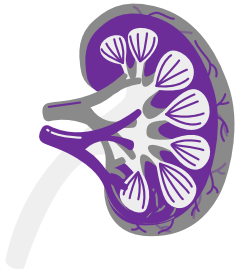
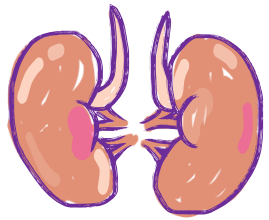
بسم الله الرحمن الرحيم

# Past paper Patho MID
# ALL Material



﴿ قُلْ بِفَضْلِ ٱللَّهِ وَبِرَحْمَتِهِۦ فَبِذَٰلِكَ فَلْيَفْرَحُوا۟ هُوَ خَيْرٌ مِّمَّا يَجْمَعُونَ ﴾


**Written by: Ahmad Rami**
**Zaid Bushnaq**


**Reviewed by: Hashem Al-Jarrah**
**Mahmood Alabsi**

# 1-5
# Dr. Nisreen Material

**Q1:** All of the following are manifestations of nephritic syndrome, EXCEPT:

A. Massive proteinuria (>3.5 g/day)
B. RBC casts
C. Hypertension
D. Azotemia
E. Oliguria

Answer: A

**Q2:** In order to know the specific composition of immune deposits inside the glomerulus, we typically use the following test:

A. Transmission electron microscopy
B. Dissection microscopy
C. Light microscopy (silver stain)
D. Direct immunofluorescence microscopy
E. Light microscopy (H&E stain)

Answer: D

**Q3:** Which cell type compromises the visceral layer of Bowman capsule?

A. Endothelial cells
B. Juxtaglomerular cells
C. Mesangial cells
D. Podocytes
E. Extraglomerular mesangial (Lacis) cells

Answer: D

# **Q4:** A characteristic feature of nephritic syndrome:

A. Lipiduria
B. Hematuria
C. Massive proteinuria
D. Hypoalbuminemia
E. Hyperlipidemia

Answer: B

# **Q5:** Which of the following is NOT a nephrotic sign?

A. Generalized edema
B. Hyperlipidemia
C. Lipiduria
D. Azotemia
E. Heavy proteinuria

Answer: D

# **Q6:** One is true about Minimal Change Disease:

A. May be caused by nephron loss
B. Diffuse glomerular basement membrane thickening
C. Leads to recurrent hematuria
D. Selective albumin loss in urine
E. Azotemia is an important finding in blood tests

Answer: D

**Q7:** One is true about primary membranous nephropathy:

A. Azotemia
B. Recurrent episodes of hematuria
C. Hypertension
D. Urine RBC casts
E. Massive proteinuria

Answer: E

**Q8:** A 4-year-old boy presents with severe proteinuria, hypoalbuminemia, generalized edema, and hyperlipidemia. The patient improves on corticosteroids with complete resolution of proteinuria. Most likely diagnosis:

A. Diabetic nephropathy
B. Focal segmental glomerulosclerosis
C. Lupus nephropathy
D. Membranous glomerulonephritis
E. Minimal change disease

Answer: E

**Q9:** A 3-year-old girl presents with generalized edema after recovery from URI. Marked albuminuria, hypoalbuminemia, hyperlipidemia. Prior episodes responded to steroids. Most likely diagnosis:

A. Focal segmental glomerulosclerosis
B. Membranous glomerulonephritis
C. Minimal change disease
D. Poststreptococcal glomerulonephritis
E. Rapidly progressive glomerulonephritis

Answer: C

# **Q10:** ONE is true about focal and segmental Glomerulosclerosis (FSGS):

A. A disease of childhood
B. Only some glomeruli are affected
C. Rapidly progressive glomerulonephritis
D. Positive family history in most cases
E. Subepithelial humps

Answer: B

# **Q11:** A disease that presents with nephrotic syndrome:

A. PSGN
B. IgA nephropathy
C. Membranous nephropathy
D. RPGN
E. Acute pyelonephritis

Answer: C

# **Q12:** One is true about membranoproliferative glomerulonephritis:

A. Most common cause of azotemia in children
B. Only one type exists
C. Inflammation is not a contributing factor in pathogenesis
D. Mesangial IgA deposits are diagnostic
E. Double contour (tram-track) GBM is characteristic

Answer: E

# **Q13:** One is true about IgA nephropathy:

A. Most common nephrotic syndrome in childhood
B. An X-linked hereditary nephritis
C. Elevated serum anti-ASO titers
D. Recovery is the usual outcome
E. Linked to abnormality in secretory immunoglobulin clearance

Answer: E

# **Q14:** One of the following is correct about postinfectious glomerulonephritis (PSGN):

A. Mostly causes nephrotic syndrome
B. Negative tests by immunofluorescence
C. Elevated anti-streptolysin O titers
D. Caused by staphylococci only
E. More common in adults than children

