BOWEN UNIVERSITY, IWO
COLLEGE OF HEALTH SCIENCES
FACULTY OF CLINICAL SCIENCES
END OF JUNIOR PAEDIATRICS (P1) POSTING EXAMINATIONS
4TH FEBRUARY 2021

TIME ALLOWED: 1HR

INSTRUCTIONS:

1. *Answer all questions.*
2. *Indicate T (for True) and F (for False) against each of the statements below on the answer sheet provided.*
3. *Please do not write or make any marks on the question paper which should be returned with the answer sheet.*

1.The following are risk factors for neonatal sepsis.

A. Rupture of membrane of 7hrs in HIV positive mother
B. Transient foetal tachycardia
C. Intrapartum maternal fever
D. Chorioamnionitis
E. Congenital malformation

2. The features of hyperkalaemia on electrocardiography include: prolong PR interval, widened QRS complex, tall-peaked T waves. The serum level of potassium can be lowered through the following therapy except:
A. insulin /glucose infusion
B. 10% calcium gluconate
C. Oral kayaxalate
D. Nebulized Salbutamol
E. Dialysis.

3. A 5-year-old boy presents with fever. Results of urinalysis include 50 to 100 white blood cells per high-power field. The following are correct except:
A. Positive leucocyte esterase test is diagnostic
B. May have posterior urethral valves
C. He may have tuberculosis
D. Differential diagnosis include appendicitis
E. Intravenous ceftriaxone is the drug of choice

4. The following are symptoms of congenital heart disease
   a. excessive cry
   b. Recurrent chest infection
   c. growth delay
   d. frequent squatting
   e. breathlessness

5. A 2-year-old presented at the emergency room with 1 week history of nasal discharge, and cough, few days later he developed fever and breathlessness. There was similar history of cough two months ago. The following are true

   a. pulmonary tuberculosis should be considered
   b. History of immunisation is very important
   c. The child could have an underlying heart disease
   d. Tachypnoea is not usually present in pneumonia
   e. Chest radiograph is not useful

6. Indication for Oxygen therapy in supportive management of Pneumonia include:

   a) SaO_2 <90%
   b) Tachypnoea > 20/min for the age
   c) Central cyanosis
   d) Severe lower chest wall in-drawing
   e. Grunting

7. Differential diagnosis of a 4yr old child with cyanosis and effort intolerance includes:

   a) Tetralogy of Fallot
   b) Atrial septal defect
   c) Tricuspid atresia
   d) Ventricular septal defect
   e) Asthma

8. Common causes of Cerebral Palsy in Nigeria include:

   a) Severe Birth Asphyxia
   b) Severe Neonatal Jaundice
   c) Pyogenic meningitis
   d) Intrauterine factors
   e) Poliomyelitis

9. Concerning HbSS:

   a) Dactilytis is a late and infrequent finding
   b) Fluid restriction is indicated in vaso-occlusive crisis
   c) Sickling test is used to confirm diagnosis
   d) Proguanil is indicated for prophylaxis
   e) Daily Folic Acid and Iron are indicated

10. A 5hour old baby delivered at 36weeks 4days gestational age, weighs 1.6Kg at birth. This newborn is at risk of the following except:

   a) Anaemia of prematurity
   b) Hyperglycaemia
   c) Polycythaemia
   d) Respiratory distress syndrome
   e) Pulmonary haemorrhage

11. A 3-year-old girl presents with a 2-day history of vomiting and diarrhea. She managed to take sips of water and had poor appetite. On physical examination, her temperature is 37.0°C, heart rate is 140 beats/min, respiratory rate is 14 breaths/min, blood pressure is 80/40 mm Hg, and weight is 15 kg. She has very dry mucous membranes and a capillary refill of 4 seconds. Laboratory evaluation reveals:

• Sodium, 131 mEq/L
• Potassium, 1.5 mEq/L
• Chloride, 94 mEq/L (94 mmol/L)
• Blood urea nitrogen, 144.0 mg/dL
• Creatinine, 1.1 mg/dL
.Specific gravity of 1.030

Which of the following are the MOST appropriate interventions?

A. Monitor urinary output
B. 5% dextrose water at 50 mL/hr
C. 5% dextrose + 0.33% sodium chloride + 20 mEq/kg potassium chloride at 50 mL/hr
D. 0.225% sodium chloride at a volume of 300 mL over 1 hour
E. Infusion of 0.9% sodium chloride at a volume of 300 mL over 30min

12.The following can be transmitted transplacentally:

a) Malaria parasite
b) Hepatits A virus
c) Human Immunodeficiency Virus
d) Hepatits C virus
e) Hepatitis E virus

13. Concerning the National Programme on Immunisation in Nigeria:

a) Oral polio vaccine is given at birth, 4, 6 and 14 weeks of life
b) BCG is given intramuscularly at birth
c) Measles and Yellow fever vaccines are given concurrently at 6 months of life
d) HBV is given subcutaneously on the thigh
e) Pneumococcal vaccine is given at 6months

14. The following are live vaccines:

a) Rubella vaccine
b) Measles vaccine
c) Inactivated Polio vaccine
d) Hib (Haemophillus influenza type b) vaccine
e) Yellow Fever vaccine

15. Concerning the Pentavalent vaccine:

a) It is given intramuscularly at 6, 10 and 14 weeks of life

b) Haemophilus Influenza Type C is a component

c) It is best stored at a temperature of -4 to -20^{o}C

d) Diphtheria and Pertussis vaccines are components

e) It is best used when the inner square of the vaccine vial monitor is darker than the outer circle.

