Tanta Faculty of Medicine

Internal Medicine department

Diploma exam (2013) – October 2020

1st paper

I-Answer all of the following multiple choice questions (each 4 Marks):

1. The following are typical features of esophageal achalasia EXCEPT:

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- a. Failure of lower esophageal sphincter relaxation
- b. Heart burn and acid reflux
- c. Predisposition to esophageal carcinoma
- d. Symptomatic response to pneumatic balloon dilatation
- 2. Gastro-esophageal reflux disease is associated with the following factors EXCEPT:
 - a. Decreased intra-abdominal pressure
 - b. Delayed gastric emptying
 - c. Prolonged esophageal transit time
 - d. Decreased lower esophageal sphincter tone
 - e. Presence of a hiatus hernia

3. Typical features of peptic ulcer dyspepsia include all of the following EXCEPT:

- a. Pain relieved by eating
- b. Well localized pain relieved by vomiting
- c. Nausea and Epigastric pain lasting more than 4 hours
- d. Nocturnal pain causing frequent night waking

4. Causes of intra-hepatic cholestatic jaundice include the following EXCEPT:

- a. Primary biliary cirrhosis
- **b.** Primary sclerosing cholangitis
- c. Alcoholic cirrhosis
- d. Cystic fibrosis

- 5. A young lady with symptoms of hyperthyroidism with elevated T4 has TSH levels 8.5. Further examination reveals bitemporal hemianopia. Next step of management?
 - a. Start anti-thyroid drugs, and do urgent MRI brain
 - b. Start beta blockers
 - c. Conservative management
 - d. Start anti-thyroid drugs and wait for symptoms to resolve

6. Which type diabetes is HLA associated:

- a. Type 1 DM
- b. Type 2 DM
- c. Malnutrition related type diabetes
- d. Pregnancy related diabetes

7. Is not a clinical feature of acromegaly:

- a. Arthropathy and myopathy
- b. Hypertension and impaired glucose tolerance
- c. Cardiomegaly
- d. Skin atrophy and decreased sebum secretion
- 8. During the winter months, a 65-year-old man presents with livedo reticularis and purple fingertips. Other symptoms include arthralgia and weakness. Renal impairment is present on laboratory testing. Which of the following is the most likely diagnosis?
 - a. cold agglutinin disease
 - b. Henoch-Schönlein purpura
 - c. antiphospholipid antibody syndrome
 - d. cryoglobulinemia
- 9. An 18-year-old man, of Italian extraction, is found to have a hypochromic microcytic anemia of 10 g/dL. In addition, there is a fair degree of anisocytosis, poikilocytosis, and targeting on the blood film. The WBC is 9500/mL, the platelet count is 240,000/mL, and the reticulocyte count is 7%. The spleen is palpated 5 cm below the left costal margin. Which of the following is the most likely diagnosis?

- a. sickle cell trait
- b. thalassemia
- c. sideroblastic anemia
- d. hereditary spherocytosis

10.In the normal formation of blood cells which statement is FALSE?

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- a. Erythropoietin is produced mainly in the liver.
- b. All lymphocytes originate in the bone marrow and some migrate to the thymus.
- c. Hematopoiesis in adults extends to the femoral and humeral heads.
- d. The proerythroblast precedes the development of the normoblast.

11.Best blood product to be given in a patient of multiple clotting factor deficiency with active bleeding?

- a. Fresh frozen plasma.
- b. Whole blood
- c. Packed RBCs
- d. Cryoprecipitate
- **12.**A patient undergoing emergency surgery for trauma receives 20 blood transfusions during the operation. Four weeks later, she develops a syndrome resembling infectious mononucleosis. Which of the following is the most likely causative organism?
 - a. EBV
 - b. hepatitis C virus
 - c. delayed hemolysis
 - d. CMV
- 13.A 53-year-old man with alcoholic cirrhosis presents with increasing jaundice and abdominal discomfort. He reports no fevers or chills. On examination, his blood pressure is 100/60 mm Hg, pulse 100/min, temperature 38.1°C. He has a distended abdomen, peripheral edema, and shifting dullness. The abdomen is tender and bowel sounds are present. A diagnostic paracentesis is performed; the total cell count is 940/mL with polymorphonuclear neutrophils (PMNs) equal to 550/mL, Gram stain is negative, and cultures are pending. Which of the following is the most likely diagnosis?