Answer: C

# **Q15:** Dense deposit disease is also known as:

A. MPGN I
B. RPGN I
C. PSGN
D. RPGN II
E. MPGN II

Answer: E

**Q16:** Dense deposit disease is characterized by glomerular deposits composed of:

A. IgG
B. IgA
C. IgM
D. C3
E. C4

Answer: D

**Q17:** Post-infectious glomerulonephritis is most commonly linked to an immune response against:

A. Schistosomiasis
B. Streptococcus Group A
C. Staphylococcus
D. H. influenzae
E. Coronavirus

Answer: B

**Q18:** A 5-year-old boy presents with hematuria. He had sore throat for 2 days and similar prior episodes occurring simultaneously with sore throat, resolving after a few days. Most likely diagnosis:

A. Alport syndrome
B. Goodpasture syndrome
C. IgA nephropathy
D. Membranoproliferative glomerulonephritis
E. Poststreptococcal glomerulonephritis

If it were weeks not days = Then PSGN is more likely **Answer: C**

# **Q19:** The abbreviation MPGN stands for:

A. Membranoproliferative glomerulonephritis
B. Minimal proteinuria glomerulonephritis
C. Mesangial proliferative GN
D. Membranous primary GN
E. Microscopic proliferative GN

Answer: A

**Q20:** MPGN types I and II share in common many features, EXCEPT:

A. C3 nephritic factor is elevated in serum
B. An immune-mediated problem
C. Low complement serum levels
D. Nephritic presentation possible
E. Poor prognosis

Answer: A

**Q21:** The letter S in PSGN representing the organism most frequently linked to the disease stands for:

A. Shigella species
B. Streptococcus species (β-hemolytic)
C. Salmonella species
D. Streptococcus species (α-hemolytic)
E. Staphylococcus species

Answer: B

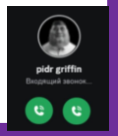
**Q22:** Cystic diseases of the kidney that may develop carcinomas are caused by:

A. Genetic mutation of polycystin genes
B. Inflammation
C. Chronic hemodialysis
D. Hypertension
E. Acute pyelonephritis

Answer: C

# **Q23:** Wrong combination:

A. Adult type PKD — fibrocystin 1
B. Childhood type PKD — PKHD1
C. Adult PKD — PKD1 mutation common
D. Acquired cystic disease — dialysis related
E. Medullary sponge kidney — collecting ducts




Answer: A

# **Q24:** Wrong about nephronophthisis-medullary cystic disease complex:

A. Tubulointerstitial nephritis may occur
B. May progress to renal failure
C. Associated with hereditary hepatic fibrosis
D. Medullary cyst formation may occur
E. Genetic basis may exist

Answer: C

**Q25:** Autosomal recessive (childhood) polycystic kidney disease occurs mostly due to mutation in:

A. PKD1
B. PKD2
C. PKHD1
D. WT1
E. Nephrin

Answer: C

# **Q26:** Pathogenesis of analgesic nephropathy:

A. T-cell mediated
B. Inhibition of PG synthesis
C. Type I hypersensitivity reaction
D. Non-covalent binding to enzymes
E. Anti-GBM antibodies

Answer: B

# **Q27:** All of the following can lead to hydronephrosis, EXCEPT ONE:

A. Atresia of urethra
B. PKHD1 mutations
C. Ptosis of renal pelvis
D. Prostatic hyperplasia
E. Spinal cord damage

Answer: B

**Q28:** All are correct regarding acute drug-induced tubulointerstitial nephritis, EXCEPT one:

A. Characterized by fever, skin rash and eosinophilia
B. Develops within days to weeks following drug exposure
C. Causes hematuria without significant proteinuria
D. Increased risk of urothelial carcinoma of renal pelvis
E. Hypersensitivity reactions may be implicated

Answer: D

# **Q29:** “Struvite” renal stones are composed of:

A. Magnesium ammonium phosphate
B. Calcium phosphate
C. Cystine crystals
D. Uric acid crystals
E. Calcium oxalate

Answer A

# **Q30:** Most common kidney stone in children:

A. Calcium phosphate
B. Oxalate stone (mostly)
C. Struvite
D. Uric acid
E. Cystine

The more u know : )

Answer: B

# **Q31:** Wrong about acute drug-induced TIN:

A. May cause eosinophilia
B. Can occur after drug exposure
C. Often hypersensitivity mediated
D. Dose related allergy
E. May improve after stopping drug

Answer: D

# **Q32:** Analgesic nephropathy occurs due to:

A. Immune complex deposition
B. Inhibition of prostaglandin synthesis
C. IgA deposition
D. Podocyte loss
E. Renal vein thrombosis

