/achondroplasia

- >C/v of osteoporosis what to give-bisphosphonate
- > CN of fibromuscular dysplasia
- >c/v of factor V leiden

- >persistent sweating on hand--- what to resect-upper thoracic sympathetic ganglia in option
- >pansystolic murmur of MR
- >pressure volume loop, where does mitral valve close
- >macardles diseasea what increase in muscle-glycogen in option
- >e. coli sepsis in infant-which enzyme defecta uridyltransferase
- >strep pneumonia infection then sepsis what is responsible-alipotichoeic
- >DM woman- whitish vaginal discharge and itching-what to give-fluconazole
- >precocious puberty in male- what to seea 17-progesterone/karyotyping
- >husband asking her wifes information on phone-best response---cannot share her information without her perm1ss10n
- >antidote of 5-flurouracil
- >CD25+, FOXP3 + flowcytometry pica.regulatory T cell
- >MELASa heteroplasmy (variable expression)
- >c/v of a condition described-to choose incomplete penetrance
- >left shift ofHbO2 curve with hyperbolic curve-so increased affinity and decreased (loss of) co-operativity, as curve is no more sigmoid shaped. >mucicarmine stain-Cryptococcus infection >chloroquine sensitive also treated with primaquine-why to prevent relapse
- >double ring in a RBC shown, in which plasmodium it occurs a p. falciparum
- >tumor necrosis factor alfa (TNF- alfa)

- >transforming growth factor beta (TGF beta)
- >RCC grossa what to suspecta VHL
- >for bone marrow activationa salgramostrim
- >sleep disordera repeated disturbed sleep in night,

- >S/E of tacrolimus nephrotoxicity
- >18 year old, h/o fever and flu in school friends, no h/o of such in family-having arthritis-whats the dx?--> parvovirus in option
- >throat infection, given antibiotic but not relieved-heterophil negative.CMV in option
- >right sided heart failure with tricuspid regurgitation, wheez in chest-what to see 5-HIAA in option >CKD patient, when to do immediate dialysisapericarditis in option
- >fluid retention, edema is s/e of which antidiabetic drugapioglitazone in option
- >hypoaesthetic macule with nerve involvement-what you see?-->th1 response/ th2 response
- >Mgso4/also4/calcium carbonate, what causes diarrhea?
- >Inheritance of beta thalassemia to offspring- when female is affected and male is normal from population with incidence of 1/1600-option 1/1600; 1/800; 1/4 >MI 12<sup>th</sup> day-what changes will you see... collagen with fibroblast and new vessels/fibroblast and new vessels >Thymus immunoglobulin injected and bla bla >Rash, after a gap of time seizure(months or year do not exactly remember)-options measles/lyme disease >Incidence rate per annum to calculate from data of 5 years >zenker diverticulum pie with barium swallow-what to resect-thyropharyngeus in option
- >non alcoholic cirrhosis, what is seen a bridging fibrosis
- >ewings sarcoma-EWS:FLI1
- >SBLA- in pedigree whats the defect a p53
- >in large pedigree only one affected- c/v describing muscular dystrophy-whats this? - spontaneous mutation in option
- >rett syndrome c/v a skewed X inactivation in option
- >uworld graph of drug dose response curve a only option

telling the most potent was correct

inside in captivity so that his popularity won't decrease as they look alike... she says she hears instructions about what to do and says she has no time for an interview as she is in a hurry.. Dx? Bipolar I mania with psychotic features/schizophrenia

- >Antibiotic (with and without fatty diet) has higher weight gain as indicated from graph on comparison to controls that are given placebo (with and without fatty diet)-this change is due to the action of the antibiotic that causes? Long options describing the metabolic conversions, could not recall them
- >Old blind DM woman brought by her husband, she had an amputated right leg, presents with fever, increased HR and decreased BP... on saying drugs have to be given by the physician... the patient says she does not want any active actions now... they both agree to go to hospice as they think it becomes easier for them to handle the situation there... you know that hospice takes care of those who have terminal illness and live for <6 months... what will you do? Seek advice from her elder child/wait until surgeon confirms no more intervention is required/send to hospice when few days remain for her life as hospice does not allow people living >6 months/make arrangements for her and send her to hospice
- >Aminoglycoside affects-hair cells/tympanic membrane/ossicle
- >c/v of osteogenesis imperfecta-what you do in this case-hearing test in option
- >recurrent vesicular lesion on arm and groin, is due to- celiac disease in option
- >cannot abduct fingers of hand and cannot plantarflex foot -defect? Ulnar and tibial nerve
- >bilateral parotid swelling pie- what might happen?- orchitis in option
- >20<sup>th</sup> week gestation- erythropoiesis is from liver/spleen/bone marrow/ yolk sac

stained and pie was shown-seems like budding- treatment asked? Caspofungin in option/ vancomycin >Fat patient-wants to lose weight, so bypass of jejunum to stomach done-dumping syndrome seen-what change will occur in blood-hypocalcemia etc in option >CT of diverticular abscess after diverticulitis in the left lower abdomen-pain occurs on? Adduction of hip/external rotation of hip/ flexion of hip >Pie of central swelling in mid neck, moves with protrusion of tongue, this swelling is due to-failure of apoptosis of thyroglossal duct >Patient of hyper parathyroidism undergone surgery, only 3 parathyroid gland removed, develops the same initial features again.. where might be the cause-mediastinum in the option >Young patient with recurrent aphthous ulcer, what to suspect-inflammatory bowel disease >Infant has a swelling in inguinal region that bulges on coughing-the lesion lies on? Medial to inferior epigastric vessel/lateral to inferior epigastric vessel >No testes in one side of scrotum----defect is due to... gubernaculum in option >Asthma patient taking albuterol is under very poor control, add drug that -decrease IL-1, block muscarinic receptor, increase cAMP >ECG with increased PR interval, HR 40.. where is the lesion-superior right atrium/interatrial septum >Drug X given contraction of GI muscle seen, X+cholinesterase- level of contraction didn't change.. X+atropine- decreased contraction, what's drug X? neostigmine in option >White reflex of eye pie, defect in which gene? Rb gene in option

>Woman brought by police as she was found spying white house recurrently for 2 months, she says president twin brother is her husband and the president has kept him



- >Calf muscle tear repair is from--- satellite cell, extrafusal muscle, intrafusal muscle
- >HIV patient, pie of vertebral fracture--- cause? Mycobacterium etc in option
- >Patient died- on biopsy all four chambers increased in size with fibrosis, normal valve -whats this-dilated cardiomyopathy/ amyloidosis
- >Patient taken food, after 1 hr what happens-- j cAMP, i l protein kinase A
- >CN with heart problem, high arched foot, proprioception impaired, this disease is due to-triple repeat mutation >Granuloma is due to--- dendritic cell/ epithelial cell/ macrophage
- >Child born with chorioretinitis-this is due to-mother eating meat at the time of pregnancy
- >NNT
- >Specificity calculation
- >Clavicle fracture pie-what muscle attaches to the fractured piece-deltoid, sternohyoid, pectoralis minor >Thumb pointing down and placing arm in flexed position, pain elicited on shoulder on asking patient to resist the downward force, this is due to injury of which muscle  
-supraspinatus
- >Old age, significant Smoking history, complain of difficulty combing hair and raising up from chair, increased creatine kinase-treatment? Corticosteroid/methotrexate >Nose bleed and atrophy, blood in sputum, hematuria- what you see to confirm diagnosis-antineutrophil cytoplasmic antibody
- >AAAATTTT mutated to AAAAGTTT-defect on what-splice site acceptor/ splice site donor
- >Old patient- GI perforated-on piperacilline tazobactam, 2<sup>nd</sup> day of admission blood cultured and the growth is