16. About cardiomyopathies

a. It is an intrinsic disease of the heart muscle

b. Hypertrophic cardiomyopathy is the most common form

c. Dilated cardiomyopathy present with abnormal ventricular systolic function

d. Infants usually present with signs of heart failure

e. Infants usually present with sudden death

17. Causes of thrombocytopaenia include:

a) hyposplenism

b) hypersplenism

c) massive blood transfusion

d) haemolytic uremic syndrome

e) Fanconi anaemia

18. Concerning anaemias,

a. Normochromic normocytic anaemias are seen in chronic kidney disease

b. Macrocytosis may be seen in children on zidovudine therapy

c. Microcytic anaemias may be found in iron deficiency anaemia

d. Macrocytosis may be seen in liver disease

e. Clinical features may not be seen in haemoglobin levels greater than 7g/dl

19. Differential diagnosis of microcytic anaemias include:

a. Iron deficiency anaemia

b. Folic acid deficiency

c. Lead poisoning

d. Sideroblastic anaemia

e. Thalassamias

20. The following are correctly matched:

a) Rifampicin - Optic neuritis

b) Isoniazid - Ototoxicity

c) Streptomycin - Peripheral neuritis

d) Ethambutol - Colours urine orange

e) Pyrazinamide – Hepatotoxicity

21. Concerning Paediatric HIV/AIDS:

a) Vertical transmission accounts for most cases in Nigeria.

b) Primary prevention of HIV infection in women of reproductive age group is an unimportant control measure.

c) Positive HIV antibodies in an infant is diagnostic of the condition

d) Positive HIV antibody testing in a 13month old baby is an indication for commencement of HAART

e) Breast feeding is the commonest route of vertical transmission of the virus.

22. Concerning the clinical features of paediatric HIV/AIDS:

a) Persistent generalised lymphadenopathy is Stage II disease

b) Extrapulmonary Tuberculosis is a feature of Stage IV disease

c) Kaposi sarcoma is an AIDS defining condition

d) Oesophageal candidiasis is a feature of Stage III disease

e) Extensive warts infection is a feature of Stage II disease

23. Second line anti-tuberculous drugs include:

a) Cycloserine

b) Streptomycin

c) Capreomycin

d) Rifampicin

e) Pyrazinamide

24.Excessive sweating in a young infant may be manifestation of:
(a) Heart failure
(b) Hypoglycaemia
(c) Polycythaemia
(d) Anxiety
(e) Hypothermia

25.Common presentation of Congestive cardiac failure in infancy include:
(a) Hepatomegaly
(b) Feeding difficulties
(c) Pedal oedema
(d) Tachycardia
(e) Tachypnoea

26.The followings are common findings in Nephrotic syndrome:
(a) Mild glycosuria

(b) Red blood cell casts in urine

(c) Hypoproteinaemia

(d) Oedema

(e) Hyperlipidaemia

27. Common causes of Acute Renal Failure in children:
(a) Glomerulonephritis

(b) Nephrotic syndrome

(c) Haemolytic uraemic syndrome

(d) Obstuctive uropathy

(e) Septicaemia

28. Jaundice is seen immediately after birth in
(a) G-6-P-D deficiency
(b) Septicaemia
(c) Rh incompatibility
(d) Breast milk jaundice
e) Physiologic jaundice

29. Causes of intrauterine growth retardation (IUGR):

(a) Chromosomal anomalies
(b) Chronic placental insufficiency
(c) Malaria in pregnancy
(d) Pregnancy induced diabetes
(e) Malnutrition

30. Known complications of neonatal polycythaemia include:
(a) Hyperbilirubinaemia
(b) Renal vein thrombosis
(c) Necrotising enterocolitis
(d) Hypoglycaemia
(e) Hyaline membrane disease

31. To identify ABO incompatibility, an infant's blood type and Coombs reactivity is determined when the mother is blood type:

(a) A.
(b) B.
(c) AB.
(d) O.
(e) Rh -ve.

32. The most common cause of congenital adrenal hyperplasia is a deficiency of:

(a) 11-hydroxylase.
(b) 17-hydroxylase.
(c) 21-hydroxylase
(d) 17-hydroxylase
(e) 18-hydroxylase

33. Risk factors for neonatal hypoglycaemia include:

(a) Severe perinatal asphyxia.
(b) Neonatal sepsis.
(c) Polycythaemia.
(d) Beckwith-Wiedemann syndrome.
e) Hunter syndrome.