Answer: B

# **Q33:** Hydronephrosis can occur due to:

A. Neurogenic bladder
B. Minimal change disease
C. FSGS
D. IgA nephropathy
E. Membranous nephropathy

Answer: A

# **Q34:** Most common type/cause of Acute Tubular Necrosis:

A. Ischemia
B. Heavy proteinuria
C. Uric acid stones
D. Immune complexes
E. Podocyte injury

Answer: A

# **Q35:** True about urolithiasis:

A. Some renal stones can be completely asymptomatic
B. Always bilateral
C. Always radiolucent
D. Never causes hematuria
E. Occurs only in kidney

Answer: A

**Q36:** UTI that leads to alkaline urine most likely results in:

A. Calcium oxalate stone
B. Uric acid stone
C. Struvite stone
D. Cystine stone
E. Xanthine stone

Answer: C

**Q37:** Elevated anti-streptolysin O titers are related to which condition:

A. Nephrotic syndrome
B. Diabetic nephropathy
C. Post-infectious glomerulonephritis (PSGN)
D. IgA nephropathy

Answer: C

# **Q38:** What is true regarding medullary spongy kidney cyst?

A. Develops in cortical proximal tubule
B. Asymptomatic with normal renal function
C. Associated with severe renal dysfunction
D. Frequently causes severe pain

Answer: B

# **Q39:** ONE is true about cystic diseases of the kidney:

A. Chronic hemodialysis increases risk of renal carcinomas
(100 times greater than general population)
B. Polyuria and polydipsia are symptoms of adult polycystic renal disease
C. PKD2 mutation is linked to autosomal recessive polycystic kidney disease
D. Nephronophthisis uremic complex is associated with numerous cortical cysts

Answer: A

**Q40:** All of the following are correct regarding renal stones EXCEPT:

A. Magnesium ammonium phosphate stones occur with acidic urine
B. Uric acid stones form in acidic urine
C. 50% of calcium stone patients have hypercalciuria with no hypercalcemia
D. Calcium oxalate stones are the most common type of kidney stones

Answer: A

# **Q41:** ONE is false about cystic diseases of the kidney:

A. Autosomal Recessive (Childhood) Polycystic associated with liver cysts
B. Autosomal Dominant (Adult) Polycystic is multiple bilateral cysts
C. Polycystic kidney can cause hydronephrosis
D. Nephronophthisis usually begins in childhood

Answer: C

# **Q42:** Which of the following statements is correct regarding Minimal Change Disease:

A. Most common with nephrosis
B. Most common with nephritic syndrome
C. Associated with HIV infection
D. Looks like “spike and dome”

Nephrosis=nephrotic syndrome

Answer: A


WHO IS HE?

# Dr maha material (6-7)

??

1. Which of the following may be seen in all Urinary tumors?

A) painless hematuria
B) stone formation
C) hematuria and pain during urination
D) Eosinophilia

Answer: A

**2.** ONE statement is correct regarding tumors of the urinary tract:

A) Schistosomiasis is a risk factor of Chromophobe renal carcinoma.
B) Painful hematuria is a frequent symptom of renal cancers.
C) Wilms tumor is linked to mutations in VHL gene.
D) Clear cell carcinoma is the most common renal tumor in adults.
E) Renal papillary carcinoma reveals mutations in VHL gene.

Answer: D

**3.** Most common urinary tract tumor:

A) Squamous cell carcinoma
B) Adenocarcinoma
C) Clear cell carcinoma
D) Transitional cell carcinoma (urothelial carcinoma)

Answer: D

**4.** Correct pair:

A) MET mutation >> clear cell carcinoma
B) von Hippel-Lindau mutation >> clear cell carcinoma
C) Schistosomiasis >> clear cell carcinoma
D) Loss of chromosomes 1 and Y >> clear cell carcinoma

Answer: B

5. What are the symptoms of prostatic hyperplasia?

A) Painless hematuria
B) Urinary urgency and frequency
C) Bone metastases
D) Polycythemia

Answer: B

6. Which of the following is correct?

A) Papillary renal cell carcinomas are associated with abnormalities of chromosome 3
B) Chromophobe renal carcinomas with hypodiploidy
C) Oncocytomas are the most common malignant neoplasms of the kidney
D) Clear cell carcinoma arises from the intercalated cells of collecting ducts

Answer: B

7. ONE is true about testicular tumors:

A) Germ cell tumors are generally considered benign tumors
B) Seminoma typically displays schiller- Duvall bodies
C) Sex cord- stromal tumors include embryonal carcinoma and teratoma
D) They are the most common tumors in men > 60 years old
E) Elevated serum AFP is considered a tumor marker for testicular yolk sac tumor

