

UGS

Midterm
exam



021



Anatomy:

1) Upon taking an aspiration from a 2-month-old child who suffers from hydrocele, the needle won't cross the following layer:

- a) Skin
- b) Dartos muscle
- c) Tunica albuginea
- d) Cremaster muscle
- e) Parietal layer of tunica vaginalis

Ans: C

2) Which of the following exists in perineum in males:

- a) Inferior hypogastric plexus
- b) Membranes part of urethra

Ans: B

3) Which of the following is true regarding gynecoid pelvis type in females:

- a) Long sacrum
- b) Ischial tuberosity everted in
- c) Wide subpubic angle

Ans: C

4) Which of the following represents a bony mark of a common ureter constriction area:

- a) Corresponding to L3
- b) Sacroiliac joint

Ans: B

5) One of the following is a parietal branch of anterior internal iliac artery:

- a) Superior vesical artery.
- b) Inferior vesical artery.
- c) Internal pudendal artery.

Ans: C

6) All the following are false except:

Ans: lymph drainage of bladder's neck is sacral lymph nodes.

7) All of the following are false except:

- a) Renal fascia is continuous laterally with diaphragm.
- b) Right kidney upper pole is elevated more than upper pole of the left kidney.
- c) Subcostal nerve lies posteriorly to the kidney.

Ans: C

8) Which sentence is true regarding muscles:

Ans: Pubococcygeal proper is inserted into anococcygeal body.

9) True statement:

Ans: Ejaculatory duct opens into seminal colliculus.

Physiology:

1) Which molecule has a time-dependent reabsorption in proximal tubules & T-max of transportation in distal tubule?

- a) Glucose
- b) Amino acids
- c) Na^+

Ans: C

2) Substance (x) plasma concentration was 2 mg/ml, and glomerular filtration rate was 100 mg/ml. If its urine concentration was 600 and urine flow= 1 mg/ml. The substance is probably:

- a) Reabsorbed
- b) Secreted

Ans: B

3) A person has a partial obstruction in his right kidney by a stone, after testing, doctors found that his capsular hydrostatic pressure = 20 mmHg, his glomerular hydrostatic pressure= 50, and blood colloid pressure was 30 mmHg. His net filtration pressure is:

- a) 0
- b) 70
- c) 150

Ans: A

4) A patient is treated by diuretics i.e furosemide, after 4 weeks we will have:

- a) Hypokalemia
- b) Increased extracellular volume
- c) Increased Na^+ reabsorption (hypernatrmeia)

Ans: A

5) Why diabetes patients have frequent urinations?

Ans: Osmotic effect of the unreabsorbed glucose.

6) What can increase GFR & reabsorption by decreasing renal blood flow & peritubular capillaries hydrostatic pressure?

- a) Catecholamine
- b) ANP
- c) Angiotensin

Ans: C

7) A hypertensive patient took Renin & Angiotensin blockers, what will happen after 4 weeks:

Ans: Impaired GFR autoregulation.

8) Which of the following decreases renal blood flow & GFR?

- a) Decrease afferent resistance to half.
- b) Increase resistance of efferent vessels more than 3 times.

Ans: B

9) If GFR has decreased by 50%, and creatinine kept being produced by muscles. When GFR comes back to normal levels, what happens to creatinine?

- a) Increase excretion by double.
- b) Unchanged excretion rate of creatinine.

Ans: B

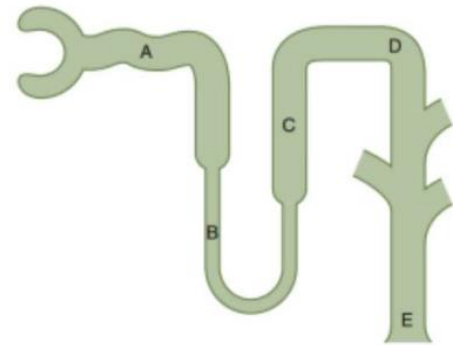
10) If the maximum urine osmolarity = 200 mOsm/L, to maintain electrolyte balance what will be the obligatory urine volume if 600 mOsm of solute must be excreted each day?

- a) 3L
- b) 0.337L
- c) 4 L
- d) 0

Ans: A

11) In a patient with severe central diabetes insipidus caused by a lack of ADH secretion, which part of the tubule would have the lowest tubular fluid osmolarity?

