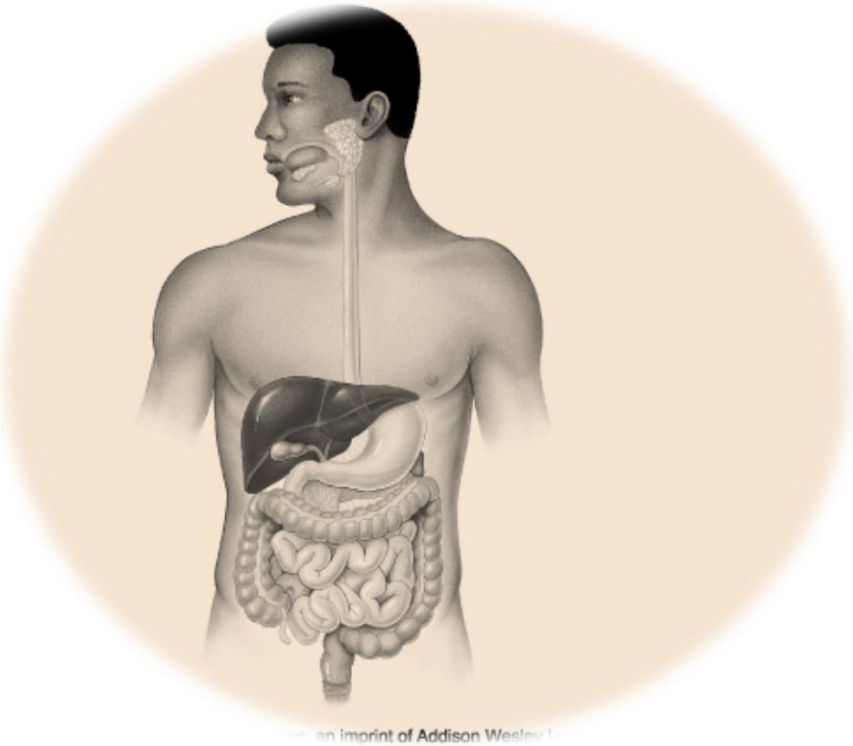
GIT Block

Revision Questions for the 4th week



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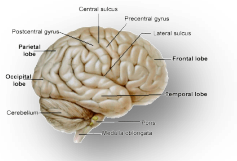


Anatomy:

Liver & spleen

1) which of the following is posterior to liver ?

A. right kidney
B. upper 1/3 of the esophagus
C. abdominal aorta
D. pylorus of the stomach

Answer: A

2)posteroinferior surface covered with peritoneum, except at?

A. fossa for the gallbladder
B. portahepatis
C. grooves for SVC
D. a-b

Answer:D

3) The left fissure formed Anteriorly by?

A. fissure for the ligamentumvenosum
B. fossa for the gallbladder
C. the groove for the inferior vena cava
D. fissure for the round ligament

Answer:D

4) Spleen located in the ?

A. epigastrium
B. lefthypochondrium
C. righthypochondrium
D. a-b

Answer:B

5)splenic vessels and the tail of pancreas are carried by?

A. Gastrosplenic ligament
B. Lienorenal ligament
C. ligamentumvenosum

Answer:B

6)Gastrosplenic ligament carrying

A. left gastroepiploic vessels
B. left gastric vessels
C. rightgastroepiploic vessels
D. short gastric vessels
E. a-d

Answer:E

Histology :

Histology of LIVER & SPLEEN

q1)All of the following form the portal areas of hepatic lobule except ?

A. Bile ducts
B. Branch of portal vein
C. Branch of splenic artery
D. Branch of hepatic artery

Answer: C

2)regarding to Liver Sinusoids which of the following is wrong ?

A. Endothelial Cells are Fenestrated & continuous
B. Basal laminaof endothelial Cellsis absent
C. Kupffer Cells are macrophages
D. Function of Kupffer Cells is phagocytosis

Answer: A **Note: Endothelial Cells are Fenestrated & discontinuous**

3) which type of collagenSpace of Disse has ?

A. Type I
B. TypeII
C. Type III
D. Type IV

Answer: C

4) regarding to White Pulp of spleen which of the following is wrong ?

A. Periarterial lymphatic sheaths (PALS) housing T lymphocytes
B. Periarterial lymphatic sheaths (PALS) housing B lymphocytes
C. Lymphoid nodules housing B lymphocytes
D. Lymphoid nodules housing T lymphocytes
E. B-D

Answer: E

5) Pulp (splenic) cords have all of the following except ?