Answer: E

8. ONE is true about prostate gland pathology:

A) Frequent symptoms of early prostate cancer include urinary urgency and hesitancy
B) Serum levels of prostate specific antigen (PSA) is used for prostate cancer screening
C) Benign prostatic hyperplasia usually arise in peripheral zones
D) Only epithelial elements are affected by benign prostatic hyperplasia
E) Cryptorchidism is an important risk factor for prostate cancer

Answer: B

9. The most common primary testicular tumor in children younger than 3 years is:

A) Embryonal carcinoma
B) Yolk sac tumor
C) Choriocarcinoma
D) Teratoma

Answer: B

10. ONE is CORRECT regarding germ cell tumors of the testes:

A) Embryonal carcinoma displays uniform small tumor cells
B) Choriocarcinoma typically displays schiller-Duvall bodies
C) Elevated serum HCG is considered a tumor marker for seminoma
D) They are most common after the age of 60
E) Post-pubertal germ cell tumors are considered potentially malignant

Answer: E

11. ONE is correct regarding prostate hyperplasia:

A) Cryptorchidism frequently leads to prostate hyperplasia.
B) Serum level of prostate specific antigen (PSA) is markedly high.
C) Involves prostate overgrowth of stroma but not glands.
D) An Androgen-dependent condition of the prostate
E) Represents the precursor lesion for prostate cancer

Answer: D

12. Which of the following statements are correct regarding testicular tumors:

A) AFP is elevated in patients with seminoma
B) Mature teratomas in postpubertal males usually follow a benign course
C) HCG elevated in choriocarcinoma
D) LDH is elevated exclusively in yolk sac tumors

Answer: C

13. What is found in Yolk sac tumors?

A) Syncytiotrophoblasts
B) Fibrovascular cores
C) Schiller-Duvall bodies
D) Islands of cartilage

Answer: C

14. Which of the following statements is correct regarding Schistosomiasis:

A) Is a primarily causes liver cirrhosis without affecting the bladder.
B) is a predisposing factor for bladder cancer.
C)does not affect the urinary system.
D) is only associated with skin conditions.

Answer: B

15. All of the following are correct regarding prostatic cancer Except:

A) It is most common in older men
B) Cancer of prostate does not develop in males castrated befor puberty
C) It can be detected through elevated PSA levels.
D) It is most common in <30 years old men

Answer: D

16. Which of the following is wrong about seminoma tumors?

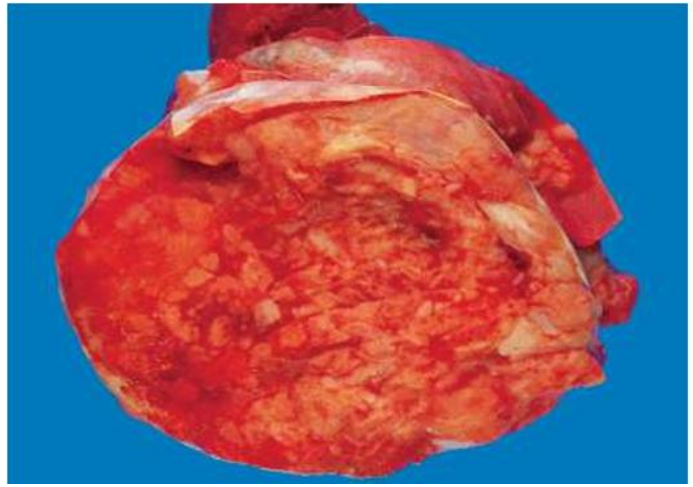
A) Have necrosis & hemorrhage
B) Progressive painless enlargement of the testis
C) Highly sensitive to radiation
D) Typically affects younger men

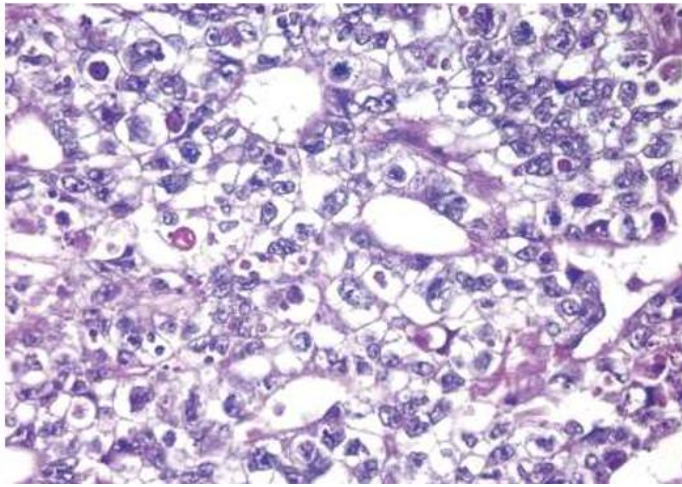
Answer: A

# Lab Material

1. A 21 years-old man is found to have a large right testicular mass. He undergoes rightorchiectomy. The testis contians ill-defined masses with foci of hemorrhage and necrosis. Microscopic examination shows undifferentiated cells and primitive gland -lik structures. What is the most likely diagnosis?