"Just took my Step 1 exam! Here's my review:

- Many questions were repeats from past exams around 10 per block, but they have tweaked few answers
- Biochemistry was heavily tested, especially storage diseases
- Important tip: even if you know the answer, take 40-50 seconds to double-check the question to avoid raising red flags at the test center

1. Child born with all features of potter sequence and picture of polycystic kidney was given, it was actually case of ARPKD. Now asked what will be the probability that next child born to these parents with same disease? A. 0% B. 25% C. 50%
2. Question asked about calculation of case fatality ratio, In data incidence of different disease along with the no. of cases per disease was given, in my question case fatality ratio of breast cancer was asked?
3. Patient presented with abdominal pain, amylase level was 1100 and asked at which location gallstone causes obstruction? A. Duodenum B. Hepatopancreatic ampulla
4. Case of Polycythemia Vera and asked lab changes in this patient are due to erythropoietin causing increased action on which of following? A. Basophilic erythroblast B. Metamyelocytes C. Reticulocytes D. Thrombocytes
5. Patient presented with enlarged lymph nodes since 3 months, on biopsy we found different population of small cells with scant cytoplasm and large cells with vesicular cytoplasm. (Don't remember other details) asked for diagnosis? A. DLBCL B. Follicular Lymphoma
6. Patient was taking aspirin and 7 days before clopidogrel was added, now patient presented with bruises, now asked for the cause of bruises in this patient? A. Additive antiplatelet effect due to addition of clopidogrel with aspirin B. Clopidogrel decreased metabolism of aspirin C. Clopidogrel decreases protein binding of aspirin
7. Scenario of undescendent testis, asked this condition is due to failure of which of the following? A. Gubernaculum
8. Case of CO poisoning, patient developed pulmonary edema and asked which of the following factor is decreased in this patient? A. Pulmonary capillary hydrostatic pressure B. Interstitial oncotic pressure C. Permeability constant D. Arterial PO<sub>2</sub> E. Pulmonary lymph flow

9. Patient took Ecstasy and started feeling unwell shortly after that he was also taking SSRI for some psychiatric problem and now presented with agitation, hyperclonus. Asked for reason of these findings? A. Serotonin Syndrome
10. Patient presented with painful menstruation history, well circumscribed mass is present in uterus and CT scan was given showing mass in uterus asked for the origin of this growth in uterus? (No idea about it, do check for radiology of Adenomyosis and uterine fibroid) A. Endometrium B. Myometrium
11. 17 year old male comes in for routine physical examination, everything is ok. He is recently assigned as the captain of his school soccer team. He says he smokes cigarettes and drink beer occasionally on weekends when he is out with his friends. What is the best initial step by the physician? A. Ask the patient about the source of his cigarettes B. Ask the patient how many beers he drinks and if he ever drives when he is drunk C. Ask the patient if his parents know about his drinking since he is a minor D. Tell the patient he must stop smoking and drinking right away E. Tell the patient that smoking will cause him premature death F. Tell the patient that smoking will cause him yellow discoloration of teeth and bad breath
12. 30 yr. old male patient came with painful scrotal ulcer. Physician started acyclovir with no benefit. Now he then started doxycycline, few days after that he developed groin lymphadenopathy, after 5 weeks course of doxycycline the lesions are healed and everything is ok. Asked for diagnosis? A. Neisseria gonorrhoea B. Staphylococcal lymphangitis C. Lymphogranuloma venereum
13. New born baby presents with congenital heart disease and was diagnosed as VSD, on follow up after 2 weeks murmur is increased as compare to last visit now asked for reason of this increase in murmur. A. Decrease pulmonary vascular resistance B. Increase in pulmonary vascular resistance C. Increase in size of VSD D. Decrease in size of VSD E. Patent ductus arteriosus
14. Female patient can't talk in front of people after she got promotion in her job, now has to give speech but she can't give for which she feel embarrassed, she has this problem since childhood. What should be physician's response? A. Evaluate patient about her childhood experience B. Ask her about maladaptive thoughts that she face at time of public speaking
15. A patient had an infarction at the territory of the LAD which of the following will return the blood from the affected area :A. Great cardiac vein B. Middle cardiac vein C. Anterior cardiac vein
16. we were doing a study to assess the association between non Hodgkin lymphoma and herbicides after selecting patients with and without lymphoma you assessed the exposure by asking the patients about their exposure in the past which of the following will affect the validity of the test: A. Variability of exposure measurement B. Variability of outcome measurement

17. an old patient came to you with long history of COPD, he has difficulty breathing, cyanosis, respiration is 12 BPM, you give him supplemental oxygen, then respiration decreases what's the most likely cause: A- Decrease hypoxic stimulation of peripheral arterial chemoreceptors
18. 21-year-old male with multiple cutaneous lesion on left arm, numbness of finger. What other finding you will see? A- Hypopigmented macules 2-cherry red macules 3-twisting growth erosion on fingertips.
19. Patient shows typical systemic senile amyloidosis in terms of cardiac dysfunction, what is fibril protein buildup? a. Normal transthyretin
20. Patient with family history of sudden cardiac death is experiencing cardiac issues, what is most likely to be seen on echocardiogram? a. Thickening of IV septum (genetic hypertrophic cardiomyopathy)
21. Mechanism of Abciximab
22. Mechanism of Adenosine - increases K conductance
23. Female Patient 35 years of age with severe right adnexal/right quadrant pain that started after she was exercising in the gym. Presented to ER, her pregnancy test is negative, rating pain on 10/10 scale, if we do the Doppler ultrasound in which we will find the less signal in which vein/artery? Ovarian vein
24. What substrate is increased in 88 years compared to 50 year old( insulin/Insulin like GF / GH, dont remember other)
25. Weird Q about experiment, they say about fibroblast with virus infection and that T cell dont response, but then they add some 10 aa peptide and T lymphocytes kill this fibroblast .The options were like Defect in MHC II, Failure to glycosylate MHC I, failure to synthesise MHC I, Failure of TAP synthesis
26. Patient return from travel and had smth like ulcer in the nose, ask what we will see in microscopy-amastigotes in tissue. This is cutaneous leishmaniasis
27. Patient taking morphine for a long time and start to take buprenorphine and present with withdrawal symptoms, They ask what is the mechanism of these symptoms, there were no partial agonist option, so I picked competitive antagonist option

