

Pathology model answers:

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Q. All of the following are manifestations of nephritic syndrome, except:

**A. massive proteinuria (> 3.5 g/day) [this is a manifestation of nephrotic rather than nephritic syndrome]**

B. RBC casts

C. hypertension

D. azotemia

E. oliguria

Q. The glomerular cell that is directly responsible for the integrity of the “Slit diaphragm” in the filtration membrane proteins especially nephrin is:

A. endothelial cell

**B. the podocyte [nephrin and other proteins forming the slit diaphragm are produced by podocytes]**

C. mesangial cell

D. parietal cell

E. macrophage

Q. One of the following is correct about post infectious glomerulonephritis (PSGN):

A. mostly causes nephrotic syndrome

B. negative tests by immunofluorescence

**C. elevated anti-streptolysin O titers**

D. caused by streptococcal pyelonephritis

E. more common in adults than children

**ASO titer is diagnostic of a previous streptococcal infection as the cause of this glomerulonephritis**

Q. Minimal change disease (MCD) mostly shows the following results by immunofluorescence tests of the kidney biopsy:

**A. negative for immunoglobulins and complement [MCD is not caused by immune complex-mediated pathogenesis, rather there is podocyte injury]**

B. IgG positive deposits in capillary walls

C. IgA positive deposits in mesangium

D. C3 positive deposits in capillary walls

E. all immunoglobulins are positive

Q. Adult Polycystic Kidney Disease is most commonly linked to inheritance of the following mutation:

**A. PKD- 1 [this accounts for 80% of cases]**

B. PKD- 2

C. PKHD-1

D. PKHD-2

E. WT-1

Q: The following are frequently associated with nephronophthisis-medullary cystic disease, except:

A. Polyuria

B. Polydipsia

**C. symptoms appear by age 40 [they appear in childhood]**

D. Cortico-medullary junction cysts

E. Positive family history of renal disease

**Q. ONE of the following is False about Struvite renal stones:**

A. contain phosphate

B. contain ammonium

C. contain magnesium

D. infection is a risk factor

**E. associated with acidic urine [correct is alkaline urine]**

Q: Analgesic nephropathy, choose the best description:

A. Penicillin- induced

B. Not dose- dependent

C. Type I hypersensitivity

D. Reversible injury of tubules

**E. Chronic interstitial nephritis [it is a drug-induced chronic TIN]**

Q: One of the following is a predisposing factor to renal cell carcinoma:

**A. VHL mutations [it predisposes to clear cell renal carcinoma]**

B. pyelonephritis

C. B-naphthelamine

D. Schistosomiasis

E. Cyclophosphamide

Q: A 2-year-old girl presented to a pediatrics clinic with abdominal mass. She underwent unilateral nephrectomy for a huge mass in her right kidney. Macroscopically, the mass is whitish and firm. Microscopically, the pathology report described the tumor cells as “blue cells” that were replacing the normal renal cortex, they were arranged in primitive glomerular and tubular structures. After reading the report, the clinician decided to give the patient chemotherapy following her surgery. The most likely diagnosis of this mass is:

A. Simple renal cyst

**B. Wilms tumor [a childhood renal tumor that belongs to primitive "blue cell" tumors]**

C. Clear cell carcinoma

D. Urothelial papilloma

E. Chromophobe carcinoma

Q: “Koilocytosis” is the histopathological hallmark of the following disease of the female genital tract:

A. Lichen sclerosus

B. Lichen simplex chronicus

**C. Condyloma accuminatum [genital warts that are caused by HPV infection]**

D. Vulvar squamous carcinoma

E. Sarcoma botryoides

Q: ONE is true about the epidemiology and pathogenesis of cervical intraepithelial neoplasia (CIN):

- A. Grading CIN depends on extent and severity of cytologic atypia  
[CIN I versus II versus III depends on severity and extent of dysplasia]**
- B. Grading CIN depends on presence of invasion and metastasis
- C. HPV types 6 and 11 are the most important causes of CIN
- D. Peak patient age for CIN lesions is the same as for cervical cancer
- E. CIN III detection by pap smear does not require any treatment