### Choose the **Correct** answer

- 1-Causes of acute pre-renal failure
- a- Neurogenic bladder
- b- Acute tubular necrosis
- c- Dehydration
- d- Refluxing ureters

## 2- As regard nephrotic syndrome

a-Remission is defined as urine trace or negative for protein for 2 consecutive days

b-Relapse is defined as mild proteinuria after a good response to corticosteroids

c-Relapse is extremely rare

d- Hypocomplemetinemia is an indication for renal biobsy before starting treatment

## 3-As regard pyuria

- a-Defined as the presence of more than 5 leucocytes/hpf
- b- Always indicate the presence of urinary tract infection
- c-Tonsillitis dose not cause pyuria
- d-Urinary bilharziasis never associated with pyuria

#### 4-In acute poststreptococcal glomerulonephritis

- a-Follows infection of throat or skin by nephritogenic strains of group C hemolytic streptococci
- b- Urinary protein excretion & hypertension normalize by 1 2 years after onset
- c- Microscopic hematuria may persist for 1–2 years after onset
- d-Hyaline casts are predominant in urine

### 5- As regard nephrotic syndrome

- a- Remission is defined as urine trace or negative for protein for 2 consecutive days
- b- Relapse is defined as proteinuria (1 or 2+)
- c- Relapse is extremely rare
- d- Hypocomplemetinemia is an indication for renal biobsy before starting treatment

#### 6- Charateristics of normal urine include

a-PH is 9 b-RBCs are 5 – 7 / HPF c-WBCs are from 0 - 1 / HPF d-Normal protein excretion is up to 4mg/kg/hour urine

## 7- As regard nephrotic syndrome

- a-Rapid response to steroids & absence of relapse in 1st six months after diagnosis is associated with infrequent relapsing course
- b-Dose of corticosteroid is 60 mg / kg body weight/day for 4 8 weeks
- c- Persistent hematuria is not an indication for renal biobsy before starting treatment
- d- Release of antidiuretic hormone has no relation to the etiology of edema

# 8- The most reliable diagnostic laboratory test diagnosing acute renal failure is

a-Blood urea nitrogen

**b-Serum** creatinine

c-Serum potassium

d-Blood gas analysis

# 9- Diagnostic laboratory investigation associated with acute renal failure include

- a-hypophosphatemia
- b-hypernatremia
- c-metabolic alkalosis
- d-metaboloic acidosis

### 10-As regard protein excretion in urine

a- Normal protein excretion up to 40mg/m2/hr urine

- b-Nephrotic range proteinuria more than 40mg/m2/hr urine
- c-Proteinuria in minimal change disease is never selective
- d-Proteinuria is due to loss of positive charge of glycoproteins present in the glomerular basement membrane

### 11-As regard nephrotic syndrome

a-Secondary nephrotic syndrome conistitute 90% of cases in children

b-Minimal change disease is uncommon

c-Typhoid fever can be complicated by nephrotic syndrome

d-It is more common in females than males

12-As regard spot urine protein / creatinine ratio a- Its normal level in children less than 2yrs of age is more than 0.5

b- Its normal level in children more than 2yrs of age is less than 0.2

c- Morning urine sample is not accurate

d-It diagnoses nephrotic syndrome if the ratio is more than 1

## 13-AS regard urinary tract infction

- A-significant bacteruria is defined as bacterial count of the clean catch urine is more than or equal to 10,000/ml
- b-more common in male than female childrens
- c-the most common causative organism is E-coli
- d-main source of infection is the urethra

### 14-As regard diagnosis of urinary tract inection

- a-Urine culture shows 10,000 colonies of a single pathogen
- **B- DMSA** scan is used to detect renal stones
- c-Urine culture shows 1000 colonies of a single pathogen in symptomatic child
- d-Acute pyelonephritis may present with acute gastroenteritis in infants

### 15-As regard hematuria:

- a-Microscopic hematuria is defined as the presence of 15 or more RBCs / hpf
- b-Terminal hematuria is upper urinary tract in origin
- c-Deformed urinary RBCs signify glomerular origin of hematuria
- d-Lower urinary tract lesions are associated with abnormal RBCs morphology, moderate proteinuria(more than 100mg/d)