A. Extravasated blood cells
B. mast cells
C. macrophages
D. reticular cells and fibers.
E. plasma cells

Answer: B

Physiology :

Physiology of the colon

1-secretion of water and electrolayte into the large intestine in response to

A. infection
B. extreme parasympathetic stimulation
C. sympathetic stimulation

Answer: A

2- inhibition of defecation reflex is by

A. -cerebral cortex
B. -enteric nervous system
C. -spinal reflex

Answer: A

3-ileocaecal valve relaxes by

A. distention of cecum
B. adrenergic stimulation
C. secretin

Answer:B

Bilirubin Metabolism

1:Bilirubin is absorbed through the hepatic cell membrane by:

A. secondary cotransport with amino acid.
B. Carrier protein combined with albumin
C. Carrier protein combined with Y & Z proteins

Answer: C

2:The intestinal mucosa is relatively impermeable to ..... bilirubin but permeable to ..... bilirubin:

A. unconjugated - conjugated
B. conjugated - unconjugated

Answer: B

Q3:Urobilinogen is converted to _____, which is excreted in the feces:

A. stercobilinogen
B. urobilin
C. A&B

Answer: A

4:The direct bilirubin (conjugated) is converted to _____ by bacteria in the intestine:

A. Biliverdin
B. urobilin
C. Urobilinogen

Answer: C

5: Adding ethanol to the plasma precipitates ..... and ..... from the protein complex (unconjugated):

A. heme - globulin
B. albumin - globulin
C. protein - frees bilirubin

Answer: C

6: The effect of steroid.

A. compete with bilirubin
B. proliferation of the smooth endoplasmic reticulum in the hepatic cells.
C. increase in hepatic glucuronyl transferase activity

Answer: A

Biochemistry :

Bile acids and salts

Synthesis of bile acids upregulated by:

A. End products (bile acids)
B. cholesterol
C. End products (bile Salts)

Answer: B The rate-limiting step is catalyzed by Cholesterol 7-α-hydroxylase.

Which one of the following is found in the bile:

A. Only bile acids
B. Only bile salts
C. Bile acids and bile salts are present

Answer: B

After removal of OH from Cholic acid by intestinal bacteria, it's transformed into:

A. Deoxycholic acid
B. Lithocholic
C. Chenodeoxycholic
D. Glycocholate

Answer: A Intestinal bacteria transform bile salts into bile acids (after removal of **Glycine or Taurine**) then into 2° Bile acids (after removal of **OH**).

Urea cycle

Which one of the following reactions transform the glutamate into α-ketoglutarate by releasing NH3(ammonia) :

A. Reduction
B. Transamination
C. Oxidative deamination

Answer: C The enzyme for this reaction is glutamate dehydrogenate (Important)

Transportation of the Ammonia from the muscles into the liver is done by:

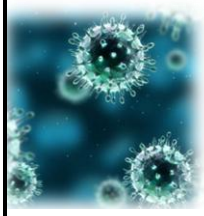
A. Glutamate
B. Glutamine
C. Alanine

Answer: C

2 month infant brought by his mother with tremors, vomiting and lethargy. After investigation the doctor told the mother that her baby had hyperammonemia due to deficiency of one of the enzyme that transform the ammonia into urea and the doctor also explains to the mother that the type of inheritance is x linked recessive. Which one of the enzyme is most likely the deficient one:

A. Carbamoyl phosphate synthetase I
B. Argininosuccinate synthase
C. Ornithine transcarbamoylase (OCT)
D. Argininosuccinate lyase

Answer: C



Microbiology

Intestinal Protozoa1.

Q1)suggests a patient has had Hepatitis A at some point in the past?

A. a)Hep A IgG
B. B)Hep A IgE
C. C)Hep A IgM
D. D)Hep A IgY
E. E)Hep A IgA

Answer: A

2)The most common type of viral Hepatitis is ?

A. a)Hep A
B. B)Hep B
C. C)Hep C
D. D)Hep D
E. E)Hep E

Answer: A

3)Vaccination are available for ?

A. a)Hep A HepB
B. B) Hep A Hep E
C. C) Hep B Hep E
D. D) Hep D Hep E

Answer: A

4) HepatitisB vaccination is recommended for ?

A. a)Healthcare profession and sex workers
B. b)IVDUs or these travelling longish to an endemic area
C. c)Babies born to HBeAg- positive mothers or babies at risk of Hep B
D. D)Haemophiliacs and patient with chronic renal failure
E. e)all of these

Answer: E

5)pegylated alpha interferon , Lamivudine and Adefovir are possible treatment for ?

A. Hep A
B. Hep B
C. Hep C
D. Hep D
E. Hep E

Answer: B

6)which of the following are spread by Fecal-oral route?

