4. NEPHROLOGY & CONNECTIVE TISSUE

1. A 10-year-old girl presents with pallor and features of renal failure. She has hematuria as well as proteinuria. The serum urea and creatinine are elevated. These symptoms started after an episode of bloody diarrhea 4days ago. What is the most probable diagnosis?

a. TTP b. HUS c. ITP
d. HSP e. ARF

2. A 6 months old boy is admitted with persistent irritability. He is lethargic and is not feeding as well as usual. His RR=30bpm, sat=97%, temp=38.0C, capillary refill time=2s. Urine reveals leucocytes on is the single inv most likely to lead to diagnosis? dipstick.

a. Blood for C&S b. ESR c. CXR
d. Urine for C&S e. CSF analysis

3. A 2-year-old patient presents with colicky pain which radiates from loin to groin. He complains of similar episodes in the past. Iny has been done and 7mm stone was found in the ureter. What is the most appropriate management?

a. Percutaneous nephrolithiotomy
b. Open surgery
c. Ureterscopy or laser
d. Conservative treatment
c. Extracorporeal Shock Wave Lithotripsy (ESWL)

4. A 14-year-old boy is brought to the emergency department by his parents with the complaint of coughing up blood. He is stabilized, and his hemoglobin and hematocrit levels are 11 mg/dL and 33% respectively. During his hospitalization, he is noted to have systolic blood pressure persistently greater than 130 mm Hg and diastolic blood pressure greater than 90 mm Hg. His urinalysis is remarkable for hernaturia and proteinur.ia. The patient has which of the following disease?

a. AHemolytic-uremic syndrome
b. Goodpasture syndrome
c. Nephrotic syndrome X
d. Post-streptococcal glomerulonephriti
c. Renal vein thrombosi^

5. A 5 year old child presents to your clinic with history of recurrent urinary tract infections. She had been diagnosed with grade 2, vesico-ureteric reflux in past and is on prophylactic antibiotics. There is also history of on and off constipation. You want to check her functions of her kidney radiologically. Which of the following investigation is the best option?

a. Ultrasound abdomen b. MCUG scan
c. IVU d. DTPAscan e. Plain MRI abdomen

6. You have an infant on ventilator for bronchiolitis. His oxygen requirement has increased in last 1-2 hours. You have done following blood gas analysis. Interpret following arterial blood gas: pH 7.0 (7.35-7.45), PCO2=65mm Hg (40-46), HCO3=27mmol/L(20-28), Base Excess=+2.8 mmol/L

a. Respiratory acidosis b. Respiratory alkalosis
c. Metabolic acidosis
d. Metabolic alkalosis e. e. Normal

7. Examination of An 8 year old child present with generalized body swelling His blood pressure is 100/65mmHg. his cardiovascular and central nervous system is unremarkable. He has crepitations on base of lungs, both sides. He has been passing less amount of urine than normal. Following are result of his investigations: Blood Urea 45 mg/dl (10-50), ALT = 22 U/L (10-50), Creatinine = 0.5mg/dl (0.7-1.2), Urine routine examination-Specific gravity =1.020, pH=40, Protein 4+, Glucose Nil, Ketones negative, Nitrites negative, WBC 2-3, RBC 03-04. Based on above information, what is the most likely diagnosis?

a. Renal failure b. Glomerulonephritis
c. Nephrotic syndrome
d. Hemolytic uremic syndrome
e. None of above

8. A 5 year old child with urine frequency more than routine for last few days. She is also drinking a lot of water. She had been diagnosed with grade 2, vesico-ureteric reflux in past and is on prophylactic antibiotics. There is also history of on and off constipation. You have asked for urinec routine examination, which showed Specific gravity = 1.020, PH = 4.6, Protein 1+ Glucose Nil, Ketones negative, Nitrites positive, WBC 12-15, RBC 03-04. Based on urine routine examination, what is the most likely diagnosis?

a. Nephrotic syndrome b. Renal failure.
c. Urinary tract infections
d. Henoch Schonlein Purpura =C
e. None of above

9. In patients with chronic renal failure, which of the following is the most important contributor to renal osteodystrophy?

a. Impaired renal production of 1,25 dihydroxy vitamin D
b. Hypocalcemia
c. Hypophosphatemia
d. Loss of vitamin D and calcium via dialysis
e. The use of calcitriol

10. A 2 years old boy has a large abdominal mass and pancytopenia. Which of the following diagnosis would most likely be established by bone marrow aspiration?

a. Hepatoblastoma b. Neuroblastoma
c. Renal cell carcinoma d. Rhabdomyosarcoma
e. Wilm's tumor

11. An 8 years old child present with generalized body swelling. His blood pressure is 100/65. Examination of his cardio vascular and central nervous system in unremarkable. He has crepitations on base of lungs both sides. He has been passing less amount of urine than normal. Following are result of his investigations: Blood Urea-- 45 mg/dl (10-50) ALT-- 22 U/L (10-50) Creatinine -- 0.5mg/dl (0.7-1.2) RBC 03-04. Based on above information, what is the most likely diagnosis?