#### 16-In acute poststreptococcal glomerulonephritis

- a- Serum C3 level is decreased & returns normal 2 weeks after onset
- b- proteinuria is in the range of 4– 40mg/m/hr urine
- c- long acting penicillin is given for prophylaxis to prevent reccurence
- d- Fluid intake is calculated as insensible water loss (100ml/m2/24hr) + urinary out-put

# 17-As regard treatment of urinary tract infection

- a-A 7 days course of a broad spectrum antibiotics is needed for treatment of acute pyelonephritis
- b- Treatment may start before obtaining a urine specimen for culture & sensitivity test
- c-Follow up include doing urine culture for 1-2 years only in symptomatic children
- d-Vesico-ureteric reflux is associated with frequent recurrences of UTI

# 18-As regard treatment of minimal change nephrotic syndrome

- a-Diet should be protein resricted
- b-Judicious use of diuretics is mandatory to avoid increased risk of thromboembolic complications
- c- About 50 % of children respond to prednisone within 3 5 weeks
- d-History of BCG vaccination has no significance before starting treatment with prednisone

### 19-As regad management of acute renal failure

a-Protein in diet is normal

b-Potassium intake is not restricted

c-Protein in diet is high

d-Fluid intake is administered according to urine output and insensible water loss

# 20- Diagnostic laboratory investigations associated with acute renal failure include:

a-Hypokalemia

**b-Hypercalcemia** 

c-Anemia, thrombocytopenia, leucopenia

d-Respiratory acidosis

### 21- causes of acute post- renal failure

- a-Burns
- **b-Glomerulonephritis**
- c-Cyanotic congenital heart diseases
- d-Bilateral pelviureteric junction obstruction

## 22-As regard nephrotic syndrome

- a-85% of idiopathic nephrotic syndrome is membranoproliferative
- b-Worest prognosis is associated with focal glomerulosclerosis
- c-Only 50% of cases with minimal change disease respond to prednisone treatment
- d-Proteinuria in minimal change disease is rarely selective

# 23- In nephrotic syndrome

a-Edema is due to increased plasma protein level

b-Renin-angiotensin system activation has no role in etiology of edema

c-Hyperlipidemia is due to decreased plasma lipoprotein lipase

d-The most common age of presentation in minimal change disease is 1- 12 years of age

# 24- As regard diagnosis of minimal change nephrotic syndrome

- a-Renal biobsy is required for diagnosis in most children
- b- Serum Complement C3 & C4 are decreased
- c- Serum albumin level is less than 2.5 g / dl
- d- Granular casts are predominant in urine analysis

#### 25-As regard complications of nephrotic syndrome

- a- Spontaneous peritonitis the most common type of infection and caused by staphylococcus aureus.
- b- Immmunosupressive therapy is not an etiological factor
- c-Increased tendency to arterial & venous thrombosis is due to decreased prothrombotic factors
- d- Polyvalent pnemococcal vaccine given to all children with nephrotic syndrome when child is on alternate day therapy.

### False & True

- ☐ Systemic hypertension is a common complication of idiopathic nephrotic syndrome
- Generalized non pitting odeama is a cardinal sign of idiopathic nephrotic syndrom
- Most cases of idiopathic nephrotic syndrome are steroid resistant
- Hypocomplementemia is almost always present in acute postinfecious GN
- Rt sided HF is a common complication of acuteGN
- In acute poststreptococcal GN corticosteroids represents a major line of treatment

### **Case Senario**

A 5 years old boy presenting with a one week history of generalized edema starting around the eyes. On examination there is ascites, B.P.100/70, Spot urine Protein /creatinine ratio is 4, serum cholsterol 285mg/dl.

Q1: What is the possible diagnosis?

Q2: Mention 2 other investigations.

Q3: Mention 2 possible complication.

Q3: What is the treatment?

#### Case senario 2

A 13 years old girl presenting with a 15 days history of generalized edema starting as morning buffy eyes. On examination there is ascites, B.P.140/85 mmhg, Spot urine Protein /creatinine ratio is 5, serum cholsterol 465mg/dl.

Q1: What is the possible diagnosis?

