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| Pediatric medicine | Year 2022 – 2023 |
| Third – Year | Frist -term exam. |
| Total Marks: 50 | Date: 12/1/2023 |
| Prof. Nesrin Mosad Handoka | Time Allowed: 2 Hours |

Read each question carefully and circle the best answer from the choices following the question (1 marks for each question).

1. Which of the following is the most common finding of major criteria rheumatic fever diagnosis?

a. Carditis

b. Arthritis

c. Erythema marginatum

d. Chorea

e. Subcutaneous nodules

2. The pathogenesis of Sydenham chorea in rheumatic fever is:

a) Autoimmune response of the CNS to Group D Streptococci.

b) Autoimmune response of the CNS to Group B Streptococci.

c) Autoimmune response of the CNS to Group A Streptococci.

d) Absence of antineuronal antibodies.

e) Autoimmune response of the peripheral nervous system to Group A Streptococci.

3. A fetal hemoglobin chain that rapidly increases in first few months after birth:

a) Alpha chain

b) Beta chain

c) Gamma chain

d) Delta chin

e) Epsilon chain

4- Beta thalassemia major is characterized by:

A- Normochromic RBCs.

B- Presentation before 6 months of age.

C- Narrow Medulla of long bones.

D- Hemoglobin defects hemolytic anemia.

E- Low serum iron.

5. Migratory polyarthritis represents one of the major criteria for acute rheumatic fever, which of the following statements is true?

A. Occurs in approximately 50% of patients

B. Typically involves small joints

C. Heals without deformity

D. Rheumatic arthritis is almost deforming

E. There is often a proportional relationship between the severity of arthritis and the severity of cardiac involvement.

6. Patients with acute rheumatic carditis and cardiomegaly should receive prednisone 2 mg/kg/day in 4 divided doses for

A. 7-10 days

B. 2-3 weeks

C. 6-8 weeks

D. 2-3 months

E. 4-6 months

7- Persistent diarrhea defines that type which remains for:

a. More than 2 weeks.

b. More than 4 weeks.

c. More than 2 months.

d. More than 3 months

8. Hypertensive encephalopathy is most commonly associated with the following disease:

a) Renal

b) Hepatic

c) Adrenal

d) Pituitary

e) Thyroid

9. Which of the following serotype of group A beta-hemolytic streptococci (Streptococcus pyogenes) is nephritogenic?

a) Serotype 24

b) Serotype 49

c) Serotype 55

d) Serotype 57

e) Serotype 59

10- Apgar evaluations of newborn infants include all of the following EXCEPT:

a. Color

b. Heart rate

c. Core temperature

d. Respiratory effort

e. Response to catheter in nostril.

11. The newborn should be fed on the first day of life by:

a) Glucose 5%.

b) Sweetened water.

c) Colostrum.

d) Herbs as "Karawy"

12. All of the following statements are correct about bronchial asthma EXCEPT:

a- Prophylactic therapy is required between attacks in all cases

b- Upper respiratory viral infection is a common triggering factor

c- Wheezes may not be apparent in severe cases

d- It is a disease of airway hyper-reactivity

e- By adolescence, most cases improve

13. A child appears with a history of vomiting and diarrhea for the last 3 days. He has a moderate dehydration. All of the following findings are present except:

a) Decreased tears

b) Mild tenting of the skin

c) Pale

d) Irritable

e) Hypotension

14. A 2-year-old boy appears with diminished growth and hepatosplenomegaly. CBC reveals hemoglobin 4.5, hematocrit 14.0, MCV 45, WBC 6,000, polymorphs 55%, lymphocytes 45%, and platelet 205,000. Hemoglobin electrophoresis reveals hemoglobin A 20%, hemoglobin A2 4%, hemoglobin F 76%, hemoglobin S 0%, What is most likely diagnosis?