a. Renal failure b. Glomerulo nephritis
c. Nephrotic syndrome
d. Hemolytic Uremic syndrome
e. None of them

12. Classification of Chronic kidney disease (CKD) is based on which one of the following?

a. Urine out put b. Hb level
c. Glomerular filtration rate
d. Damage to kidney on ultrasound
e. None of the above

13. In Early Phase of Acute Tubular necrosis there is:

a. Oliguria b. Polyuria c. Glycosuria
d. Proteinuria e. None of them

14. A young boy presented with bilateral periorbital edema, ankle swelling and increase in body weight. What is the most likely diagnosis?

a. Chronic heart failure
b. Nephrotic syndrome
c. Renal failure
d. Acute heart failure e. Glomerulonephritis

15. What would be the most likely urinalysis and laboratory findings in a 8 year old with post streptococcal glomerulonephritis?

a. Red blood cells casts, 2+ protein, numerous RBCs / HPF
b. Oxalate crystals
c. C 4+ protein, 1+ ketones, 0-5 RBC/HPF, 0-5 WBC/HPF
d. 5 RBC/HPF, numerous WBCS/HPF & WBC casts
c. Greater than 50 RBC/HPF, 20 WBC/HPF and many bacteria

1.B	2.D	3.E	4.B	5.D
6.A	7.C	8.C	9.A	10.E
11.C	12.C	13.A	14.B	15.A

16. Maintenance water requirement for children having 10Kg weight is approximately

a. 500 ml/day b.1000 ml/day
c. 1300 ml/day d. 1500 ml/day
e. 1800 ml/day

17. In nephrotic syndrome, the drug of choice for induction of remission is

a Prednisolone b. Frusemide
C Spironolactone d. Hydrochlorothiazide
e. Salt poor albumin

18. Causes of generalized edema are all except

a. Congestive cardiac failure b. Malnutrition
c. Mumps d. Nephritic syndrome
e. Protein losing enteropathy

19. A 7 year old boy having diarrhea for 2-3 days. Biochemistry shows increased BUN and creative most likely lesion found in kidney is

a. Acute glomerulonephritis
b. Acute tubular necrosis
c. Nephrotic syndrome
d. Obstructive nephropathy
e. Pyclonephritis

20. Which of the following findings on microscopy of a fresh early morning midstream urine specimen from a boy of 8 is not abnormal?

a. a white cell count of 50 per mm3
b. a red cell count of 10 per mm3
c. a granular cast d. a hyaline cast
e. motile bacteria

21. The urine of a child with nephrotic syndrome is likely to:

a. be frothy
b. be of small volume
c. show a highly selective differential protein clearance pattern
d. no leucocyturia e. all of the above

22. The leading cause of morbidity & mortality in S.L.E is

a. Arthritis b. Nephritis
c. Neuropsychiatric lupus d. Pericarditis
e. Pneumonitis

23. One of the following is NOT usual feature of acute glommulongphritis in children

a. Congestive cardiac failure
b. Encephalopathy
c. Hematuria or cola colored urine
d. Hypertension e. Polyurea

24. Following is not a regular feature of minimal change nephrotic syndrome

a.Hyponatremia b.Hypercholesterolemia
c. Proteinuria d. Hypoproteinemia
e. Gross hematuria

25. The most common cause of primary idiopathic nephrotic syndrome is

a. Focal segmental glomerulosclerosis
b. Membrano- proliferative glomerulo-nephritis
C. Membranous glomerulopathy
d. Minimal change disease
e. Systemic lupus erythematosis

26. Henoch Shonlein purpura has

a. Palpable rash b. Macular rash
c. Vesicular rash d. Pustular rash
e. Moribilliform rash

27. One of the following is NOT a regular feature of acute post-streptococcal glomerulonephritis:

A. Anemia B. Decrease urine output
C. Hypertension D. High color urine
E. Periorbital edema

28. Minimal change Nephrotic syndrome in a young child is characterized by all of the following EXCEPT:

a. Ascites b. Azotemia c. Generalized edema
d. Hyperlipidemia e. Heavy proteinuria

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29. Hyperkalemia is associated all of the following EXCEPT:
a. Digitalis Toxicity b. Metabolic Acidosis
c. Metabolic Alkalosis d. Trauma
e. Uremia

30. Clinical manifestation of Hypokalemia include all the following EXCEPT:
a. ECG changes b. Constipation c. Paralysis
d. Urinary retention e. Blurring of Vision

31. A 10-year-old girl presents with pallor and features of renal failure. She has hematuria as well as proteinuria. The serum urea and creatinine are elevated. These symptoms started after an episode of bloody diarrhea 4days ago. What is the most probable diagnosis?
a. TTP b. HUS c. IFP d. HSP e. ARF

