

## FINAL YEAR EXAMS - 6TH STAGE - 2014

### Medicine

- 35 yo female, non-alcoholic, hx of 2-mo oral contraceptive use. All viral & autoimmune markers are negative. She has right subcostal tenderness, abdominal distention & pain, shifting dullness positive, ascitic tap albumin > 3.5, high lymphocytes. Hypertrophied caudate lobe on US.
  - What is the diagnosis? [Budd-Chiari !]
  - Mention 3 other investigations?
  - What are the lines of treatment?
- A young man with 2-day hx of diarrhea 3 weeks ago, has left knee pain & right ankle pain, elevated ESR & fever.
  - Diagnosis? [Reactive Arthritis]
  - Investigations?
- (Typical fx of subacute combined degeneration of the cord) Glossitis, tongue atrophy, Rombergism by description, typical reflexes.
  - Diagnosis?
  - Management?
- A pt with a 30-day hx flu like illness, cough, pleuritic chest pain, expectoration, develops progressive headache, depressed level of consciousness. CSF: high ptn (220 mg/dL), WBC (lymphocytosis), normal sugar (60).
  - Diagnosis? [TB meningitis!]
  - Management?
- 14 yo pt with pancytopenia, dry BM. [*Aplastic anemia!*]
- 18-yo pt (male!) with recurrent joint bleeding, prolonged aPT, normal PT, normal bleeding time, mild anemia, normal platelet, normal white cell, HIV positive. [*Hemophilia A*]
- Typical lactic acidosis.
- Female with palpitation, dyspnea, fever, ST-T changes, no chest pain, got better after 2 weeks.
  - Diagnosis? [Myocarditis!]
  - Investigations?
- A 70-yo pt with UTI & HF, on clindamycin & furosemide, the sepsis has resolved but very high urea & creatinine.
  - What is the cause? [Interstitial nephritis due to clindamycin]
  - Treatment?
- Young male with dysphagia & weight loss, on investigations there is esophageal candidiasis, CD count < 150.
  - Diagnosis? [*AIDS*]
  - Aim of treatment? [*CD count > 200, viral copies < 50*]
- Typical bronchiectasis.
  - Diagnosis?
  - 3 Complications? [Pleural: effusion, pneumothorax, Brain abscess, Amyloidosis]

### Assays

- Cardiotoxic drugs
- Cardiac markers & their clinical uses
- Diagnosis of asthma
- Management of GERD
- Complications of Dialysis

25 MCQs

## **Surgery**

Long essay (10 marks each), short essay (5 marks each), Single-choice (40 items, 1 mark each).

### *Long essay*

1. A young man presents with history of sudden onset pain in the right loin that gradually became more severe. It was associated with nausea. On examination the right side of the abdomen was rigid and there was tenderness at the costovertebral angle. Vital signs are stable. Urine examination shows 6 pus cells/hpf and 10 RBC/hpf. Ultrasound shows mildly dilated right kidney.

- A. What is the most probable diagnosis?
- B. Mention one other investigation to order and why.
- C. Describe the management.

2. Discuss the diagnosis, treatment, and complications of intracapsular fracture of neck of femur in a 70-year-old male.

3. A child was bitten in a picnic by a snake on the left leg and brought to the hospital. On examination the left leg shows fang marks with 4 inches of surrounding edema and ecchymoses.

- A. What is the grade of envenomation? Options were grades 0-4.
- B. What is best step to take during the first hour? Options included making cruciate incision, linear incision proximal to wound, calming patient and putting leg below level of heart, sucking the wound out, none of the above.
- C. How many ampoules of antivenin do you give? Options were none, 3, 5, 15.
- D. How do you give the antivenin? Options were IM, SC, IV, IV drip in 500 mL.

### *Short essay*

1. Enumerate complications of ventriculo-peritoneal shunt.

2. What are the hard and soft signs of arterial trauma?

3. How do you differentiate clinically between squamous cell carcinoma and basal cell carcinoma of skin?

4. Write about the classification of goiter.

5. Write about complications of intestinal stomas in general.

6. Write about the clinical presentations of Hirschsprung disease taking into consideration the age of the patient.

## Pediatrics

Cases and data (60 marks), single-choice (40 questions, 1 mark each).

### Cases

Case 1: History of a 6-week old infant with vomiting and poor feeding, elevated serum potassium and low serum sodium, difficult to identify sex during the early part of pregnancy by ultrasound but later they could; siblings are normal; there is history of neonatal death in the family.