A) Embryonal carcinoma
B) Mature cystic teratoma
C) Seminoma
D) Medullary sponge kidney

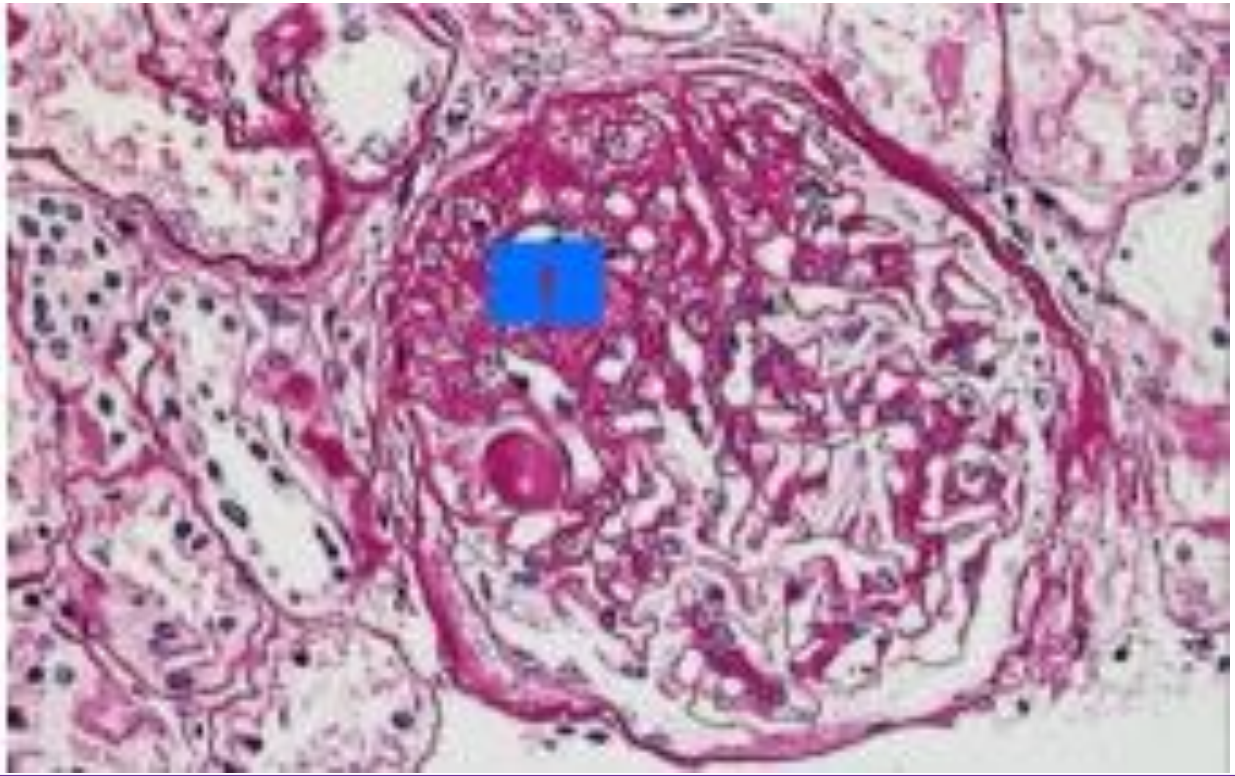




Answer: A

2. The pink-colored material in this picture that is characterestic of this glomerular disease is composed of:

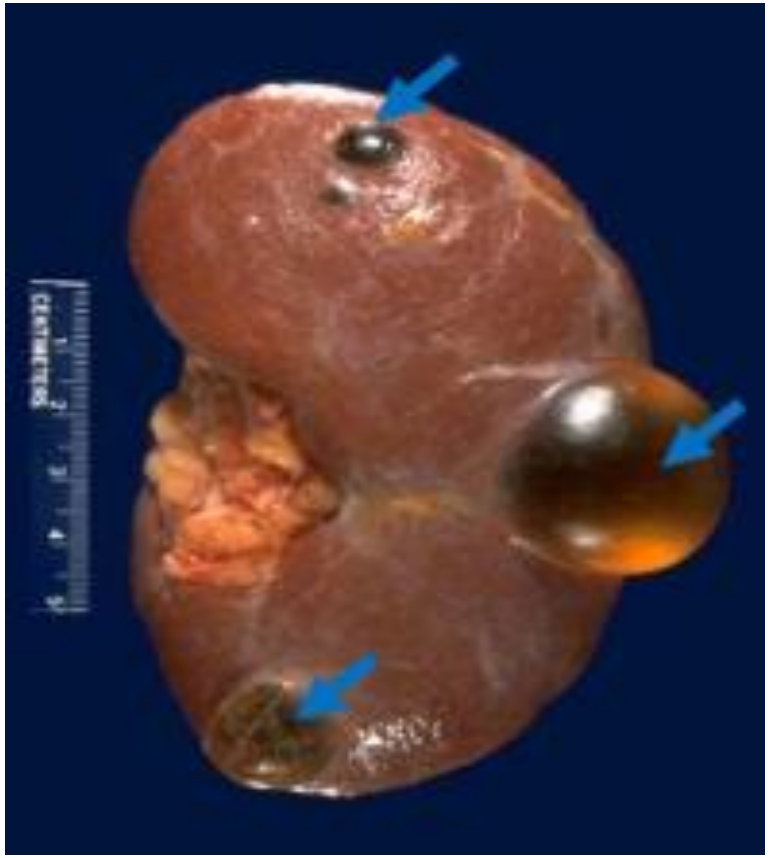
A) Immunoglobulins
B) Collagen (FSGS (Focal and Segmental Glomerulosclerosis))
C) Complements
D) Seminoma



Answer: B

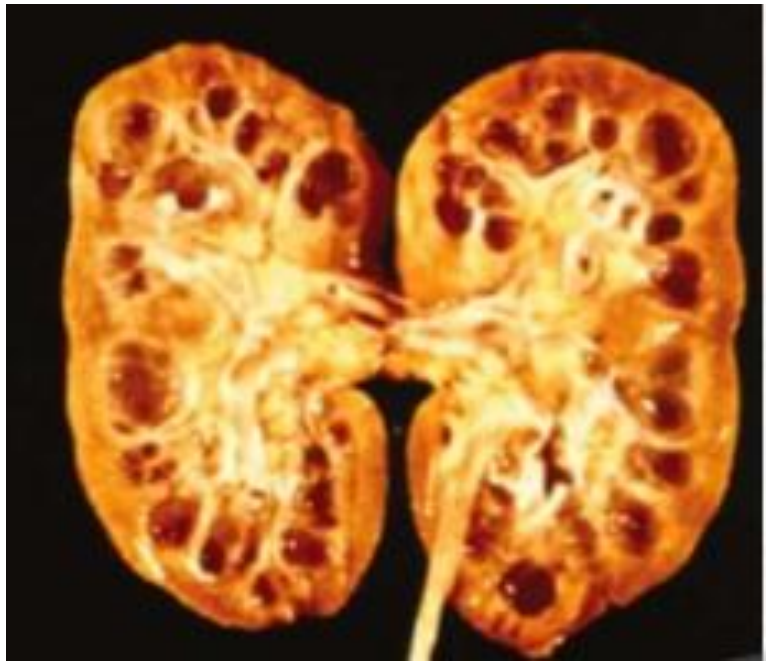
3. A healthy 34 years-old man had a general medical check up for a job interview. This picture (blue arrows) is representative of what he was told to have in his left kidney. His other tests including kidney function test and urine analysis were normal. He had normal blood pressure readings.What is the most likely diagnosis?