A. Hep A & B
B. Hep A & E
C. Hep B& E
D. Hep D & E

Answer: B

7) An incomplete virus incapable of transmission in absence of another on this list?

A. Hep A
B. Hep B
C. Hep C
D. Hep D
E. Hep E

Answer: D

8)what is the incubation period for Hep A

A. 6weeks-6monthes
B. 2-6weeks

C. 2-6monthes
D. 6-8weeks

Answer: B

9)PCR is commonly use to detect ?

A. Hep A
B. Hep B
C. Hep C
D. Hep D
E. Hep E

Answer: C

10)Full recovery occurs in 3 monthes in 85% of cases

A. Hep A
B. Hep B
C. Hep C
D. Hep D
E. Hep E

Answer: A

11) More prevalent in developing world usual source is contaminated water supplies incubation period 4-8 weeks ?

A. Hep A
B. Hep B
C. Hep C
D. Hep D
E. Hep E

Answer: E

12)suggestes a patient has had recentHep A infection

A. Hep A IgG
B. Hep A IgE
C. Hep A IgM
D. Hep A IgY
E. Hep A IgA

Answer: C

13)interpret the following Hep B serology results : HBsAg(+),Anti-HBcIgG (+) ,HBeAg (+),HBV DNA

(+)

A. Post infectious
B. chronic infection (low infectivity)
C. chronic infection (high infectivity)
D. Acute infection
E. HBV vaccination

Answer: C

14)confirms infection with Hep A ?

A. IgG-d anti-HAV
B. IgG-g anti-HAV
C. IgG-m anti-HAV
D. IgG-e anti-HAV

Answer: C

15)interpret the following Hep B serology results : Anti-HBs (+)

A. Post infectious
B. chronic infection (low infectivity)
C. chronic infection (high infectivity)
D. Acute infection
E. HBV vaccination

Answer: E

16) in case of Hep B , the ……. antigen reflects higher infectivity when present ?

A. g
B. a
C. e
D. i
E. m

Answer: C

17)with regards to hepatitis B, which of the following is FALSE?

A. HBsAg is a protein antigen produced by HBV
B. HBsAg is often used as a marker of infectivity
C. some strains of HBV do not make e-antigen
D. asymptomatic carriers are HBsAg negative

Answer: D

18)indicates Hep A immunity due to previous infection or immunization

A. IgG-d anti-HAV
B. IgG-g anti-HAV
C. IgG-m anti-HAV
D. IgG-e anti-HAV

Answer: B

19)chronic infection does not occur in ?

A. Hep A & B
B. Hep A & E
C. Hep B& E
D. Hep D & E

Answer: B

Q20)How are both Trypanosoma and Leishmania spread?

A) By blood-sucking vectors

B) Mother-to-fetus

C) Sexually transmitted

D) Fecal-oral route

E) Person-to-person

Answer: A

Q21)What organ is targeted during an infection with Trypanosoma cruzi?

A) Heart

B) Brain

C) Nervous system

D) Liver

E) Spleen

Answer: A

Pharmacology :

DRUG METABOLISM

What's the transcription factor for the expression of the CYP P450 genes:

A. RXR
B. RXP
C. PXR
D. PXP

Answer: C

And it **dimerizes with RXR**

A patient with H.pylori infection receives a triple therapy of omeprazole, Clarithromycin and amoxicillin. He went to a cardiologist complaining of arrhythmia and the doctor prescribed Amiodaron for him after several days the patient developed interstitial lung disease & his thyroid test was abnormal. He also mentioned that he uses metformin which is antidiabetic drug since 2 months. Which one of the following drug-drug interaction on CYT 3A4 is the likely cause of his current state?

A. Metformin+Amiodaron
B. Clarithromycin+metformin
C. Amiodaron+omeprazole
D. Clarithromycin+Amiodaron

Answer: D

Clarithromycin is an enzyme inhibitor.

A patient went through minor surgery and to relieve the pain after the surgery the doctor

prescribed tramadole but the next day the same patient came to the doctor saying that there's still pain. What could explain the persistence of pain in this patient:

A. A genetic **polymorphism which decreases metabolizing capacity of CYP2D6**
B. The patient might take other medication which could be enzyme inducer.
C. A genetic **polymorphism which increases metabolizing capacity of CYP2D6**
D. A genetic **polymorphism which decreases metabolizing capacity of CYPA34**

Answer: A

Because **tramadole is a prodrug which needs CYP2D6 to be activated.**

If you have any questions you want to add, please send it to : Revisiontest432@Gmail.com

Good luck

Team Leaders :