Q2: Mention 1 important investigation.

Q3: Mention 2 possible complication.

#### Case senario 3

A 5 years old boy presenting with a 5 days history of cola-like urine, generalized edema starting as morning buffy eyes. On examination: B.P. is 140/85mmhg, urine analysis shows RBCs 100/hpf, ASOT 350, C3 is decreased.

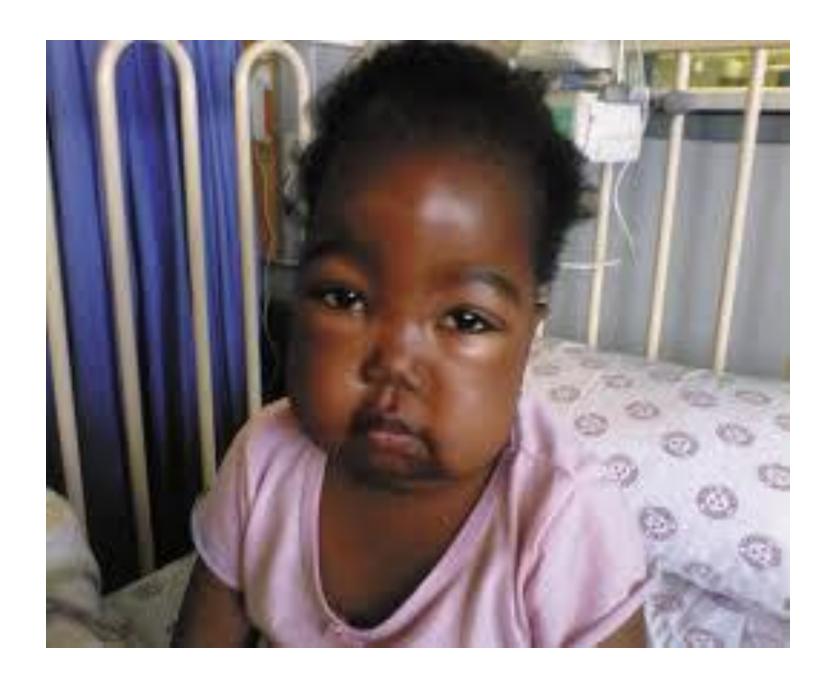
Q1: What is the possible diagnosis?

Q2: Mention 2 other investigations.

Q3: Mention 2 possible complication.

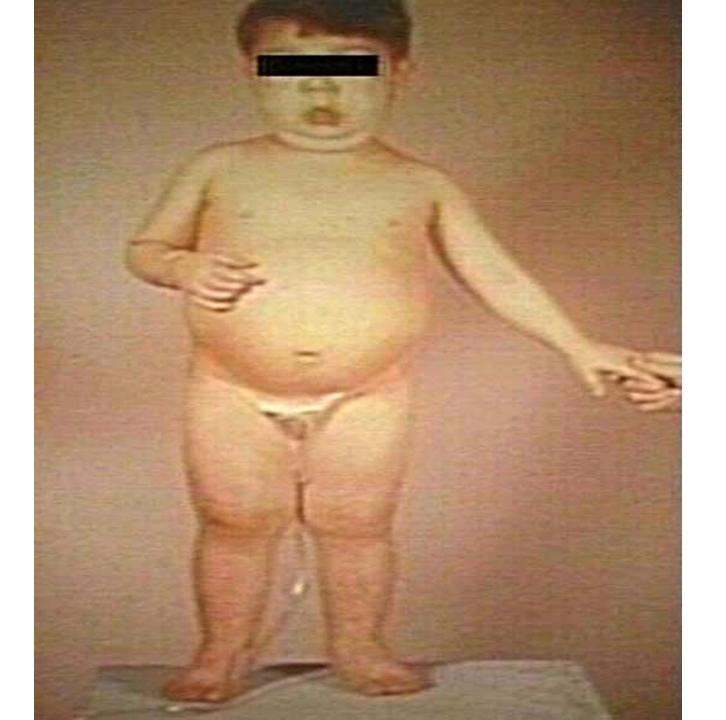
Q4: Mention 3 lines of treatment.

















A Child with Nephrotic Syndrome