A)Medullary sponge kidney
B) Simple renal cysts
C) Hydronephrosis
D) Adult polycystic kidney disease



Answer: b

4. A 5 years-old boy was brought to the pediatrics clinic as his parents were concerned about his growth. They described that "he drinks a lot of water and urinates very frequently". They mentioned that some of his uncles had renal failure as children and young adults. Physical examination revealed high blood pressure. His blood tests show high creatinine and urea. This picture which is representative of what the child has shows many renal cysts at the corticomedullary junction. What is the correct diagnosis

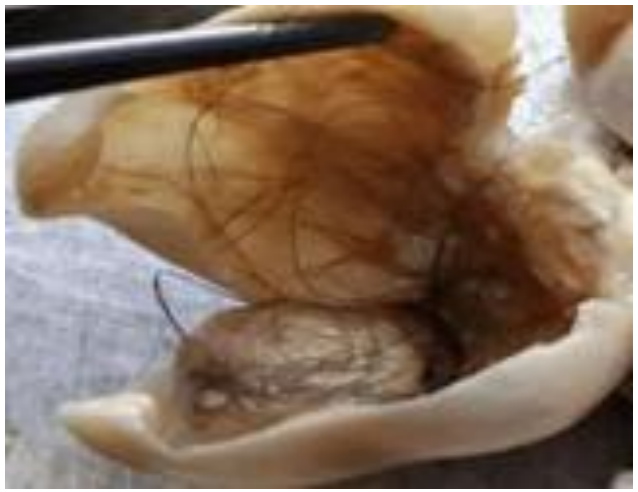


A) Childhood polycystic kidney disease
B) Medullary sponge kidney
C) Nephronophthisis Medullary cystic –Uremic disease