- a) A
- b) B
- c) C
- d) D
- e) E



Ans: E

12) Same picture and case as the previous, where is the highest osmolarity?

Ans: C

13) Giving the following values, what is the reabsorption rate?

GFR = 100 ml/min.

Glucose plasma concentration = 160mg/100ml.

No glucose molecules were found in urine.

Transport maximum = 200.

- a) 16
- b) 160
- c) 0
- d) Secretion no absorption happened.

Ans: B

Pathology:

1) What is true regarding medullary spongy kidney cyst?

- a) Develop in cortical proximal tubule.
- b) Asymptomatic & normal renal function.

Ans: B

2) A young patient has come with fever & nausea & gross hematuria symptoms after 4 weeks of pharynx infection, diagnosis?

- a) Post-streptococcal glomerulonephritis.
- b) Membranoproliferative Glomerulonephritis.

Ans: A

3) Which of the following statements is correct?

- a) Membranoproliferative Glomerulonephritis is associated with adults more.
- b) Minimal-change disease is the most common cause of nephrotic syndrome in children.

Ans: B

4) All of the following is true about Focal Segmental Glomerulonephritis except:

- a) inherited or congenital forms resulting from mutations affecting nephrin.
- b) Poor responses to corticosteroid therapy.
- c) Glomeruli are normal under LM.

Ans: C

5) Wrong regarding hydronephrosis:

- a) Can happens bilaterally.

b) One of the acquired cortical cyst kidney diseases.

Ans: B

6) Wrong about seminoma tumors:

a) Have necrosis & hemorrhage.

b) Progressive painless enlargement of the testis.

Ans: A

7) All of the following are correct regarding prostatic cancer except:

a) Drop in prostate cancer mortality, due to increased early screening.

b) Most common gene rearrangement is TMPRSS2-ETS fusion gene.

c) Common bone metastases in axial skeleton.

d) Most common in <30 age men.

Ans: D

8) All of the following can be inherited except:

a) Polycystic Kidney Disease.

b) Nephronophthisis-medullary cystic disease complex.

c) Cysts Associated with Chronic Dialysis.

Ans: C

9) Correct match:

Ans: Squamous cell carcinoma ... Schistosomiasis infection.

10) Wrong statement:

Ans: Magnesium ammonia phosphate stones occur in acidic pH urine.

Microbiology:

- 1) A 16-year-old female patient suffers from dysuria, urinary frequency, and vaginal discharge. No history of sexual activity, what is the probable pathogens:**

Ans: Bacterial Vaginosis.

- 2) A mechanism of defense against infection in urine is:**

- a) Lactobacilli
- b) Uromodulin
- c) IgD

Ans: B

- 3) Which of the following tests is correct regarding negative gram bacteria:**

- a) Positive leukocyte esterase enzyme.
- b) Positive nitrite.

Ans: B

- 4) Which of the following tests is used to follow up the patient in syphilis cases:**

- a) Venereal disease research laboratory (VDRL).
- b) Treponema pallidum particle agglutination (TP-PA) test.
- c) Nucleic acid amplification tests (NAATs).

Ans: A

- 5) Which of the following is correct regarding STDs:**

- a) Higher prevalence among men.
- b) Prevalence & incidence vary between regions.

Ans: B

6) A 35-year-old male presents to the clinic complaining of a genital vesicular rash that appeared a few days before the visit, with some vesicles starting to ulcerate, his history revealed unprotected intercourse with 3 different sexual partners in the last 2 months. The pathogen causing this lesion is most likely:

- a) dsDNA
- b) RNA
- c) Gram negative bacteria
- d) Yeast

Ans: A

7) Which of the following is true regarding complicated and uncomplicated UTIs?

- a) Management is the same for both.
- b) The most common pathogen is the same for both.
- c) Bacteria lacking adhesions usually cause uncomplicated UTIs, while bacteria expressing adhesions cause complicated UTIs.
- d) Risk factors are the same for both.
- e) Dysuria and frequency are found only in complicated UTIs.

Ans: B

8) A patient complains from dysuria and vaginal discharge. The physician notices vaginal cervix tenderness. What is the diagnosis?

- a) Pelvic Inflammatory Disease
- b) Polynephritis
- c) Endometriosis

Ans: A

9) Which of the following is true regarding diagnosis UTIs?