a) Thalassemia minor

b) Thalassemia major

c) Sickle cell disease

d) Sickle alpha thalassemia

e) Hemoglobin SC disease

15. What is the curative therapy for patients with Beta-thalassemia?

a) P-RBCs transfusion

b) Whole blood transfusion

c) Exchange transfusion

d) Hydroxyurea

e) Bone marrow transplantation

16. The following serotypes of group A Streptococcus more frequently cause rheumatic fever except:

a) M type 24

b) M type 18

c) M type 6

d) M type 5

e) M type 2

17. A 6-year-old boy presents with fever. Which of the following might contribute to a diagnosis of rheumatic?

a. The finding of target lesions on the hands.

b. The finding of tender nodules in the fingertips.

c. A prolonged PR interval on ECG.

d. A CRP of 10.

e. Arterial blood gas

18. The treatment option for Sickle cell disease is:

a) Whole blood transfusion

b) Exchange transfusion

c) Hydroxyurea

d) Splenectomy

19. The major manifestations of Jones criteria of rheumatic fever include all of the following except:

a) Carditis

b) Chorea

c) Erythema marginatum

d) Subcutaneous nodules

e) Fever

20. 10 years old, male asthmatic child, he had daily symptoms, daily use of inhaled short-acting Beta 2 agonist ≥2 time/week, and nighttime symptoms >1 time/week Lung Function revealed: 60% - 80% predicted. What is the severity classification of Br asthma in this patient?

1. Mild persistent
2. Moderate persistent
3. Mild persistent
4. Severe persistent

21. Approximately 80% of all asthmatic patients report disease onset prior to the age of

a. 2 years

b. 4 years

c. 6 years

d. 8 years

22. Rheumatic fever is commonly associated with the following infection:

a) Group A Streptococcus lower respiratory tract infection.

b) Streptococcus pneumoniae upper respiratory infection.

c) Adenovirus lower respiratory tract infection

d) Staphylococcus aureus upper respiratory tract infection

e) Group A Streptococcus upper respiratory tract infection

23. 2-year-old child presented with dactylitis of both hands with severe pain, mild anemia and hepatosplenomegaly. CBC reveals retic 14%, WBC 11,000, polymorphs 60%, lymphocyte 40%, hemoglobin 7, hematocrit 21, MCV 78, Hemoglobin electrophoresis test result reveals hemoglobin A 0%, hemoglobin A2 2%, hemoglobin F 4%, and hemoglobin S 94%. What is most likely diagnosis?

a) Sickle cell trait

b) Sickle cell disease

c) Thalassemia major

d) Sickle beta thalassemia

e) Sickle alpha thalassemia

24. A child with a sickle cell disease should receive prophylactic therapy:

a) Rifampin

b) Zithromycin

c) Erythromycin

d) Penicillin

25. Prophylaxis for people who have had acute rheumatic fever with carditis but without residual heart disease persist for

A. 5 yr. or until 21 yr. of age, whichever is longer

B. 10 yr. or until 21 yr. of age, whichever is longer

C. 5 yr. or until 40 yr. of age, whichever is longer

D. 10 yr. or until 40 yr. of age, whichever is longer

26. Breast-feeding is not allowed when a mother is taking following medication:

a) Amoxicillin

b) Acyclovir

c) Anticancer drugs

d) Antipyretic drugs

27. Colostrum is Breast milk secreted in the first post- natal:

a. 2-4 days

b. one week.

c. two days

d. three weeks

e. One month

28. Of the following, the risk factors for the persistence of childhood asthma except:

a. Parental asthma

b. Allergy

c. Female gender

d. Low birth weight

e. Severe lower respiratory tract infection

29. Breast feeding should begin preferably.

a) Within 1 hour

b) Within 2 hour

c) Within 3 hour

d) Within 4 hour

e) Within 6 hour

30. Thalassemia major is associated with which of the following

a. Decreased level of HbA2

b. A decreased level of destruction of RBCs

c. An increased frequency of fractures

d. decreased level of iron

31. The diagnostic criterion in patients with diabetes mellitus is:

a) Random plasma glucose level is 190 mg/dL.

b) Fasting plasma glucose level is 125 mg/dL.

c) 2-hour plasma glucose during oral glucose tolerance test is 195 mg/dL.

d) Fasting blood glucose level is 127 mg/dL

e) Random plasma glucose level is 199 mg/dL

32. Which of the following is a complication of post streptococcal glomerulonephritis?

a. Acute renal failure

b. Pyelonephritis.

c. Pulmonary embolism.

d. Hypovolemic shock.

e. Septicemia.