28. Patient needs some inhaler for asthma but she will receive her salary only the next week . What to do? I picked like use some reserve, thought I dont know what they mean by this. Other were like ask her to leave and go in one week, borrow her money, say there is nothing we can do
29. Behavioral Q about 14y old with Type 1 diabetes who recently moved to USA to other endocrinologist from MEXICO and had recently several episodes of diabetic ketoacidosis, what to do: ask why she didnt take her pills, refer to another endocrinologist, ask about parents religious beliefs about chronic ilnss etc
30. Brachial plexus picture, CV about musculocutaneus nerve damage, need to pick this nerve in the picture.
31. CV about nurse, very long like 15 lines, she is hospitalized with some infection, then after treatment two days after developed another infection with some hospital bugs, I assume this can be factitious disorder which is often in health care workers
32. Hiccups resistance to treatment-what nerve to resect-phrenic
33. Q describing epistaxis, it lasts for one hour already but blood goes slowly, asked what artery is involved
34. Happy child, seizures. What is the defect?A. Paternal deletion, maternal allele hypomethylationB. Paternal deletion, maternal allele hypermethylationC. Maternal deletion, paternal allele hypomethylation D. Maternal deletion, paternal allele hypermethylation
35. Lady is going abroad. Is worried about getting traveller's diarrhea, wants you to prescribe a drug 'to use in case she gets traveller's diarrhea'. Which drug will you prescribe?A. Amoxicillin B. Floroquinolone C. Doxycycline
36. Two population pyramids of the same state was given 5 years apart. The 5-yr-later pyramid hadhigher populations in 0-4, 20-24, 25-29 and 30-34 age groups. Which of the following best explainsthis change? A. Removal of contraceptive services from free health coverage (something to this effect) B. Improvement in immunization for 0-4 age groups C. Improvement in immunization for 20-35 age groupD. Immigration of people 20-35 yrs into the state E. Emmigration of people 35-50 yrs out of the state
37. Following an accident, patient lost B/L sensations below umbilicus, B/L lower limb paralysis.Options had different cross-sections of spinal cords with defects. A. Spinal cord with whole spinal cord shaded (thoracic level) B. Spinal cord with

whole spinal cord shaded (cervical level) C. Spinal cord with dorsal columns shaded D. Spinal cord with one left half shaded

38. Patient had amputation of left arm. Feels pain in left limb. Stimulation of which part is likely to cause sensation to the amputated left arm? A. Left leg B. Left face C. Right leg D. Right face E. Right arm
39. Digoxin mechanism and what it does to the heart....like a physiology question...does it increase ejection fraction or HR?
40. Woman has enlarged breast and breast mass that is not fixed. Gross pic is very fleshy/tan looking. Micro shows leaf like picture. It is cystosarcoma phyllodes.
41. 1000 patients taken. Procedure A and B done. Events in A is 18 out of 1000 & in B its 13 out of 1000. Calculate ARR when we compare A to B?
42. Mentally incompetent & dependent patient gets some disease. Physician starting a new trial for that disease. What is require to include him? Her legal representative to proxy consent after reading about treatment, Can do it if it has beneficence & non-maleficence element.
43. what happens when ouabain is given — increased cell volume
44. features of diabetes, hashimoto, etc. were given. patient is frustrated with multiple diagnosis from different doctors, says no one has treated him properly, he is tired and fatigued, diagnosis? a. Autoimmune Polyendocrine Syndrome Type II b. chronic fatigue syndrome
45. a patient complains of pain in the neck . the pain began when she was in a car and suddenly moved her head backward while trying to look to the back seat. the pain and tenderness is in the base of the skull and radiates to the upper border of scapula. which muscle is injured? a. trapezius b. SCM c. levator scapulae
46. patient with abdominal pain nausea and all the features of DKA, his lab panel was given in which his glucose was 388 something and +ve urinary ketones. now what parameter will you find in this patient? A) Liver Glycolysis: ↓, muscle glycolysis: ↓, Lipolysis: ↑
47. One of the parents bring his/her child to the physician, child is having a lesion on her skin with a central ulceration and induration surrounding it, on serum analysis 2 to 3 um organisms are found in macrophages, what is the vector for this disease? a) Sand fly b) Reduviid bug

48. Patient had an acute pulmonary embolism; we started the treatment for this condition now her labs are as follow Day 1 hospitalization platelet count = 3 lacs Day 3 hospitalization platelet count = 1 lac something Day 6 hospitalization platelet count = in thousands It is due to treatment of which of the following? a) Dabigatran b) Heparin c) Rivaroxaban d) warfarin
49. Patient had pelvic surgery and also had external beam radiation therapy of her pelvis area due to cancer, now present with polyuria, on ultrasound there is bilateral distal ureter blockage causing bilateral hydronephrosis and hydroureters, which of the following mechanism explain this patients polyuria? A) increase pressure in bowman's capsule B) inability to concentrate urine in her kidneys
50. questions about GI regulatory substances please memorize the table in FA
51. Meckel diverticulum... what will you see? I chose gastric mucosa there was also pancreatic mucosa
52. Chemotherapy for a child and comes in vomiting and you gave him everything including Ondansetron what do you give? Dronabinol
53. A man who every now and then has an episode of jaundice but everything else is normal I decided it was Gilbert and the question was what the problem and I went with decreased UDP Glucoryl transferase.
54. A woman gives birth to a baby who is rh positive and she is negative and he dies and in her history she was pregnant but she had an abortion before this child. What is the thing that if she did she would have prevented the death of this second baby? Taking Rhogam in the first pregnancy or taking it in the 2nd trimester of this one or giving Rhogam to the bab
55. Spherocytosis.. splenectomy
56. Q about factor 5 Leiden
57. Image about INO. Many eyes ... and the diagnosis MS
58. Trendlenburg image and the affected muscle... Gluteus maximum

59. Image: the lunate is far from the scaphoid because of injury. What is the defect... Many tendons in the choices
60. Image about osteosarcoma and what is the predisposing condition? I chose Paget
61. Irineotecan mechanism of action
62. A patient with urticaria. What do you give him? Many H1 and H2 drugs. I could not choose . All of them were antihistamine
63. Lambert eaton pathophysiology
64. Diabetic ulcer pathophysiology
65. Patients on Aspirin for many years and he stops it 5 days before a surgery but he bleeds.. I chose it is irreversible
66. Why the velocity of signal transport is increased in Ranvier? Because it has lots of sodium channels
67. 45 year old woman can't get to sleep and she has irritability and everything else is normal... this is insomnia or this is normal for premenopause or she has generalized anxiety disorder
68. PICA syndrome in a clinical vignette
69. They gave me an image of real dura and told me it included the falx and they asked me what happened I chose subdural hematoma from the story because he was an old man who did an accident a few days ago and he was not sure if he passed out and the image was not full of blood and they asked about the mechanism I chose bridging vein rupture but not sure
70. Tumor in the auditory meatus and what is a complication of the surgery? I went with injuring the facial nerve.
71. Clinical story that describes nerve 3 palsy and you choose it
72. Easy story about Tourette what do you give? I went with Haloperidol



73. African American female and immunologic asthma and pets in the house and a smoking mother and asks what is the most important risk factor for the asthma ...
74. Please memorize the pharyngeal arches derivatives.. 3 Qs
75. The man whose wife dies and I decided to test him for depression.
76. I got the Q about the RA with minimal ulnar deviation and flexion of all the MCP. I went with superficial flexor but I think the students decided on flexor carpi ulnaris.
77. Place of prostate cancer.. Peripheral zone
78. Infertility in a man who has an autoimmunity against the sperm where is the problem? I chose Sertoli
79. Immuno-histo-chemical stains. ( 2 questions please memorize the table in FA)
80. Clinical Vignette about Ehlers danlos >>> pathophysiology? Collagen type 3
81. A man who had a son from his first dead wife and the son had an autosomal recessive disease (prevalence = 1/10,000). What is the chance that his second wife is a carrier of the disease?
82. What is the genetic defect in fragile X syndrome?
83. Vitamin B7 deficiency what is affected? Acetyl Co A carboxylase
84. Contraindicated in pregnancy Isotretinoin
85. Q about Galactosemia
86. A new test for diagnosing a disease and the gold standard, and he gives you the table about how many are positive for both tests and how many are normal but he asks about the prevalence of the disease.... In fact I ignored the new test and took the positives in gold standard divided by the whole population...

