1.The kidneys of the human body extend from?

A- 5 thoracic vertebrae to 3 lumber vertebrae

B- 8 thoracic vertebrae to 12lumber vertebrae

C- 10 thoracic vertebrae to 5 lumber vertebrae

D- 12 thoracic vertebrae to 3 lumber vertebrae

2- proper sequence of nephron structure?

A- DCT, glomeruli, PCT, nephron loop

B- PCT, gomeruli, nephrone loop, DCT

C- glomeruli, PCT, nephrone loop, DCT

3- Location of kidney relation to peritoneal in the abdominal?

A- retroperitoneal

B- retroabdominal

C- intraperitoneal

D- Non of them

4- which term used to describe the glomerular lesion most but not all the glomerular in the renal biopsy?

A- focal

B- segmental

C- global

D- crescent

E- proliferative

5- which is not cause of acute kidney injury (AKI)?

A- severe dehydration

B- diabetic nephropathy

C- contrast (dye) induced nephropathy

D- sepsis

E- acute tubular necrosis

6- Regarding renal covering one of them is true?

A- Fibrous capsule located close to the outer surface of kidney

B- perirenal fat cover both kidney and suprarenal gland

C- fascia is condensation of CT lies above pararenal fat

D- fibrous capsule forms the retroperitoneal fat

Answers

1- D 2- C 3- A 4- C 5- B 6- A

7- Mechanism of thiazide like drug?

A- inhibit Na+ K+ co transporter

B- inhibit Na+ Cl- co transporter and decrease Ca2+ re absorption

B- lead to hyperkalamic acidosis

D- thiazide like agents differ in several of these action include duration of action

E- have no role in prevention of renal stone

8- what is the area between the two ureteric orifices and the internal urethral orifice?

A- internal urethral sphincter

B- External urethral sphincter

C- Detrusor muscle

D- Trigone

9- when the receptor of bladder muscle wall is not work properly?

A- urination is distrupted

B-urine continue to collate in bladder

C- there is not micturation

10- The kidney is responsible for?

A- Co2 excretion

B- water and electrolytes balance

C- nitrogen poison excretion

D- a,b

E- b,c

11- which one about risk of bladder cancer is Incorrect?

A- Chronic inflammation of bladder mucosa

B- Race, not ethnicity, black people have a lower incidence than white people

C- Pelvic radiotherapy

D- Occupational exposure linked to 37% of the cases

E- Smoking

12- which one is true?

A- ureteric bud arises from the metanephric cap

B- metanephric cap form the glomerulus, PCT, DCT and the collecting tubules

C- each distal convoluted tubule forms from the metanephric cap directly joined to colllecting tubule derived from ureteric bud

D- the surface of the kidney stays is lobulated throughout the life

E- the developing kidney receives its blood supply from….

Answers

7- D 8- D 9- A 10- E 11- D 12- C

13- The primitive bladder?

A- The urachus persists throughout life as the median umbilical ligament

B- The smooth muscle of the bladder wall is derived from the endoderm

C- The primitive bladder is now divided into an upper dilated portion, the bladder, and lower narrow portion, the urethra

D- The apex of the bladder is continuous with the allantois

14- Describe the characteristics of the mesangium?

A- mesengial/endothelial:podocyte cell ratio is 2:1:3 ,…

B- Mesangial cells are polygonal in shape, with many processes extending from the cell body toward the-GBM in these processes, dense assemblies of microfilaments are found, containing d-smooth muscle actin, myosin, and d-actinin

C- mesangial cells have limited variety of receptors, including those for angiotensin II , vasopressin , atrial natriuretic factor

D- the mesangial matrix fills the spaces between the mesangial cells and the GBM, it contains several glycoproteins most abundantly fibroactins

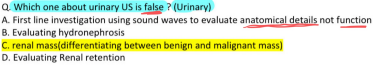
15- which of the following statements about clinical manifestation and limitations of ultrasound for urinary tract imaging is true?

A- ultrasound- guided intervention, for example nephrostomy insertion in patients with hydronephrosis

B- US can be used for imaging midureter

C- can determine presence/absence of hydronephrosis (dilatation of the collecting system)and differentiating between malignant and benign renal masses

D- use sound waves for evaluation of functional detail of urinary system



16- important relation of kidney?

A- spleen,stomach and pancreas contact with anterior part of left kidney

B- only 12th rib contact with the left kidney posteriorly

C- suprarenal gland and hepatic flexure contact with anterior part of left kidney

Answers

13- B 14- D 15- A 16- A

17- Development and vascularization of kidney?