- a. pancreatic ascites
- b. malignant ascites
- c. spontaneous bacterial peritonitis (SBP)
- d. secondary peritonitis
- e. tuberculous ascites

14.Most common pulmonary manifestation in AIDS:

- a. TB
- b. Pneumonia
- c. Bronchiectasis
- d. Mycobacterial avium intercellulare

15.All are true about meningococcal meningitis except:

- a. DIC
- **b.** Absence of meningeal signs indicates poor prognosis
- c. Meningococcemia is associated with petechial rashes
- **d.** Sensitivity to light (photophobia)

II-Answer all the following problem solving questions (each 10 Marks):

- A-A 55-year-old man from China is known to have chronic liver disease, secondary to hepatitis B infection. He has recently felt unwell, liver ultrasound showing solid focal lesion, and his hemoglobin level has increased from 13 g/dL, 1 year ago, to 19.5 g/dL.
 - 1. Which of the following is the most appropriate initial diagnostic test?
 - a) alkaline phosphatase
 - b) alpha-fetoprotein (AFP)
 - c) aspartate transaminase (AST)
 - d) alanine transaminase (ALT)
 - e) unconjugated bilirubin
 - 2. How could you confirm your diagnosis?
- B- A 56-year-old man presents with a change in skin color, fatigue, and abdominal pain. He has also noticed increased urine output and thirst. On examination, his skin appears bronze in color, his liver span is 16 cm, and there is loss of body hair, and testicular atrophy. His ferritin is 600 ng/mL (15-200 ng/mL), aspartate amino transferase (AST) 130 U/L (8-20 U/L), alanine amino transferase (ALT) 150 U/L (8-20 U/L), and total

bilirubin 0.5mg/dL (0.1–1 mg/dL). Coagulation tests and albumin level are normal but the random glucose is elevated at 250 mg/dL.

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- 1. What is your diagnosis and why?
- 2. How could you treat?
- C- A 70-year-old woman well known to have sarcoidosis, is presented with thirst, polyurea, abdominal pain and constipation, No significant finding in abdominal ultrasound. Na 140 mEq/l, K 4.3, Ca 15, RBS 100.
 - 1. What is the most likely diagnosis?
 - 2. What is the treatment?
- D- A 40-year-old school teacher develops nausea and vomiting at the beginning of the fall semester. Over the summer she had taught preschool children in a small town in Mexico. She is sexually active, but has not used intravenous drugs and has not received blood products. Physical examination reveals scleral icterus, right upper quadrant tenderness, and a palpable liver. Liver function tests show aspartate aminotransferase of 750 U/L (normal < 40) and alanine aminotransferase of 1020 U/L (normal < 45). The bilirubin is 13 mg/dL (normal < 1.4) and the alkaline phosphatase is normal.
 - 1. What further diagnostic test is most likely to be helpful?
 - a. Liver biopsy
 - b. Abdominal ultrasound
 - c. IgM antibody to hepatitis A
 - d. Antibody to hepatitis B surface antigen
 - e. Determination of hepatitis C RNA
 - 2. How could you treat this case?

III-Answer all the following short questions (each 10 Marks):

- 1. Causes of aplastic anemia.
- 2. Investigations and treatment of autoimmune hepatitis.
- 3. Management of acute hypoadrenalism.
- 4. Causes and investigations of hypoglycemia.
- 5. Clinical manifestations of infectious mononucleosis.
- 6. Complications of acute pancreatitis.
- 7. Treatment of brucellosis.
- 8. Diagnosis of megaloblastic anemia.