87. CV about cysteine stones in child and he tells you about the COLA amino acid what is the defect? Amino acid transporter
88. What is the accumulated substance in Gaucher?
89. An old man with problems in the valves related to rheumatic fever in childhood, what is the initiative microbe that he got when he was a child? GAS
90. Q about RRR ( calculate)
91. A doctor dealt with autopsy and did not put the instrument in the autoclave what remains alive? MRSA, C difficile... and other choices
92. Endophthalmitis after surgery causative agent: Bacillus
93. 2 year old boy with SX of typhoid fever and N/V and , what is in the story that helps the diagnosis: living in shelter, turtle
94. Mechanism of Metronidazole
95. Severe acne treatment >>>> Clindamycin
96. CV about HUS what else damages the kidney besides the thrombi ( this was a tough question)
97. Picture of urethritis in a man and what is the treatment.... I chose ceftriaxone and chlamydia but not sure if this is only for women or for both
98. A CV related to bats... I decided it was histoplasmosis and the q was were is the agent? In the macrophage
99. Q about Cryptococcus neoformans it was in mucicarmine red color. It was an unusual story not the AIDS patient with neurological SX. I knew it from the picture
100. Two Qs about schistosomiasis ... one person from Japan and the other went to a trip to a 3rd world place full of lakes ... They were typical stories

101. A Q that described a histology that I decided it was cirrhosis ... what is the most common cause? Alcohol or viral hepatitis and other choices
102. HIV and Sx of dementia... what is the reason? Direct effect of the virus\
103. Most common cause of pneumonia in 15 year old? RSV
104. 3 Qs about transplanted kidneys and infections>>> I always went with CMV... please study this very well
105. A baby who was given VZV and MMR and 3 weeks later comes with irritability and rash and seems fussy.. the rash was 3 vesicles in the area of the injection.. what do you do? I chose no thing right now but please check it out..
106. A person from China with nasopharyngeal carcinoma.. the agent is EBV
107. Grape fruit juice ... which cytochrome? I chose 3A4
108. Prevent AIDS transmission in pregnancy ZDV
109. Cells that were presensitized to help defend against tumor .. I went with CD8
110. The q about a child exposed to a bat in the garage ? I went with giving both the vaccine and lgs
111. 11- b hydroxylase deficiency and arrows ( table in FA)
112. Q about water house fredriekson... causative agent? N. meningiditis
113. Man with seizure problems for which he takes anticonvulsants comes with back pain that needs analgesic what to avoid? Tramadol
114. Patient who has to stop smoking tells the doctor smoking helps him relax so he will live longer what is the defence mechanism? Rationalization, Intellectualization
115. CV about opioid withdrawal.. asks what to give him? Clonidine

116. CV about opioid intoxication what to give? Methadone
117. 2 patients with hypoglycemia the first have gained weight the other have not. The main idea I thought was to differentiate between endogenous and exogenous insulin.. Arrows about protein C and glucose in the blood.
118. Contraindicated: Sildenafil and nitrate ( A man comes in with problem with erection and wants Viagra while he is taking many medications for HTN.... One of them is nitrate)
119. An old woman with a broken bone because of osteoporosis and she lives alone and her diet contains only 2-3 portions of fruit and vegetables in the week what will be decreased? PTH, CA, VITAMIN D OR ASCORBIC ACID ( I WENT WITH THIS)
120. Choose a meal that stays longer in the stomach: I chose bacon and egg since the other 4 choices included carbohydrates
121. A man with SLE Sx and medications.... Hydralazine
122. A woman with story of sharp pain near the lips ( I decided it was trigeminal neuralgia) and an image of the pons and medulla containing 5 nerves I chose the 5th... Study the image
123. A graph of a heart and the probe was in the right ventricle ( as I thought)
124. An images with spots on the mouth and I decided it was peutz jegers and what else... There were many kinds of tumors and I went with the hamartoma choice
125. Sth on the lip with histology I could not differentiate if it was an SCC or Melanoma..
126. The man who goes on the bike and needs a sunscreen
127. A man with psoriasis on his legs in a photo and they ask you to describe the histology
128. Psychiatric patient and he really needs to stay in the hospital and the insurance company will stop paying for him tomorrow what do you do? Talk with his relatives to ask if someone can come to his house and assist him to take the treatment at home, or you continue to have

him in the hospital, or you ask him to pay out of his pocket or you talk to his primary physician to make him deal with the situation.

Date / /

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**GHAZALI**

Bio chem.

- 1) Scenario of Xerodermosa pigmentosa → AR.
- 2) Cow milk to baby → deficiency of Uridyl-1-phosphate something
- 3) patient drinking alcohol, presented w/ ataxia & eye symptoms → B<sub>1</sub> (thiamine deficiency)
- 4) Bleeding etc in scenario → Vit C deficiency.
- 5) patient is Hypoglycemic & Hypoketotic → fatty acid oxidat
- 6) female runner fasted for 10 hours → arrows of fatty acids in blood?  
free fatty acids in blood  
fatty acids in urine
- 7) An athlete after running got 1 kg of weight. previously it was 75, after running/marathon it is 76  
a) Hydration b) steroid use c) energy drinks d) ate something like that
- 8) Myophosphorylase - typical scenario.
- 9) G<sub>2</sub>-S phase → Rb phosphorylation



**GHAZALI**

Miao.

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- 16) *Vibrio cholerae* → Adenylate cyclase
- 17) *Strep pneumoniae* causes diplococci shape
- 18) *Staph epidermidis* scenerio → biofilm + shape (Cluster shape)

19) Some Hx of travelling, no rash is on upper extremity, on arm, spread by → i maulked tick

20) *Coccidioidomycosis* → pic (different from FA & name)

20) patient taking steroids for COPD, now having non scrapable white patches on tongue → ?

*Candida albicans*

21) patient whose diabetes is not controlled → mucormycosis

22) fever + Hb decreased,

Indirect Billirubin & Total Billirubin ↑  
LDH ↑

a) Babesid b) Rickettsid.