A- the interlobar arteries divide and pass over into the arcuate arteries

B-

C-

D-

18- which of the following statements about ureter s anatomical relation and physiology is correct?

A-

B-

C-

D-

19- which one is correct about systemic factors?

A- The sympathetic nervous system is a key mediator of vasoconstriction of the efferent arteriole

B- Angiotensin 2 with its potent vasoconstrictive effects at the efferent arteriole

C- Vasodilator prostaglandins like PGE 1 , PGE 2 , and prostacyclin cause dilation in both affarent and efferent arterioles

D- ANP and BNP cause efferent dilatation

Q1/The most common causative organism of UTI is?
A/e.coli
B/staphylococcus aureus
C/staphylococcus epidemic
D/bacillus anthracis

Q2/ A higher percentage of women get UTIs compared to men, what are the possible risk factors for developing the infection.
Select all the correct answers?
a) Poor hygiene practices during the periods
b) The anatomy of the urinary system of the women
c) Change in the size of a uterus in pregnancy
d)all of them

Q3/Which of the following is Not the most common infection term used for UTI?
a) Endometriosis
b) Cystitis
c) Pyelonephritis
d) Urethritis

Q4/Acute UTI can be treated at home and the symptoms can go away usually within 48 hours.
What are the different measures that can subside the pain during urination and can help to get rid of the symptoms?
Choose all the correct answers:
a) Drinking plenty of water can reduce the infection
b) Only antibiotics can help to reduce any type of UTIs
c) Cranberry juices have been found effective to ease the pain
d) Frequent cleaning of the genital area and taking a shower

Q5/if the patient with diabetes and blood pressure is controlled that may be curing of the following disease:
A) diabetes kidney disease
B)renal failure
C)...
D)....

Q6/Which is a common UTI risk factor in adults?
A Enlarged prostate
B Catheter usage
C Diabetes
D All of the above

Q7/Regarding sympathetic NS activation in controlling BP all are true exceept: (Urinary)
A)increasing SV via angiotensin1 receptor
B)Increasing heart rate via B1
C)increasing vascular resistance via angiotensin2 receptor
D)Doesn't activate RAS via B1 mediated renin

Q8/K+ is mainly absorbed in ? (Urinary)

A. PCT
B. DCT
C. Collecting duct
D. Thick ascending loop

Q9/Which one is cause of renal injury? (Urinary)
A. Dissecting artery aneurysm
B. Sepsis
C. Hepatorenal syndrome
D. Decreased cardiac output

Q10/Which one about Ca+2 is False ? (Urinary)
A. Intracellular Ca+2 is important for signaling pathway
B. Intracellular Ca+2 is important for neural integrity
C. Intracellular Ca+2 is important in skeletal muscle
D... لەبیرم نیە بەس ئەم ەەڵبژاردنە ڕاست بوو

Q. Which one about Ca+2 is False ? (Urinary)
A. High extracellular concentration than intra cellular
B. Intracellular Ca+2 is important for signaling pathway
C. Intracellular Ca+2 is important for neural integrity
D. Intracellular Ca+2 is important in skeletal mm

Q11/primitive Bladder :
A. Its apex is attached to allantois
B. The urachus becomes median umbilical ligament after development
C. the primitive bladder is 2 structures , one dilated portion and one narrow portion
D. the smooth muscle of bladder comes from endoderm

Q12/which of the following is false about glomerular filter
A)Charged endothelial glycocalyx.
B)Endothelial fenestrations.
C)mesangial cell
D)The inter-podocyte slit diaphragm

Q13/Uses of both CT-KUB and CT-urography:
A) Investigation of renal and ureteric stone, Assessment of stone size, location and stone density.
B. Investigation of renal and ureteric tumors, differentiating between malignant and benign renal masses.
C)Detection and localization of the site of intrarenal and perirenal collections of pus
D)Staging (grading) offrenal injury.
E)لەبیرم نیە بەس بەپێی ئەوانەی سەرەوە بێت بەس ئەم خاڵە ئەمێنێتەوە کە ەەڵەبێت

Q14/Renin release is mediated by:
A)Decrease afferent arteriolar pressure
B)Sympathetic nervous system activation (granular cell B-1 receptors).
C) increase Na delivery to the distal tubule (sensed by the macula densa)
D)Prostacyclin is a potent systemic and pulmonary artery vasodilator

Q15/to prevent rapid changes in pH with dietary intake or excess production of [H] during exercise, a system of local (tissue) and systemic buffers has evolved. These buffers include all except:
A)Bicarbonate (HCO3).
B)Bone salts (calcium carbonate and calcium phosphate).
C)Blood proteins (albumin, haemoglobin, and other globulins).
D)the short term,blood protein the most important, though bone buffers ay a more significant role in chronic

acidosis.