Answer: C

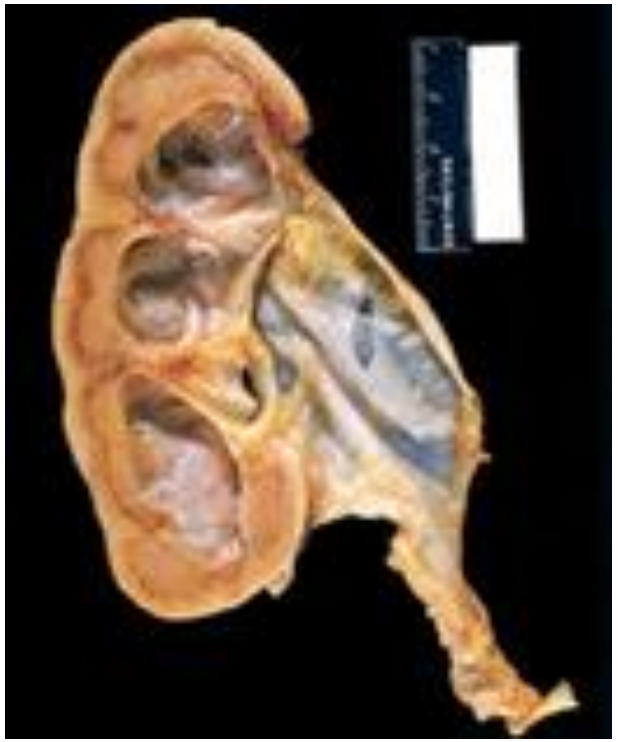
5. Choose the correct statements regarding this testicular tumor removed from a 6 years-old boy.

A) This testicular tumor may contain firm masses and cysts with hair cartilage and bone
B) In pre-pubertal males the prognosis is unfavorable with frequent metastasis



Answer: a

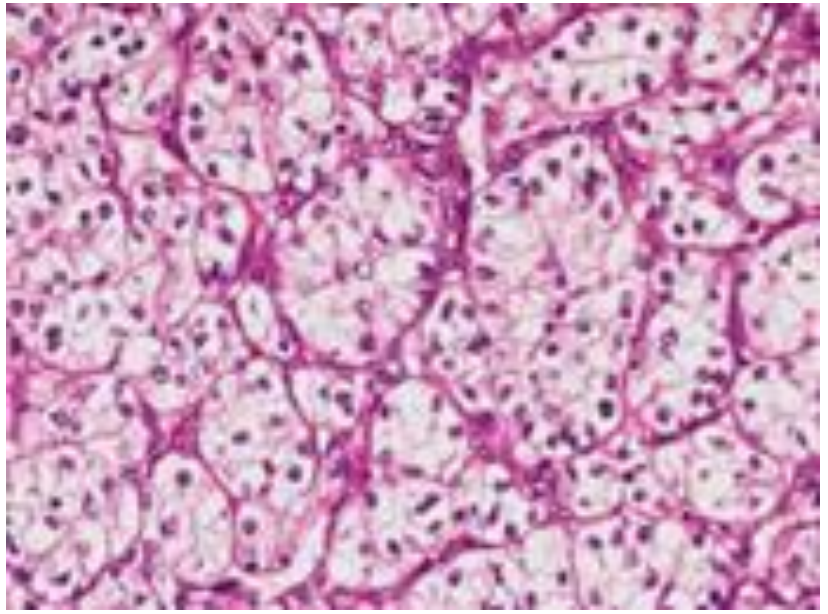
6. Dilation of renal pelvis and calyces due to _____, with accompanying _____ of kidney parenchyma. The onset maybe _____ or _____. Significance: if untreated, leads to renal parenchymal damage and _____



Answer: obstruction, atrophy, sudden, insidious, dysfunction.

7. choose the correct statement regarding the histological type of this renal tumor:

A)The MET protooncogene is involved in familial and also sporadic cases of this tumor.
B)Arises from te intercalated cells of the collecting ducts.
C)Von Hippel-Lindau (VHL) disease is associated with this type of renal cancer
D)These tumor cells have a papillary growth pattern.