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Misc

GHAZALI

- 23) Something about Shistosoma (easy to pick)
- 24) Patient / Group of people got Influenza vaccine last year, now got new variants / again influenza, what's cause  
 a) antigenic variation
- 25) mentioned spindle cell in stem →  
 so selected HHV8
- 26) Amoxicillin → Mechanism of Resistance?  
 - Picture of fungus on nail → Risk factor, occupation ✓  
 Pathology
- 27) 35 years old male + hepatitic disease symptom  
 Amyloidosis?  
 a) AA b) AL c) transthyretin.
- 28) Redness scenario  
 a) Histamine  
 b) Cytokines
- 29) tumor spread in peritoneal fluid & peritoneum, from where it did metastasize  
 a) cervix b) ovary c) liver d) lung.

30) Botox / Botulinum toxin act when

- a) ~~Muscarinic~~ ~~nicotinic~~ Nm
- b) ~~Muscarinic~~ Nm

31) NBME 31 Qs.

whose answer is

Muscarinic antagonist.

Biostat

31) cancer patients not taking meds

45	35	90

ARR of cancer patients not taking meds (something like that).

32) CI interpretation is relative risk.

Ethics A lot

33) One interpreter

34) patient at mastitis crying & saying i.e. can not feed my kid for next 8 months.

Ethics.

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**GHAZALI**

a) We can start antibiotics

b) What do you think why you can't feed for next 8 months.

35) Have to do any procedure on 13 years old kid.

a) Consent from parents assent from kid

b) Assent from kid consent from parent.

36) A 21 years old autistic child is per mother. for medication compliance, would you talk to

a) mother

b) patient

c) Both

37) A child don't let nurses to inject himself. Nurses said, otherwise child is social &amp; do interact, but not today. Dr enter the room &amp; what's response to child?

a) The nurses are saying you behave good other day

b) How are you doing (something like that)

I did have a lot of ethics almost  
10 questions per block.  
Ethics.

Date / /  
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GHAZALI

38) A kid is mother, playing on mobile accompanied  
e<sup>Dr mom.</sup>  
Dr response

- I also plays games on mobile
- Dr question to mother
- Dr question to child.

C/S.

39) Aortic Stenosis ~~pic~~  
murmur picture

40) Scenario of Aortic regurgitation (on auscultation I  
feel that)

Hypertrophy of

- left ventricle
- left atrium. etc.

41) ECG of Wolf Parkinson → accessory pathway

42) patient ko chronic Hypertension that  
mene arteriosclerosis Iga diya

43) atherosclerosis → monocyte

44) Case of Rheumatic fever & having pericardial  
friction (kch aad tha)

- myocarditis
- pericarditis

C/18

Date / /

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**GHIAZALI**

- 45) Male patient, having Renal symptoms & a lot of symptoms, something fibrinoid word was mentioned? guess  
I made a medium vessel vasculitis
- 45) Myxoma story → gelatinous

Endo.

- 46) Pregnancy allows?  
TBG, Total T<sub>3</sub>/T<sub>4</sub>, T<sub>3</sub>, TSH
- 47) Tenderness/pain in thyroid → de Quervain
- 48) Accident, now having symptoms of central DI problem is?
- 49) Diabetic patient → Insulin resistance
- 50) Diabetic <sup>obese</sup> patient taking a lot of drugs include metformin, now satiety feeling, which drug causing it?

**GHIAZALI**

GIT.

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**GHAZALI**

51 patient/kid is having ileal atresia, what his mother has taken during pregnancy.

a) Cocaine b) alcohol c) opoid.

52 patient presented w blood in vomitus, have all the symptoms of cirrhosis, where was the blood shunted that caused ~~bleeds~~ blood in vomitus, to?

a) left gastric artery b) left gastric vein  
c) Hepatic vein

53 Name picture of Ulcerative colitis e Hist pic of Ulcerative colitis, stinky patient has bloody stool & involving rectum

a) Ulcerative colitis b) Crohn's disease

54 X-ray picture of Mega colon

Have to diagnose i think, i don't remember

55 MSH2 - MLH1

56 One more about Lynch Syndrome

Hemato logy

57 Some concept about mother is Rhve & kid is RH-ve

## Hematology

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GHAZALI

58 lady after untreated celiac disease, now having Iron deficiency anemia.

59 Scenario of Polycythemia Vera.  
JAK

60 A lady having pain in leg, leg is red unable to walk, (Scenario of DVT). what med is given

a) Xa inhibitor. (only this was from Hepauni.)

## MSK

61 Unable to comb Hair, which muscle affected

62 One scenario was from Axillary nerve damage

63 problem in adductor muscle  
✓ obturator nerve damage.

64 - loss of ankle reflex - ✓ S1

65 unable to dorsiflex & loss of sensation over dorsum.

a) Common peroneal (fibular) nerve  
b) Tibial nerve

66 - One about amount asking for rickets.  
all symptoms of vit D deficiency

MSK

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**GHAZALI**

allows for vit D? serum  $Ca^{2+}$ ? PTH? Serum phosphate?

67 Anti CCP positive, RF +ve  
✓ RA

68 Name picture of gout  
✓ Mono sodium urate crystals

69 pain & weakness while raising from chair, proximal limb muscle =  $\frac{4}{5}$   
Distal limb muscle =  $\frac{3}{5}$   
Soreness is being felt

- Poly myalgia Rheumatica
- Fibromyalgia

Neuro.

70 Carbidopa, Levodopa is given to patient of Parkinson disease, would act where

- red nucleus
- Caudate
- Putamen
- Globus pallidus

71 patient lost pain in Right leg.

- left anterior spinothalamic
- left lateral spinothalamic
- Rt anterior spinothalamic
- Rt lateral spinothalamic

**GHAZALI** Publications



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Neuro

GHAZALI

72 loss of proprioception in <sup>left</sup> lower leg.

a) left Fasciculus gracilis

b) Right fasciculus gracilis

c) left Fasciculus Cuneatus

d) Right Fasciculus Cuneatus

73 CT scan of Oligoclonal bands (periventricular plaque) + patient has NO symptoms. what other finding would be present

a) Hyperreflexia b) fasciculation

74 Abnormal picture of Angiofibroma

✓ Tuberos Sclerosis

75 Tumor at Cerebello pontine angle, which cells

they are derived from. In addition they gave picture of fibers something, but I guess they were spindle.

a) Schwann cells b) fibroblasts c) GFAP

76 Used the word AV nicking.

Hypertensive Retinopathy

77 A patient is given drug when undergoing surgery, but muscles are relaxed then, drug is

a) Sevoflurane b) ~~EtO~~ Cistacurium

Neuro.

Date

/ /

**GHAZALI**

M T W T F S S

78 patient is having glaucoma where drug is contraindicated that caused myopia

a)  $\beta$ -blockers b)  $\alpha$ -agonists c) Muscarinic antagonist

Psychiatry

79 An retired army man came to Hospital after listening to Ambulance voice, us ko paid nhi kya ho jata tha, reason asked

- a) Classical conditioning  
b) Reinforcement  
c) Punishment

80 One case of splitting, nurses are good, doctors are bad.

81 Description of Tourette Syndrome, treatment

- a) alpha agonist

82 Negative symptoms of Schizophrenia involved part of Brain

a) Mesocortical b) Mesolimbic

83 Some scenario of Major Depressive disorder

Psychiatry

Date

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GHAZALI

84 2 year baby admitted to hospital with hypoglycemic features, while admitted to hospital, baby is doing well, no any symptoms, ~~mother~~ mother is stating baby is very happy everytime he visits to hospital. Before discharge a nurse notices mother injecting insulin to baby.

a) Factitious disorder    b) illness anxiety    c) Conversion disor.