Q16/Regarding Partial nephrectomy choose false one:
A)renal cell carcinoma is common in upper middle pole and lower pole of the kidney
B)tumour in a single anatomical/ functioning
Kidney or bilateral tumours
C)multifocal RCC aiming to avoid renal replacement therapy
D)for tumors (up to 7cm) with a normal contralateral kidney

Q17/regarding Glomerular disease Terminology, false one is:
A)Segmental lesions affect part of an affected glomerulus.
B)Global lesions involve most of the glomerular tuft.
C)Crescentic Glomerular parietal epithelial cells proliferate in response to local inflammatory and procoagulant signals,
D)Necrosis refers to fresh cell death as a result of ongoing injury.
E) sclerosis reflects an increase in mesangial cells (mesangial proliferative

Q18/Struvite stones ("triple phosphate' or 'infection' stones):
A)typically large stones associated with urease-producing (i.e. urea-splitting) bacteria and alkaline urine.
B)Urea breakdown produces excess ammonium and hydroxyl ions, a rise in urinary pH, and a decrease in phosphate solubility; thus encouraging the precipitation of insoluble magnesium ammonium phosphate.
C)... ... ...
D)Many common bacteria are urease producers, particularly Proteus and E. Coli

Q19/Commonest causes of solitary focal parenchymal
Lesion are:
A)Multiple simple cysts
B)renal cell carcinoma
C)Lymphoma
D)Polycystic disease

Q20/regarding main hormones produced by which one is true:
a)Renin steroid hormone released by juxtoglomerular apparatus
b)Vitamin D is protein metabolized in the kidney to produce (1.25 dihydroxvitaminD)
c)erythropoietin produced by kidney promotes erthropoiesis in liver and spleen mainly
D)prostaglandin produced by kidney have numerous effects

Q21/the apex of the renal pyramid is :
A)renal papilla
B)major calyx
C)minor calyx
D)none of them

Q-Potassium reabsorbed in the nephron mainly occurred at the level of: (Urinary)

A. Collection duct

B. Distal convoluted tubule

C. Proximal convoluted tubule✅

D. Thick ascending loop of henle

E. Descending loop of henle

Q. Which one is False (Urinary)

A. Kidney located high up in retroperitoneum on each side of vertebral column

B. Kidney located high up in retroperitoneum

C. During inspiration they move 1 inch down

D. Only left kidney is under costal margin and right kidney is not, so left is higher than right

Q. Which one is not common type of urinary tract infection: (Urinary)

A-Endometritis

B-pyelonephritis

C-cystitis

D-urethritis

Q. Regarding sympathetic NS activation in controlling BP all are true exceept: (Urinary)

A)increasing SV via angiotensin1 receptor

B) increasing heart rate via B1

C)increasing vascular resistance via angiotensin2 receptor ✅

D)activation of RAS via B1 mediated renin

Q. About use of ultrasound all are true exept: (Urinary)

A-Can determine the presence/ absence of hydronephrosis (dilatation of the collecting system).

B- Determination of the nature of renal masses, US can differentiate simple cyst

C- Evaluation of renal stone, which can be characterized by casting an acousting shadow.

D-Allows ultrasound- guided intervention.

E- وەڵامە هەڵەکەبوو بیرم نییە چیبوو

Q. K+ is mainly absorbed in ? (Urinary)

A. PCT

B. DCT

C. Collecting duct

D. Thick ascending loop

Q. Angiotensin function , except ? (Urinary)

A. Increase renin release (as negative feedback)

B. Secret aldosterone

C. Promote Na+ reabsorption

D. Smooth mm hypertrophy

Q. In dipstick test of urinalysis leukocyte esterase mean ? (Urinary)

A. Pyuria

B. Hematuria

C.gram negative bacteria

Q. Which one about Ca+2 is False ? (Urinary)
A. High extracellular concentration than intra cellular
B. Intracellular Ca+2 is important for signaling pathway
C. Intracellular Ca+2 is important for neural integrity
D. Intracellular Ca+2 is important in skeletal mm

Q. Which one about urinary US is false ? (Urinary)
A. First line investigation using sound waves to evaluate anatomical details not function
B. Evaluating hydronephrosis
C. renal mass(differentiating between benign and malignant mass)
D. Evaluating Renal retention

Q. Which one is false about prerenal injury? (Urinary)
A. Dissecting artery aneurysm
B. Sepsis
C. Hepatorenal syndrome
D. Decreased cardiac output