32. A 10 year old boy presents with generalized swelling. This has been present for 4days and included swollen ankles and puffiness of the face. It started a few days after he had a mild cold with runny nose. His only PMH was eczen. Urine analysis: hematuria, proteinuria 10g/24h, creatinine 60umol/l and albumin=15g/1. What is the single most likely diagnosis?
a. IgA nephropathy b. HSP
c. Minimal change nephropathy
d. Wilson's disease e. Cardiac failure

33. A child is diagnosed with Vesicoureteral Reflux. What would you tell his parents?
a. Requires antibiotic prophylaxis
b. Most will require surgery
c. Most will have kidney scarring by 5 years of age
d. Nothing can be done
e. Reassure

34. An 8-year-old child who is tall for his age and has a refractory error for which he wears glasses has presented with severe crushing chest pain. What is the most likely diagnosis?
a. Fragile X syndrome b. Prader-willi syndrome
c. DiGeorge syndrome d. Marfan's syndrome

35. A 4 years old child presents with pain of spontaneous onset in his knee of 2 days duration.H e has developed mild fever in the 2nd day. He can walk but has a limp. On Examination, painful restriction in the right hip. 35. What is the most probable diagnosis?
a. Osteosarcoma b. Septic arthritis
c. TB arthritis d. Exostosis
e. Osteomyelitis

36. A 6m boy is admitted with persistent irritability. He is lethargic and is not feeding as well as usual. His RR-30bpm, sat=97%, temp=38.0C, capillary refill time=2s. Urine reveals leucocytes on dipstick. What is the 36. single inv most likely to lead to diagnosis?
a. Blood for C&S b. ESR c. CXR
d. Urine for C&S e. CSF analysis

37. A young boy presented with bilateral periorbital edema, ankle swelling and increase in body weight. What is the most likely diagnosis?
a. Chronic heart failure b. Nephrotic syndrome
c. Renal failure d. Acute heart failure
e. Glomerulonephritis

38. A 4-year-old girl is taken by her mother to the ED and complains of feeling unwell, urinary urgency and Temp=39C. What is the single next best investigation?
a. Catheter catch of urine b. Clean catch of urine
c. US d. IVU e. Suprapubic catch of urine

16.B	17.A	18.C	19.B	20.D	21.E
22.B	23.E	24.E	25.D	26.A	27.A
28.B	29.C	30.E	31.B	32.A	33.B
34.D	35.E	36.D	37.B	38.B	---

39. A child presents with blue marks on the sclera, short stature and heart murmur. What is the diagnosis?

a. Osteogenesis imperfecta
b. Hypopituitarism
c. VSD
d. Achondrogenesis
e. Dwarfism

40. A 7-year-old child presented with chronic cough and is also found to be jaundiced on examination. What is the most likely diagnosis?

a. Congenital diaphragmatic hernia
b. Congenital cystic adenomatoid malformation
c. Bronchiolitis
d. RDS
e. Alpha 1 antitrypsin deficiency

41. 6 months boy is admitted with persistent irritability. He is lethargic and is not feeding as well as usual. His RR=30bpm, sat=97%, temp=38.0 °C, capillary refill time=2s. Urine reveals leucocytes on dipstick What is the single inv most likely to lead to diagnosis?

a. Blood for C&S
b. ESR
c. CXR
d. Urine for C&S
e. CSF analysis

42. A 5-year-old boy is referred to the hospital and seen with his father who is worried that he has been listless. He is not sure why his GP suggested he should come to the ED and is keen to get some tablets and go home. Exam: tired and irritable, swelling around eyes. Renal biopsy: remarkable for podocyte fusion on EM. What is the most probable diagnosis?

a. NAI
b. Myelodysplastic disease
c. HSP
d. Membranous GN
e. Minimal change GN

43. A 15-year-old boy presents with generalized edema. His urinalysis reveals protein +++, eGFR =110. What is the most likely diagnosis?

a. IgA nephropathy
b. Membranous nephropathy
c. Minimal change disease
d. PSGN
e. Lupus nephritis

44. A 2-year-old patient presents with colicky pain which radiates from loin to groin. He complains of similar episodes in the past. Inv has been done and 7mm stone was found in the ureter. What is the most appropriate management?

a. Percutaneous nephrolithiotomy
b. Open surgery
c. Ureterscopy or laser
d. Conservative treatment
e. Extracorporeal Shock Wave Lithotripsy (ESWL)

45. An 8-year-old child who is tall for his age and has a refractory error for which he wears glasses has presented with severe crushing chest pain. What is the most likely diagnosis?

a. Fragile X syndromie
b. Prader-willi syndrome
c. DiGeorge syndrome
d. Marfan's syndrome
e. Communicable (INFECTIVE) disease

39.A	40.E	41.D	42.E
43.C	44.E	45.D	--