Ethics (one more Qs I remember)

85 patient is being treated by dietician, Attending physician & cardiologist etc. While discharging what would be response of cardiologist to patient?

- a) I have explained everything to you, Do you have any question for me.
- b) Your attending would also explain all this to you, you can ask him

## Psychiatry.

Date / /

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GHAZALI

86. Case of anorexic patient presented with swollen on hands & is painful, what does she have

✓ Body image distortion

87. Case of opioid withdrawal, what patient having lacrimation.

88. I think something about PCP.

## Renal.

89. Bilateral Hydronephrosis

✓ posterior urethral valve

90. gain of function, acts when (was asking about) Liddle Syndrome.

✓ Cortical collecting tubules

91. Something viral infection & nephrotic Syndrome

✓ FSGS

92. Uncontrolled Diabetes

✓ nodular glomerulosclerosis

93. ~~After~~ after some meds patient presented with rash, costovertebral angle tenderness

✓ Acute interstitial nephritis

## Reproductive

Date / /

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GHAZALI

94. A new born baby having Holoprosencephaly, the new born's mother is took ~~used~~ alcohol during pregnancy, why Holoprosencephaly occurs.

- impaired migration of neuron & glial cells.
- alcohol passed in fetus through placenta & fetus liver can't metabolize alcohol.

95. Some lesion on penis, it would metastasize through which lymph node

- para-aortic
- superficial inguinal
- deep inguinal

96. Abnormal elevation of penis

Tunica albuginea can

97. Something about Klinefelter.

98. An adult girl, not menstruating, having Hairs on face, deepens voice.  
Sertoli Leydig tumor.

## Respiratory

99. COPD case FEV<sub>1</sub>, FVC & their ratio with percentages & arrows.

100. Pleural effusion - ? on percussion?, Breath sounds, ?

101. Some cancer ~~too~~ scenarios and it  
 been spread to all lung on peripheries  
 ✓ I marked. Adeno Carcinoma.

102. Pseudoephedrine

- Causes vasoconstriction & Hypertension

None picture of granulation tissue.

- This is all that I can Remember.

- Ethics was Huge portion, at least 8, 9 Qs per block. I  
 Just got one Qs of Interpretation.

- Biostat was tested like I'm Biostatistician.

- CVS & pulmo was tested together. I mean  
 in same Qs they would add 3 systems to  
 confuse you. So I know I did terribly  
 wrong in them, was just guessing.

I missed one from Biostat - Calculate PV  
 while Sensitivity &

PRAY for ME GUYS  
 I DID TERRIBLE  
 performance on  
 my exam

sensitivity = 0.95  
 prevalence = 50%

Q1). Person presents with ascites. What would his levels of the following things be (increased or decreased)?

Catecholamines , ADH , renin

Q2). Man at a party was angry but not violent. He was being delusional, kept accusing his gf of cheating on him and his someone trying to kill him. He has used some substance, what is the mode of action of that substance? (cant recall all the options) A) inhibits the reuptake of dopamine

B) increases the reuptake of dopamine

C) increased the reuptake of serotonin

Q3). woman has 2 cervix but one vagina? What embryological problem led to this?

A) fusion of the mullerian ducts (im not sure if this was their wording)

B) division of genital tubercle

Q4). person has Alzheimer's like symptoms. Couldn't recall 2 out of 3 things he was told to remember. What other problem would he develop first?

A) Visuospatial dysfunction

B) long term memory loss

Q5). pedigree of a lady's father having some red green color blindness. What is the probability her unborn son 46 XY will have the disease? Pedigree showed that the lady's father had the disease. Father had 4 kids none of whom had the disease. Lady had three girls, none of whom had the disease and this is her 4<sup>th</sup> pregnancy.

A) 1 of 2

B) 2 of 3

Q6). 6 weeks old baby is lethargic and developed fever. Mother thought she has some viral infection. Showed up to the hospital and this is what the labs show.

Low glucose, high lactate, high Uric acid( I'm not sure)

Kid also has hepatomegaly

The substance that will accumulate in her body is formed from the following?

A) glucose

B) cholesterol

...

Q7). when Ach is administered in normal smooth muscle cells it causes vasodilation, when given with smooth muscle cells that have endothelial cells removed causes vasoconstriction. Which drug can u give now (that is without the endothelial cells) that would still cause vasodilation?

A) atropine

B) bathenecol

C) nicotine

Q8). Similar question as the one above, where they had mentioned when Ach is administered to smooth muscles with the endothelial cells present, it results in vasodilation, but when given without endothelial cells, causes vasoconstriction. Ach causes this vasodilation via which mediator? A) Nitric Oxide

Q9). person has anterior spinal artery level damaged. Looks like thoracic level? What will she present with?

A) motor weakness in the lower limb

B) loss of temperature sensation in her hand

Q10). picture looked like a ring in a blood cell. There was also a hypersegmented cell. But they also mentioned the patient had just travelled to rural China. What other clinical feature would be seen? A) hemolysis?

Q11). case of lepromatous leprosy. Asked what is defective? Know how to differentiate between the two forms of leprosy since only symptoms were mentioned.

A) Th2 response

B) Th1 response

Q12). Huntington rate is v high in African population. It has been found that teh African population originated from a ship of people. What does this signify?

A) some sort of population (I cant recall the word)

B) genetic drift

C) autosomal negative



Q13). colonic polyp. What gene mutation?

- A) APC
- B) KIT
- C) MLH1

Q14). person has medullary carcinoma of the thyroid and marfanoid habitus. What other finding does he have?

- A) mucosal neuromas

Q15). psammoma bodies shown. Spinal cord pain. What tumor is it?

- A) meningioma
- B) schwannoma

Q16). Psammoma bodies are seen in which thyroid cancer?

- A) papillary

Q17). G protein coupled protein receptor. What is its mode of action?

- A) allows ion flow
- B) transcription of gene receptor

Q18). ROC curve. Asked for the most accurate one

Q19). Drug that is not bound to proteins but its structure includes amino acids. Which of the following is its most likely property?

- A) Crosses the plasma membrane easily
- B) Acts on nuclear receptor
- C) Decreased volume of distribution

Q20). patient with steatorrhea has ataxic symptoms. What do they have? A) vitamin E deficiency

Q21). Weird picture of a ventricle cross section. Arrow pointing at something and asked which ventricle is dilated. Looked like lateral ventricle to me and the arrow was pointing towards foramen of Munro

Q22) kaplan meiyer curve. Watch randy neils video

Q23) patient with low TSH and low T4. What do they have?

A) tumor of the thyroid gland

B) tumor of the pituitary gland with compressive symptoms

Q24). 11 year old kid with precocious puberty. Tanner stage 4 and v tall for his age. What would u give to the patient ?

A) somatostatin analog

B) GnRH agonist

Q25). ultrasound of poly cystic kidney disease. What is the most significant risk factor in this patient of 25 years?

