



Department of Pathology

Azra Naheed Medical College

Class Test-6, 14 April 2016

(Objective-MBBS 4th Year)

Time Allowed: 30 minutes

Total Marks: 25

Name: Shereem

Roll No: 14187

Date: _____

Instructions:

1. All objective questions are to be attempted on the paper and returned to the invigilator within specified time after you have received the question paper.
2. Any cuttings or overwriting in answering the objective part will not be accepted and no marks will be given even if the answer is correct.

1. The urinalysis of a 59-year-old man confirms the presence of blood, but no proteinuria or glucosuria. A cystoscopy is performed, and a 3 cm exophytic mass, microscopically composed of fibrovascular cores covered by a thick layer of transitional cells. Which of the following risk factors is most likely to have led to development of this lesion?
 - a. Diabetes mellitus
 - b. Recurrent urinary tract infection
 - c. Therapy with methicillin
 - d. Cigarette smoking** ✓
 - e. Use of NSAIDs
2. A 56-year-old man complains of dull flank pain and tenderness to the right costovertebral angle. Laboratory studies show microscopic hematuria but no proteinuria or glucosuria. A urine cytology shows no atypical cells. A CBC shows WBC count 7800/microliter, Hgb 21.1 g/dL, Hct 63.5%, MC 94 fL, and platelet count 195,000/microliter. His serum urea nitrogen is 1 mg/dL and creatinine 1 mg/dL. Which of the following radiographic findings is most likely to be present in this man?
 - a. Hydro-nephrosis on intravenous pyelogram
 - b. Renal mass on abdominal CT scan** ✓
 - c. Radiopaque ureteral calculus on an abdominal plain film
 - d. Enlarged, multicystic kidneys on abdominal ultrasound
 - e. Pelvic abscess below the bladder on MR imaging

3. A 5-year-old boy has periorbital edema. A urinalysis reveals sp. gr. 1.01, pH 6.5, no glucose, 4+ protein, no blood, no casts, and no ketone. Microscopic urinalysis reveals oval fat bodies, but no WBC's or RBC's. Which of the following renal lesions is most likely to have been present in this boy?

- a. Glomerular crescent formation
- b. Podocyte foot process effacement ✓
- c. Patchy acute tubular necrosis
- d. Mesangial immune complex deposition
- e. Hyperplastic arteriosclerosis

4. An abdominal CT of a 3-year-old child reveals a 10 cm solid mass involving the right kidney. The resected mass has a microscopic appearance with sheets of small blue cells along with primitive tubular structures. Which of the following neoplasms is this child most likely to have had?

- a. Renal cell carcinoma
- b. Urothelial carcinoma
- c. Wilms tumor ✓
- d. Medullary fibroma
- e. Angiomyolipoma

5. In a clinical study, performed on subjects with renal diseases showed loss of physiologic function accompanies many diseases. One renal physiologic function affects thirst. Loss of which of the following renal functions is identified by measurement of the urine specific gravity?

- a. Filtration
- b. Reabsorption
- c. Secretion
- d. Concentration ✓
- e. Blood flow

6. A 72-year-old man has diffusely enlarged prostate. Laboratory studies show sodium 139 mmol/L, potassium 4.0 mmol/L, chloride 104 mmol/L, CO₂ 25 mmol/L, creatinine 1.9 mg/dL, and glucose 81 mg/dL. Which of the following renal abnormalities is most likely to be present in this man?

- a. Cortical atrophy
- b. Glomerulonephritis
- c. Papillary necrosis
- d. Polycystic change
- e. Renal cell carcinoma ✓

7. Concerning the function of glomerular mesangial cells, which of the following statements is correct:

- a. Mesangial cells can contract and cause some decrease in total glomerular filtration area
- b. Mesangial cells play a major role in systemic angiotensin II production
- c. Mesangial cells are phagocytic and play a role in the clearing of proteins and immune-deposits entrapped in the mesangium
- d. a and c are correct
- e. All are correct ✓