Tanta University

Faculty of Medicine

Ophthalmology Department

14 /11/2020 Diploma exam; Medicine (All questions must be answered) (Time allowed: 2 hours)

- 1. Discuss orbital cellulitis: etiology, clinical picture and treatment. (20 marks)
- 2. Describe the clinical picture, complications and treatment of trachoma. (20 marks)
- Discuss central retinal vein occlusion, etiology, types, clinical picture, complications and treatment. (20 marks)

Choose only one answer

- 1- Which one of the following types of corneal ulcers is painless?
 - A. Neurotropic
 - B. Acanthamoebic
 - C. Mooren's
 - D. Herpetic
- 2- Which one of the following findings is true regarding typical hypoyon ulcer?
 - A. Located centrally
 - B. Grows in many directions
 - C. Never perforates
 - D. Descematocele commonly develops
- 3- Corneal ulcer resulting from lagophthalmos affects which one of the following parts of the cornea?
 - A. Upper third
 - B. Lower third
 - C. Close to nasal limbus
 - D. Close to temporal limbus
- 4- Which one of the following statements regarding glaucoma definition is TRUE?
 - A. A disease with high intraocular pressure
 - B. A disease with a specific type of optic neuropathy
 - C. A disease with obstructed aqueous outflow
 - D. A disease with high intracranial pressure

- 5- According to Shaffer's grading of the angle of anterior chamber, which of the following grades is **least likely** to undergo spontaneous closure?
 - A. Grade I angle.
 - B. Grade II angle.
 - C. Grade III angle.
 - D. Grade IV angle.
- 6- A characteristic pattern of glaucomatous optic disc damage include all of the following **EXCEPT**:
 - a. A progressive concentric enlargement of the cup
 - b. Bilateral symmetrical large cup/disc ratio
 - c. A focal loss (notching) of neuroretinal rim
 - d. Vertical extension of the cup
- 7- In patients with right 6th nerve palsy, diplopia is maximum on looking to:
 - A. Right
 - B. Left
 - C. Up
 - D. Down
- 8- Which class of chemicals constitutes the greatest threat for ocular injury?
 - A. Solvents
 - B. Petroleum products
 - C. Acids.
 - D. Alkali
- 9- Which one of the following parameters is used in determining the degree of ptosis?
 - A. Levator function
 - B. Lid crease height
 - C. Marginal reflex distance
 - D. Pupil diameter

10- Which of the following pathologies can be a manifestation of vitamin A deficiency?

- A. Nystagmus
- B. Cataract
- C. Peripheral corneal vascularization
- D. Dry eye

11- Hypoglycemia can cause which one of the following errors of refraction?

- A. Astigmatism
- B. Presbyopia
- C. Hypermetropia
- D. Myopia

12- Lens colobomas are typically located in which quadrant?

- A. Superior
- B. Inferior
- C. Nasal
- D. Temporal
- 13- Intrauterine infection with rubella can cause which one of the following types of congenital cataract?
 - A. Posterior polar
 - B. Coronary
 - C. Blue dot
 - D. Total

14- The most common cause of decreased vision in intermediate uveitis is:

- A. Disc edema.
- B. Posterior subcapsular cataract
- C. Vitritis
- D. Cystoid macular edema

15- Granulomatous uveitis include all the following pathologies "except":

- A. Tuberculous uveitis
- B. Vogt-Koyanagi- Harada disease
- C. Sympathetic ophthalmitis
- D. Behcet's disease
- 16- In cases of papilledema, edema starts first in which one of the following parts of the optic nerve head?
 - A. Upper
 - B. Lower
 - C. Nasal
 - D. Temporal

- 17- Administration of which one of the following materials can cause centro-cecal scotoma in visual field?
 - A. Salicylate
 - B. Quinine
 - C. Barbiturates
 - D. Ethyl alcohol
- 18- Which one of the following miotics acts "<u>only"</u> by stimulating the constrictor pupillea muscle?
 - A. Pilocarpine
 - B. Carbachol
 - C. Phospholine iodide
- 19- Which one of the following pathologies can cause "cherry red spot in the macula"?
 - A. Central retinal vein occlusion
 - B. Hypertensive retinopathy
 - C. Quinine toxicity
 - D. Tobacco toxicity

20- In which of the following types of esotropia, amblyopia LEAST frequently seen?

- A. Infantile
- B. Associated with high accommodative convergence to accommodation ratio
- C. Alternating
- D. Associated with Duane's syndrome

Good luck