) family history

Q26). patient with hypopigmentation on hands and presented with orthostatic hypotension I think. Had low sodium levels and high potassium levels. What is defective? A) reduced cortisol production?

B) reduced aldosterone production?

Q27). Flowchart given and asked which pathway does Ipratropium bromide inhibit?

A) Ach receptor antagonist

Q28). Nurse who has completed 3 doses of Hepatitis B vaccine, accidentally pricks needle of hep B patient, what will you find in nurse blood?

A) Antibody to HbsAg

Q29). baby born with right scrotal swelling. On the ultrasound which was performed during pregnancy, anechoic crescent shaped swelling seen ? What does he have?

- A) failure of obliteration of processus vaginalis
- B) hernia

Q30). qs on ARDS patho physio. I.e alveolar capillary membrane damage

Q) too many qs on breast

Q31). Phyllodes tumor histology was given. Info mentioned was breast retraction and calcification I think. Had to recognize what it was?

- A) Phyllodes Tumor

Q32). lady involved in a traumatic car injury involving thorax. Few weeks later presented with a mass with irregular borders on top outer quadrant. Was calcified and fatty macrophages found. What is it? A) fat necrosis

- B) fibroadenoma

Q33). patient presented with the following lesion on the face. Skin colored but a central ulcerated portion. Dude worked as a land something. What's the most common cause of this? A) occupation history (considering it was cutaneous leishmaniasis)

Q34). Achilles' tendon fat deposits. Which Apolipoprotein is defective?

- A) ApoB100
- B) ApoB48
- C) ApoC 2

Q35). patient has recurrent vesicles on penis. Where is the pathogen involved latent?

- A) peripheral nerves
- B) CNS

Q36). patient went hiking. Came back and now has fever and a weird rash that started from arm and then to trunk and then face. Cause? (The picture showed a red papular rash on the wrist and the inner side of the arm)

A) Rocky mountain spotted fever

Q37). person presented with shortness of breath and slightly blood tinged sputum. X ray showed mediastinal dilation. Mediastinal lymph nodes also looked enlarged. The patient recalls receiving an envelope few days back which contained some white powder. The responsible agent involved what? A) adenylate Cyclase

B) nuclease

C) ribosylation

Q38). nodular opacities were seen on a patients chest x ray but they were not seen when bronchoscopy was done. Lateral chest x ray given which also showed nodular opacities,

What is the cause?

Q39). baby bleeding from stump of the cord. No purulent discharge. PT and PTT were normal. What is most likely defective in the kid ?

A) Factor 8

B) factor 9

C) VwF

D) protein C

E) protein S

Q40). chediak higashi baby described. Where is the defect?

A) defective phagosome receptor

B) increased lysosome activation

Q41). S1 nerve root damaged. Patient can't stand on toes. What other thing does he have?

A) atrophy of tibialis anterior

B) loss of patellar reflex

C) rectal muscle atrophy

D) something that I can't remember, might've been the answer

Q42). lady had some ovarian mass ruptured. She's also complaining of shoulder pain. What nerve roots are responsible for the shoulder pain?

Q43). pharyngitis caused by a strep group . Which streptococcus is it?

- A) alpha hemolytic
- B) beta hemolytic
- C) gamma hemolytic

Q44). nitrite negative infection. Picture shows gram stain of staph clusters. Which pathogen? A) staph saprophyticus

Q45). baby in picture has cleft palate. Defect in which embryological defect? A) failure of the lateral palatine processes to fuse

Q46). Baby lost his third and fourth finger when born. Cause?

- A) amniotic band syndrome

Q47). patient had a kidney transplant 2 months back. Now taking cyclosporine. Presented to the clinic. Kidney biopsy shows mononuclear infiltration. Cause?

- A) acute rejection of transplant
- B) direct result of cyclosporine on the kidney

Q48). patient presents with abdominal pain. Vessel shows fibrinoid necrosis and microaneurysms. What is it?

- A) polyarteritis nodosa
- B) microscopic polyangiitis
- C) henoch schonlein purpura
- D) Kawasaki disease

Q49). patient has conjunctivitis and arthritis like symptoms. Also has genital lesions. The diagnosis is associated with.

- A) HLA B27

Q50). third degree burn qs

Q51). patient presents with vestibulocochlear nerve defects. Bone pain. MRI showed sclerotic bone

A)paget disease

B)osteosarcoma

Q52). patient can't hold a pen. Sensory receptors involved.

A) Ruffini

B) merkel

C) pacinian

Q53). what happens in epilepsy?

A) sodium channels spend less time in inactivated state

Q54). what statement about ventilation during non REM stage three is correct ?

A) reduced response to hypercapnia

B) increased tidal volume

C) hypocapnia

Q55). medial geniculate body to be marked in temporal lobe lesion

Q56). lower MCA infarct seen in picture. What does the patient have?

A) expressive aphasia

B) fluent aphasia

Q57). label oculomotor nerve.

[https://www.shutterstock.com/shutterstock/photos/214261441/display\\_1500/stock-photo-cranialnerves-of-brainstem-ventral-view-posterior-part-of-the-brain-adjoining-and-structurally-214261441.jpg](https://www.shutterstock.com/shutterstock/photos/214261441/display_1500/stock-photo-cranialnerves-of-brainstem-ventral-view-posterior-part-of-the-brain-adjoining-and-structurally-214261441.jpg)

Q58). patient has sense of smell before seizures. Where do her seizures originate from? A) temporal lobe

Q59). subdural hematoma shown in picture. Which veins affected?

A) bridging veins

B) circle of Willis

Q60). what if inhibited in a granuloma would result in dissemination of the infection? A) TNF- $\alpha$

Q61). blurry vision developed in a patient that started from the superior quadrant. Initially patient also had a complaint of floaters and flashes for days. What is the cause?

A) vitreous hemorrhage

B) foreign body

Q62). bitemporal hemianopsia

A) craniopharyngeoma

Q63). rinne and Weber qs on conductive hearing loss

Q64). baby has retinoblastoma. The gene involves which phase of the cell cycle?

A)G1-S

Q64). patient with malignant hyperthermia. Given dantrolene. Mode of action? A) inhibits the release of calcium from sarcoplasmic reticulum

Q65). paclitaxel inhibits what?

Tubulin

Q66). qs on denial

Q67). qs on altruism

Q68) patient was brought to the ER in an unconscious state. Was administered naloxone. His condition improved. Now few days later patient says he's experiencing withdrawal. What would most likely be seen in the patient?

A) increased bowel movement, diaphoresis, dilated pupils

Q69). A patient with hypersomnia. Both at night and in the day. Which hormone is deficient? A) orexin

Q70). patient has envelope like crystals in urine. What will you treat him with? A) Thiazide diuretics

Q71) staghorn stone picture given and asked what it is?

[https://www.webpathology.com/slides-13/slides/Kidney\\_StaghornCalculus\\_Gross.jpg](https://www.webpathology.com/slides-13/slides/Kidney_StaghornCalculus_Gross.jpg)

A) stag horn calculus

Q72). patient has club foot. What error?

A) deformation

B) malformation

Q73). which of the following can be used as the hall mark for innate immune response?