Q. Risk factor of UTI in adult? (Urinary)
A. Diabetes
B. Prostatic enlargement
C. Catheter
D. Non
E. All

Q. Inflammation of kidney? (Urinary)
A. Cystitis
B. Pyelonephritis
C. Urethritis

Q. Common cause of UTI? (Urinary)
A. E.coli
B. Staphylococcus

Dignosis
Q. Dx of UTI applied by? (Urinary)
A. Midstream urine
B. Endstream urine
C. Fullstream urine
D. All

Q. GBM: true one is ? (Urinary)
A_ consist only by gkucoprotein and protoglycan
B_ pdocyte are the main component of GBM and are the principile of filteration
C_ compoed of 4 layer, lamina densa, lamina Interna, lamina externa and capilary

1- About PCT which one is false?

A. reabsorbs bulks of Na,Cl,Bicarbonate,glucose, amino acid, water, urate

B. is highly impermeable for water

C. chloride leaves the cell in exchange for K via specific chloride pumps

D. along pct Na and H are exchanged

2- About metanephric cap which statement false:

A. Metanephric cap will forms the glomerular capsule, proximal and distal convoluted tubule, loop of henle , collecting duct.

B. Glomerular capsule invaginate by cluster of capillary & glomerulus .

C. Surface of kidney is lobulated at first, but after birth lobulation usually disappear.

D. Developing kidney initially a pelvic organ , receives blood from pelvic continuation from aorta.

3- Overall kidney will :-

A. Control cell volume

B. Control ph

C. Control osmolarity partially(with respiratory system)

D. Excrete waste product

Note/ prsyaraka halaya dabu nusraba (will not)

4- The buffer system includes all of the following except?

A. HCo3

B. Absorption of ammonia at the distal tubule

C. Bone salts (calcium carbonate and calcium phosphate).

D. Blood proteins (albumin, haemoglobin , and other globulins).

5- Which one is false about renal structure:
a) The medulla is composed of about a dozen renal pyramids, each having its base oriented toward the cortex and its apex
b) The renal papilla, are apex of renal pyramids which projecting laterally.
c) The cortex extends into the medulla between adjacent pyramids as the renal columns.
b) Medullary rays are striations that extending from the bases of the Renal pyramids into the cortex

6- Uses of ultrasound in urology (the false statement is):
A. can determine the absence/presence of hydronephrosis characterized by casting an acoustic shadow
B. evaluation of renal stone
C. evaluation of urinary retention and measurement of pvr urine volume
D. assessment of hematuria

7- Sympathetic nervous
systems activation cause, all of the following true , except:
A. increase in stroke volume (via -angiotensin-1 and -2 receptor)
B. increase in heart rate (via beta-1 receptor)
C. increase in systemic vascular resistance (via beta-1 receptor)
D. activation of RAS (via beta-1 receptor- mediated renin release

8- The primitive Bladder ?
A) The urachus persists throughout life as the median umbilical ligament
B) The smooth muscle of the bladder wall is derived from the endoderm.
C) The primitive bladder is now divided into an upper dilated portion, the bladder, and a lower narrow portion, the urethra.
D) The apex of the bladder is continuous with the allantois

—According to renal structure which one is false
A) kidney compose of dark brown outer cortex and light brown inner medulla
B) medulla compose a few renal Pyramid ✅
C) in base of pyramid extended to cortex known as medullary ray
D) renal sinus located in the renal hilum

7-GFR determined by these except

A)Afferent-efferent arteriole

B)Cardiac output

C)Affinity of hemoglobin to O2 ✅

D)Systemic oncotic pressure

8-Regarding renal covering one of them is true

A Fibrous capsule located close to the outer surface of kidney ✅

B perirenal fat cover both kidney and suprarenal gland

C fascia is condensation of CT lies above pararenal fat

D pararenal fat composed of high amount of fat that form part of intraperitoneal fat

37-relationship between stone formations and super solubility?

A-high solute

B-low volume

C-concentrated urine

D-all above ⬆ ✅

38-which of them correct about glomerulus?

Ans/ knot of cappilary ✅

27)Regarding sympathetic NS activation in controlling BP all are true exceept:
A)increasing SV via angiotensin1 receptor
B) increasing heart rate via B1
C)increasing vascular resistance via angiotensin2 receptor ✅
D)activation of RAS via B1 mediated renin

28)role of kidneys in acid-base:
A)preventing proton loss
B)excreting bicarbonate
C)
D)proximal tubular cells deaminate glutamine to form bicarbonate and ammonia ✅