Ans: urine specimen with 1 bacterial specie isolated in a quantitative count $\geq 10^5$ cfu/mL identifies bacteriuria in men.

Histology:

1) The Inner (visceral) layer of Bowman's capsule is lined by:

- a) Podocytes
- b) Simple squamous epithelium
- c) Simple cuboidal epithelium
- d) Simple columnar epithelium

Ans: A

2) Choose the correct pair:

- a) Sertoli cells———testosterone production.
- b) Prostate —— corpora amylacea.

Ans: B

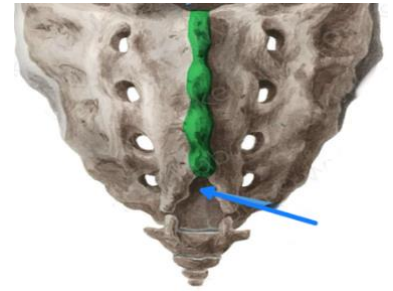
3) Which of the following is true:

Ans: Rara interna encounters the endothelium.

Labs:

1) Which structure passes through the pointed hiatus:

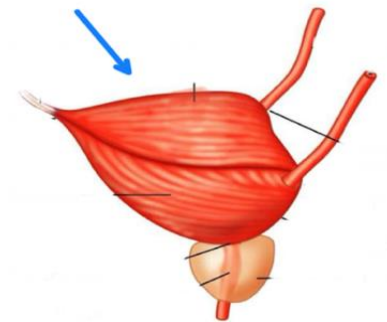
Ans: 5th pair of the sacral nerve branches.



2) The structure superior to the pointed area is:

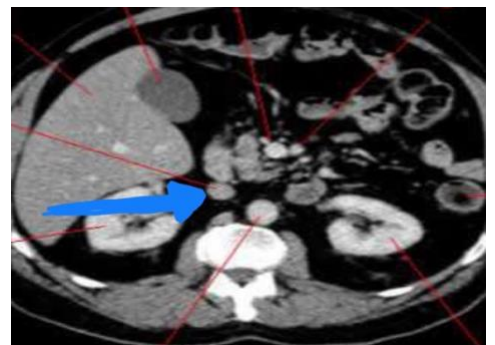
- a) Peritoneum
- b) Rectum
- c) Ampulla of vac
- d) Seminal vesicles

Ans: A



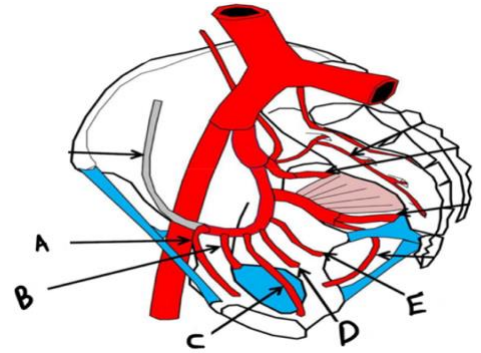
3) The pointed structure is:

Answer: IVC



4) The artery that supplies vas deferens is:

Answer: C

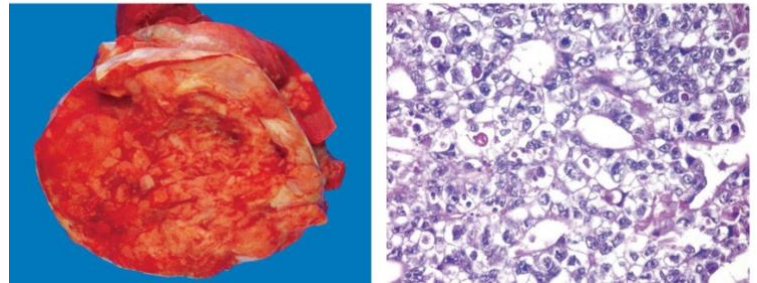


5) A 21-year-old man is found to have a large right testicular mass. He undergoes right orchiectomy. His testis contained ill-defined masses with foci of hemorrhage and necrosis. Microscopic examination showed undifferentiated cells and primitive gland-like structures.

What is the most likely diagnosis?

- a) Embryonal carcinoma
- b) Mature cystic teratoma
- c) Seminoma

Ans: A



6) What disease does this picture represent?

- a) FSGS
- b) MNP
- c) MCD
- d) MPGN-2

Ans: A