A) IL12 levels

B) PAMPs

C) the rest of the answers were adaptive

Q74). 10 days after administration of rituximab patient develops urticaria and some other allergic symptoms. His previous rituximab administration was normal. What hypersensitivity?

A) 1

B) 2

C) 3



D) 4

Q75). NK cells kill by?

A) granzymes

Q76). which pathway in complement activation predisposes a person to neisseria when defective?

A) classic

B) alternative

C) lectin

D) terminal

Q77). an obese person is having shortness of breath. What is the most likely cause?

A) decreased outward recoil of the chest

B) increased outward recoil of the chest

C) decreased outward recoil of the lungs

D) increased outward recoil of the lungs

Q78). person replaced carbs with amino acids. What would be increased?

A) urea cycle activity

B) increased glutamine production

Q79). PNH described. What is defective?

A) decay accelerating factor

Q80) PNH described. What is deficient?

A) complement inhibitor

Q81). patient has BPH. BPH is formed due to:

A) hormonal causes

Q82). osteogenesis imperfecta child described. Asked the type of collagen defective:

- A) I
- B) II
- C) III
- D) IV

Q83). Frank-Starling law. Why does the cardiac output increase when the preload increases? A) increases the stretch on the myocardial cells ?

Q84). an experiment was conducted in which increasing the dose increased the adverse effect. Previous data was picked up from previous similar researches which showed that an increased dose actually increased the chance of developing the adverse effect. Biochemical processing showed so and so properties of the drug contributed to the adverse effect. However the same adverse effect can also be caused by multiple other drugs. What does this research cover?

- A) dose-dependent response, strength of association, biological plausibility
- B) dose-dependent response, biological plausibility, specificity

Q85). several studies with OR given and confidence intervals given for different studies and we had to compare which one was statistically significant and which one wasn't

Q86). folate deficiency. What is this vitamin used up for?

- A) nucleotide synthesis

Q87). Patient has tingling sensation and slightly ataxic. Which vitamin deficiency? A) pyridoxal phosphate

Q88). pain when patient opens his jaw. Which nerve is involved?

- A) trigeminal nerve

Q89). patient has fungal nail infection. What is the MoA of the drug used in this patient? A) squalene epoxidase inhibitor

Q90). old male patient. Morning stiffness in his knees lasts for 15-20 minutes then gets better. Pain gets worse at the end of the day. Synovial fluid analysis of his knee was done. Didn't have any leukocytes. What is the most likely diagnosis in this patient ? (Didn't mention the pathologies directly but a v generic point related to each) A) osteoarthritis

B) rheumatoid arthritis

C) paget disease

Q91). drug results in same  $K_m$ , changed  $V_{max}$ . What type of drug is it?

A) non competitive inhibitor

B) competitive inhibitor

Q92). lights criteria. Pleural fluid protein/serum protein was 0.6. What must be the most likely cause here?

A) malignancy

B) mycobacterium tuberculosis infection

Q93). 20 year old woman with hypertension. Renal bruits are heard. What is the most likely cause of this?

A) fibromuscular dysplasia

B) atherosclerosis

Q94). man keeps developing abscesses. The drug administered has the following mode of action?

A) bacteria cell wall inhibitor

B) bacterial protein synthesis inhibitor

Q95). Man with peptic ulcer disease. a drug is used with bactericidal activity which binds to the ulcer base. What drug is it?

A) bismuth subsalicylate

B) metronidazole

C) macrolides

Q96). Person wants to design a case control study. What should be the first most step he needs to take?

A) Define case

B) Identify the persons with the disease

Q97) study is conducted in which the people are recruited based on exposure status. What type of study?

A) Cohort

B) case control

Q98) 2 murmurs. One of them had it mentioned in the question that the murmur was causing carotid bruit so it was easy to identify it was Aortic Stenosis. The other one sounded like mitral valve prolapse to me, nothing was mentioned in the question.

Q99). Patient went for trip to Colorado mountains, had berries and water of lake then presented with diarrhea

A) Giardia

Q100). Some experiment was conducted in which bacteria were allowed to grow on a medium. And after months the medium was checked. Which bacteria will still be surviving? A) Bacillus anthrax, clostridium?

Q101). HPV infects which cells?

A) epithelial cells

B) lymphocytes

C) red blood cells

D) neutrophils

Q102). An astronaut after taking one round turn of earth comes to get some examination done before going into space for another thing. Changes in the following?

A) Bone Mass ↓ Muscle Mass ↓ Urine Ca<sup>+</sup> ↑ Urine cAMP ↑

Q103). Ivacaftor-Lumacaftor mode of action

A) increases transport of CFTR proteins to the cell membrane

Q104). A 3 month old baby asked which neurological process will still be occurring A) Myelination

Q105). We are giving O group which is RH -ve, to a patient with AB group with RH +ve, now there is reaction which of the thing reacted against the patient blood?

- A) Anti A
- B) Anti B
- C) Anti Kell
- D) Anti O
- E) Anti RH

Q106). Identify the partial agonist curve

Q107). The following histology picture was shown. What is the person deficient in?

<https://www.google.com/url?sa=i&url=https%3A%2F%2Fneuropathology-web.org%2Fchapter10%2Fchapter10cPeroxisomes.html&psig=AOvVaw0QcO1cCjZfo4gmqaErl7LW&ust=1692550985834000&source=images&cd=vfe&opi=89978449&ved=0CBAQjRxqFwoTCMiA4PeZ6YADFQA AAAAdAAAAABAE>

- A)peroxisomes
- B)endoplasmic reticulum
- C)nucleus
- D)golgi

Q108). Uworld question where a man presented with unstable angina. Underwent coronary angiography via femoral approach. Stent is placed and the patient is discharged. Presents few days later with livedo reticularis and cyanotic toe I think. What is the diagnosis?

- A)Atheroembolic disease

Q109). NSAID exacerbated respiratory disease described in a patient. Patient had chronic sinusitis, and asthma like symptoms. What else would the patient have?

- A)nasal polyps

Q110). Posterior urethral injury was described I think. There was a pelvic fracture and blood was present at the meatus. Asked which part had been injured?

- A)urethra
- B)prostate
- C)bladder
- D)kidney

Q111). 19 year old girl started college. It has been 6 weeks and the girl doesn't go out to any events or talks to anyone in college. When asked why is that so, she says I want to make friends and go out but I am just scared I will do something embarrassing and then everyone will judge me. What is the most likely diagnosis?

- A)Avoidant personality
- B)generalized anxiety disorder
- C)panic disorder
- D)phobia

Q112). Unilateral LMN lesion of the facial nerve. Asked whether the patient has lost both upper face and lower face facial nerve functions or just one part?

- A)both lost

Q113). Painless white plaque on the lateral tongue that cannot be scraped off. What is the causative organism? A)EBV

- B)candida

Q114). Hemolytic disease will most likely occur in which combinations?

- A)Rh- mother, Rh+ father, Type O mother, Type AB father

Q115). Enterochromaffin like cells were labelled in a gastric pit and asked what the following cells secrete?

Q116). There was some athlete who was participating in a race. Halfway into the race the athlete becomes dizzy and fell. I don't recall any labs or his BP being mentioned. The question asked what did the athlete drink before starting the race?

A)carbonated sodas

B)sports drink

C)water