33- Complications of insulin dependent diabetes mellitus include:

a. Mental retardation.

b. Diabetic ketoacidosis.

c. Pathological calcifications.

d. Heart failure.

e. Uremic coma

34. Type 1 diabetes mellitus is not characterized by:

a) Genetic susceptibility.

b) Viral infections are common triggering factors for its onset.

c) Is treated only by insulin.

d) Oral hypoglycemic drugs have a therapeutic role.

e) Elevated Hgb A1c

35- One of the classical presenting features of type 1 diabetes mellitus is:

A- Polydipsia.

B- Diarrhea.

C- Weight gain.

D- Loss of appetite.

e- Decrease urination

36. Concerning childhood asthma:

a. Inhaled steroids are useful treatment

b. Hospitalization is usually needed.

c Exacerbations usually occur with food.

d. Sufferers are excluded from sports.

e. long term control medications include anticholinergics

37. The following teste is indicated when classified patients with asthma

a) Pulmonary function test

b) Blood pressure

c) Temperature

d) ECG

e) Throat swap

38- All of the following statements are correct about bronchial asthma EXCEPT:

a- Long term control medications include anticholinergics

b- Upper respiratory viral infection is a common triggering factor

c- Wheezes, intermittent dry cough are clinical manifestations

d- It is a disease of airway hyper-reactivity

e- Multifactorial disease

39. All of the following are complications of sickle cell anemia except:

a) Intraocular bleeding

b) Hematuria

c) Splenic infarcts at high altitude

d) Hypersplenism

40. The protozoal pathogen responsible for diarrhea in children is:

a. Shigella.

b. Giardia lamblia.

c. Salmonella.

d. Campylobacter.

e. Vibrio cholera.

41-Standard treatment of acute asthmatic attack includes the following except:

1. Anticholinergics.
2. Leukotriene modifiers.
3. Short acting B2 agonist nebulization.
4. I.V. glucocorticoids.

42. Severely dehydrated baby with acute gastroenteritis. Which one of all the following findings is not noted?

a) Lethargic

b) Sunken eyes

c) Unconscious

d) Drinking poorly

e) Skin pinch goes back slowly

43. Infants with gastroenteritis:

a. In most instances not require treatment with Zinc.

b. Should be admitted to hospital if they are unable to tolerate fluid orally

c. Bacterial diarrhea is most common in young children.

d. Metabolic Alkalosis is a complication

44- Recognized features of acute glomerulonephritis nephritis include the following EXCEPT:

a. Hypertension.

b. Normal urine volume.

c. Mild proteinuria.

d. microscopic hematuria.

45. A 6- year- old girl has had a dry cough without sputum for months. The cough is getting is getting worse after exercise and at night, Family history revealed that the parents have eczema. On physical examination, a wheeze in both lung fields is detected. What is the most likely diagnosis?

A. Bronchial asthma.

B. Pertussis.

C. Bronchiectasis.

d. Interstitial pneumonia.

e. Bronchitis

46- The following is true about breast milk except:

a- The production is independent of child birth.

b- Is rich in secretory IgA.

c- Has less phosphorus than cow’s milk.

d- The production is promoted by oxytocin.

47. Serious complications of diarrhea include

a. Dehydration

b. Acidosis

c. Shock

d. All of the above.

48. Female patient of 5 years has gross hematuria, urine contains dysmorphic red cells, red cell casts. The following should be considered in the differential diagnosis:

a. Post-streptococcal Glomerulonephritis

b. Urinary tract infection

c. Ectopic ureter

d. Ureterocele

49. What is the mode of transmission in Beta-thalassemia?

a) Autosomal recessive

b) Autosomal dominant

c) X-linked recessive

d) X-linked dominant

e) Multifactorial

50- Asthma triggers include all the following Except:

a. Viral respiratory infections.

b. Tobacco smoke.

c. House dust mite.

d. Steroids

Questions Ended