34. Features of Haemolytic uraemic syndrome include:

(a) Dysentery.
(b) Acute renal failure.
(c) Anaemia.
(d) Renal microthrombi
e) Hyperkalaemia

35. Differential diagnosis of children who present with wheezing

(a) Bronchial Asthma.
(b) Retained foreign body.
(c) Tracheoesophageal fistula.
(d) Severe pneumonia.

(e) All of the above.

36. Concerning Vit. D and Calcium metabolism

a) Deficient calcium absorption leads to secondary hyperparathyroidism
b) Deficient Vit. D leads to craniotabes in infancy
c) Treatment of hypocalcaemia requires the use of IV 10% Ca Gluconate /ml/kg to prevent complications
d) Vit. D deficiency is a common cause of BLOUNT'S Disease
e) The use of calcium supplement is essential in the management of nutritional rickets

37. Concerning Malaria

a) Artesunate is a 2nd line drug in the treatment of uncomplicated malaria
b) Chemoprophylaxis is indicated in children who recover from cerebral malaria
c) Oral quinine is a drug of choice used in cerebral malaria
d) Severe malaria is common in malnourished children
e) Acute renal failure is a known complication

38. The following defines malaria with life threatening complications:

a. Positive malaria parasite in a 3-year-old girl with random blood sugar greater than 40mmol/L

b. Positive malaria parasite in a child with one episode of generalised tonic-clonic seizures in 24 hours

c. Positive malaria parasite in a 4-year-old child with Hb level less than or equal to 5g/dl

d. Positive malaria parasite in a 2-year-old child too weak to sit or stand

e. Positive malaria parasite in a 2-year-old child with severe loss of appetite and 10 episodes of diarrhea in 24 hours

39. In Tumor Lysis Syndrome

a) Fluid administration at daily maintenance value is adequate
b) Allopurinol is useful in preventing it
c) Uric acid of 11mg/dl is in keeping
d) IV NaHCO3 is used in its treatment
e) Can occur in Acute Leukaemia

40. Concerning Leukaemias;

a) Acute is commoner than chronic in children
b) Down's syndrome increases predisposition
c) Abnormal bleeding is common in leukaemia
d) Blasts in peripheral film is diagnostic
e) Fever occurs in most cases

41.Concerning Burkitt lymphoma;

a) Commoner in the maxilla than in the mandible
b) Male > Female

c) There is generalised lymphadenopathy in endemic type
d) Modified Ziegler's regimen used in the treatment
e) Prognosis is better in abdominal than in the jaw form

42. Concerning UTI

a) All confirmed cases must be investigated
b) Staph. aureus is the commonest cause in children
c) Presence of an indwelling catheter is not a risk factor
d) Co-trimoxazole is the 1st line drug
e) Bowel training is a preventive measure

43. In a 3-month-old infant, the following are correct

a) Jaundice is less common in breastfed infants than those on formula feeds
b) Breastmilk contains more Vit D than cow milk
c) Incidence of URTI is lower in breastfed children
d) Breast milk is the best source of iron
e) Complementary feeds should be commenced

44. Concerning Acute Hepatitis B

a) Presence of Anti-HBs Ab indicates immunity
b) About 10% progress to chronic state
c) Primary Liver Cell Carcinoma is a complication
d) Presence of Hbe antigen is a good prognosis
e) It is faeco-oral in transmission

45. Concerning Measles

a) Koplik spots are diagnostic
b) the fever crashes at the onset of the rash
c) Laryngotracheobronchitis is a complication
d) Stevens – Johnson syndrome is a differential diagnosis
e) The rash typically commences at the trunk

46. Heat loss from the body of newborn occurs by:

(a) Conduction
(b) Convection
(c) Osmosis
(d) Radiation
(e) Non-shivering thermogenesis

47. The following are True:

a) An infant of a diabetic mother is at risk of a hyperglycaemia in the first hour of life.
b) An infant of a mother diagnosed with Tuberculosis should be commenced on oral Rifampicin immediately after birth till mother is smear negative three times.
c) An infant of an HIV positive mother should commence oral Nevirapine for the first 6 months of life

d) An infant of a Hepatitis B surface antigen (HbSag) positive mother should have Hepatits B vaccine and immunoglobulin within the first 12 hours of life

e) An infant of a Sickle Cell disease mother is at risk of perinatal asphyxia.

48. Concerning Seizures:

a) Complex febrile seizure has a duration of between 10 – 15 mins
b) Recurrent Febrile seizure isn't a risk factor for epilepsy
c) EEG is necessary for definitive diagnosis
d) West syndrome has a poor prognosis
e) Neurofibromatosis is inherited as Autosomal recessive

49. Management of a child with severe protein energy malnutrition (PEM) includes:
a) Intravenous fluid at 1 ½ maintenance
b) oral zinc supplement
c) intravenous frusemide
d) iron supplement should be commenced at admission
e) high sodium and low potassium containing solution

50. An infant of a diabetic mother may present with:
a) Macrosomia
b) Congenital anomalies
c)Hypocalcaemia
d)Respiratory distress syndrome
e)Polycythaemia