1. What is the most likely diagnosis? Congenital adrenal hyperplasia
2. Mention three investigations.
3. Mention two lines of treatment.

Case 2: History of a pre-school age girl who went to a picnic with friends and went swimming there, then developed sore throat and fever followed by a rash within a day or two; rash was small and rough; she had cervical lymphadenopathy; you prescribed treatment but after few days she was brought back because of sloughing of skin of hands and feet and parents are worried.

1. What is the most likely diagnosis? Scarlet fever
2. Mention two complications.
3. What is your treatment?

Case 3: A young infant has sudden jerks of spreading his arms and legs out and bringing head forward in supine position; he has microcephaly and delayed developmental age.

1. What is the most likely diagnosis? Infantile spasm (salaam attacks)
2. Mention one special investigation and what is might show in this condition.
3. What is the prognosis?

Case 4: A 5-year old patient presents with chest infection, has loud first heart sound, fixed splitting of second heart sound that doesn't vary with respiration, soft ejection systolic murmur in pulmonic area, some weight loss and poor growth.

1. What is the most likely diagnosis? Atrial septal defect
2. Mention two ECG changes.
3. What investigation is most helpful in this child?

Case 5: A child has bouts of diarrhea and emesis and now presents with hypotension, tachycardia, irritability, doughy skin feeling; weight loss from 10 kg to 9 kg. You send for serum electrolyte measurement.

1. What electrolyte abnormality are you going to see? Hypernatremia
2. What is the best type of fluid to give as an initial IV bolus?
3. Describe your fluid management over the next 48 hours.

Case 6: A 12-year old boy presented with hematemesis and received endoscopic band ligation for grade 1C (LA classification) esophageal varices last night; now you evaluate the child and notice huge, firm hepatomegaly, splenomegaly, jaundice; since 4 years he has had two attacks of jaundice last two weeks; his older sister died of a similar condition recently.

1. How can the ophthalmologist help in the diagnosis? Keyser-Fleischer rings (?)
2. Mention three differential diagnosis for this presentation.
3. Mention three investigations for your differential diagnosis.

## Data

Data 1: An infant with hypoglycemia, hepatomegaly, elevated lipid profiles, elevated uric acid in urine.

1. What is the most likely diagnosis? Glycogen storage disease.
2. Mention one essential investigation.

Data 2: Child presents with painful swollen joint and history of bleeding from scratches, father also has history of severe bleeding during surgery; hematological values show normal platelet and PT, prolonged bleeding time and aPTT, and low level of factor VIII and von Willebrand antigen.

1. What is the most likely diagnosis? von Willebrand disease (type 1)
2. What is the treatment?

Data 3: A child presents with generalized body edema after being stung by a wasp a few days ago causing a relapse of his condition (history of similar presentation before); he has abdominal pain, rigidity, dyspnea, and cries during the examination; investigations show heavy proteinuria (nephrotic range) and hyperlipidemia.

1. Define steroid dependent disease.
2. Which vaccination is essential for this child?
3. What common infection is this child suffering from?

Data 4:

Examine this pedigree.

1. What is the most likely mode of inheritance? Autosomal recessive.
2. Mention one example.
3. What is the risk of the arrowed male child to be clinically affected? This was in the third generation in the pedigree; his mother (belonged to the family) was affected and father (consanguinous marriage) was clinically normal; so if father is homozygous normal his risk will be 0% (he will only be a carrier) but if his father is heterozygous for the abnormal allele (i.e. he is a carrier) the risk for the child to be clinically affected will be 50%.

## Obstetrics and Gynecology

Essay (6 items, 10 marks each), true-false (10 x 5 items, 25 marks), single choice (15 items, 15 marks).

Q1/ A lady presents with two missed periods and slight vaginal bleeding. Pregnancy test is positive.

1. What are the differential diagnosis?
2. What are the clinical features that help you to reach the diagnosis?
3. Mention two important investigations and how they might help you reach the diagnosis.

Q2/ A 29 year old primigravida presented at 41 weeks gestation and was confirmed to have intrauterine death. How do you manage her?

Q3/ Mention the principles of management of CIN and enumerate the treatment options.

Q4/

- A. Discuss the intrapartum management of multiple pregnancy.
- B. What are the signs of separation and descent of placenta.

Q5/

- A. Write shortly about vulvovaginal candidiasis regarding risk factors, signs and symptoms, and management.
- B. Classification of genital prolapse.

Q6/ A lady was brought to emergency department with severe vaginal bleeding and she is unconscious. The paramedics report that she is 9 months pregnant. Discuss initial management.