Answer: C

# Test Bank on Dr. Nisreen Material

Highly recommended : )

**Q1:** Which of the following is a feature of nephritic syndrome?

A. Massive proteinuria >3.5 g/day
B. Hyperlipidemia
C. Gross hematuria
D. Lipiduria
E. Selective albuminuria

Answer: C

**Q2:** Which of the following is a feature of nephrotic syndrome?

A. RBC casts
B. Severe edema
C. Gross hematuria
D. Oliguria as dominant feature
E. Azotemia as major presentation

Answer: B

**Q3:** Nephritic syndrome is associated with all of the following EXCEPT:

A. Hematuria
B. Mild to moderate proteinuria
C. Hypertension
D. RBC casts
E. Heavy proteinuria >3.5 g/day as main feature

Answer: E

**Q4:** Nephrotic syndrome is characterized by all of the following EXCEPT:

A. Hypoalbuminemia
B. Generalized edema
C. Hyperlipidemia
D. Lipiduria
E. Marked hematuria as principal feature

Answer: E

# **Q5:** Azotemia refers to:

A. Proteinuria with edema
B. Increased blood urea nitrogen and creatinine
C. Presence of RBC casts in urine
D. Decreased urine sodium only
E. Hyperkalemia due to tubular damage only

Answer: B

# **Q6:** Uremia is best defined as:

A. Any isolated rise in creatinine
B. Clinical syndrome due to advanced renal failure with systemic manifestations
C. Mild proteinuria only
D. Presence of bacteria in urine
E. Hyperlipidemia with edema

Answer: B

**Q7:** Rapidly progressive glomerulonephritis is characterized by:

A. Slow loss of renal function over years
B. Loss of renal function in days to weeks
C. Only nephrotic syndrome
D. No hematuria
E. Isolated glycosuria

Answer: B

**Q8:** Acute renal failure may result from all of the following EXCEPT:

A. Glomerular injury
B. Interstitial injury
C. Acute tubular necrosis
D. Vascular injury
E. Hyperlipidemia

Answer: E

# **Q9:** Chronic renal failure is:

A. Limited to glomerular diseases only
B. End result of many chronic renal diseases
C. Always reversible
D. Characterized by isolated hematuria only
E. Acute sudden oliguria only

Answer: B

# **Q10:** Which of the following is true regarding glomerular diseases?

A. They are uncommon causes of chronic kidney disease
B. Bowman space is where plasma ultrafiltrate first collects
C. Podocytes line renal pelvis
D. Mesangial cells are absent from glomerulus
E. Efferent arteriole enters Bowman space directly

Answer: B

**Q11:** Membranoproliferative glomerulonephritis (MPGN) usually presents as:

A. Acute pyelonephritis
B. Nephritic syndrome, sometimes mixed nephritic-nephrotic picture
C. Isolated glycosuria
D. nephrotic syndrome only
E. Normal urinalysis only

Answer: B

**Q12:** Type I MPGN is most strongly associated with:

A. Tubular obstruction
B. Anti-GBM antibodies only
C. Circulating immune complexes
D. IgE-mediated allergy
E. Renal artery stenosis

Answer: C

**Q13:** Type II MPGN (dense deposit disease) is caused by:

A. Hypercalcemia
B. Uric acid deposition
C. Renal vein thrombosis
D. Excessive complement activation
E. Bacterial invasion of tubules

Answer: D

# **Q14:** C3 nephritic factor acts by:

A. Blocking aldosterone receptors
B. Stabilizing C3 convertase
C. Activating fibrinolysis
D. Inhibiting renin secretion
E. Destroying podocytes directly

Answer: B

**Q15:** A patient with hypocomplementemia is most classically associated with:

A. Renal stones
B. Minimal change disease
C. Type II MPGN
D. Acute cystitis
E. Hydronephrosis

Answer: C

# **Q16:** Light microscopy finding in MPGN includes:

A. Tubular necrosis
B. Papillary necrosis
C. Normal glomeruli
D. glomeruli with lobular appearance
E. Crescents only

Answer: D

# **Q17:** “Tram-track” appearance in MPGN refers to:

A. Double contour splitting of GBM
B. Podocyte foot process fusion
C. Amyloid deposition
D. Calcium deposition in tubules
E. Crescent rupture into tubules

Answer: A

# **Q18:** Nephritic syndrome develops mainly due to:

A. Increased albumin synthesis
B. Glomerular inflammation with leukocyte infiltration and proliferation
C. Excess ADH secretion
D. Pure lipid metabolism disorder
E. Renal cyst enlargement only

Answer: B

**Q19:** Hypertension in nephritic syndrome is mainly related to:

A. Hypocalcemia
B. Decreased erythropoietin
C. Fluid retention and increased renin release
D. Hyperlipidemia
E. Dehydration

Answer: C

**Q20:** Hematuria in nephritic syndrome is mainly caused by:

A. Ureteric obstruction only
B. Increased lymphatic drainage
C. Hypernatremia
D. Escape of RBCs through injured glomerular capillary walls
E. Liver dysfunction

Answer: D

# Scan the QR code or click it for FEEDBACK

Corrections from previous versions:

| Versions | Slide # and Place of Error | Before Correction | After Correction |
|---|---|---|---|
| V0 → V1 | | | |
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