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University Examinations 2023/2024

FOURTH YEAR FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR
OF CLINICAL MEDICINE AND COMMUNITY HEALTH

CCM 3422: PEDIATRICS AND CHILD HEALTH III

DATE: APRIL 2024

TIME: 3 HOURS

INSTRUCTIONS:

Answer *All* questions

Ensure that all your answers are properly numbered

Section A: Short answer questions

Section B: Long answer questions

Section C: Multiple choice questions

SECTION A: SHORT ANSWER QUESTIONS - 40 MARKS

1. List 5 causes of respiratory distress in neonates (5 marks)
2. Describe the management of allergic rhinitis in children (6 marks)
3. List the features in major criteria Jones diagnostic criteria of acute rheumatic fever (5 marks)
4. How do you manage a baby born to a mother with hepatitis B surface antigen positive test?
(List what should be done at birth and how to follow up the infant?) (4 marks)
5. Describe the initial management of paraffin poisoning in children (5 marks)
6. List 5 indication of occupational therapy in children (5 marks)

7. What are the indications of referring a patient with foreign body in the ear to the ENT surgeon? (4 marks)
8. Describe polio vaccination in the Kenya schedule of immunization-types of polio vaccines available, route and age administered (6 marks)

SECTION B: LONG ANSWER QUESTIONS- 40 MARKS.

1. A 6 days old newborn is brought in to hospital due to yellowness of eyes that started on day 3 of life. She is able to feed well and has no fever. On examination she is alert, well hydrated and is active. Has jaundice to the level of the umbilicus. systemic exam- essentially normal.
 - a) What are the laboratory investigations you will do as part of workup of this patient (5 marks)
 - b) What are the most common causes/risk factors of this condition (5 marks)
2. Andrew is 7 years old boy is admitted with history of fever, vomiting, general malaise abdominal pain and dysuria also has frequency of micturition and urgency. He was seen 2 weeks ago due to similar symptoms and was treated but is now back. He appears sick, has some dehydration, has fever temperature - 38.5. on abdominal exam has tenderness on the left lumbar region.
 - a) What is the likely diagnosis? (1 mark)
 - b) List the work up for Andrew - laboratory tests and imaging (7 marks)
 - c) What are the 2 complications of this condition? (2 marks)
3. Mwikali is a 12 years old girl who has been on follow-up in the outpatient pediatric clinic with Type 1 diabetes mellitus . She is admitted to hospital with polyuria, polydypsia and is lethargic. She also has abdominal pain and nausea and she has not been feeding well. The mother stopped her insulin injections 2 days ago because she was afraid her blood sugars would be low because of the poor feeding. She appears sick, dehydrated and has deep breathing, she is drowsy and not able to sit up.
 - a) What is the most likely diagnosis? (2 marks)
 - b) what are the likely cause/ risk factors of her current status? (2 marks)

c) What are the main laboratory findings that are used in the diagnosis of this condition?
(6 marks)

4. Discuss childhood Tb under the following headings:

a) Cardinal diagnostic features in children (5 marks)

b) Management of TB pericarditis (5 marks)

MULTIPLE CHOICE QUESTIONS - CHOOSE THE BEST ANSWER (20 MARKS)

1. The following statements is TRUE regarding croup in children?

A. It's mainly caused by streptococcus pneumoniae

B. It's a common cause of stridor in children

C. Management include intravenous penicillin

D. Majority of patient require admission to hospital for treatment

2. The following are true about jaundice in children except

A. Jaundice is clinically detectable at levels greater than twice the upper normal limit

B. Rbcs breakdown is the main source of bilirubin

C. Unconjugated bilirubin is due to overproduction of bilirubin

D. Jaundice due to medication that impair uptake into the liver persists long after withdrawal of the medication

3. In rhematic heart disease (RHD); which of the following is false

A. Aortic valve is affected in most cases

B. Usually follows acute rheumatic fever carditis secondary to permanent valve damage

C. Patients with RHD require group B streptococcus pharyngitis prophylaxis

D. Valve replacement is indicated for patients with RHD

4. the following is not true regarding caustic substance ingestion

A. Initial symptoms of caustic ingestion include drooling and dysphagia

B. Oesophageal strictures are a likely complication and hence follow-up is important

C. Gastric lavage should be avoided

D. All patients should be put on iv antibiotics and corticosteroids

5. The following are true regarding cholelithiasis in children except
 - A. Cholesterol gallstones are radiolucent
 - B. Pigment stones are formed within the ductal system
 - C. Brown stones form within the ductal system
 - D. Cholesterol stones are composed of >50% cholesterol
6. In regarding to goals of physiotherapy in children which of the following is not true
 - A. Promote independence
 - B. Facilitate motor development
 - C. Promote cure of primary disease
 - D. Improve endurance
7. The following is false regarding paediatric hypertension
 - A. Primary hypertension is more common in children below 6 years
 - B. Renal disease is most common cause of secondary hypertension in children
 - C. Children with stage 1 hypertension should be rechecked within 1 to 2 weeks
 - D. The width of the cuff should be at least 40% of the circumference of the middle upper arm
8. The following are features of severe acute asthma attack except ?
 - A. Tachypnoea and use of accessory muscles of respiration
 - B. Pulsus paradoxus (systolic pressure drop greater than 10mmhg during inspiration)
 - C. Auscultation of chest reveals moderate wheezing, which is often end expiratory. Audible wheeze, silent chest- severe attack
 - D. Oxyhemoglobin saturation with room air more than 95%.
9. In paracetamol poisoning the following are poor prognostic indicators at 24 to 48 hours post ingestion include all of the following except
 - A. pH < 7.3 after adequate resuscitation
 - B. International normalized ratio (INR) < 3
 - C. Serum creatinine > 2.6
 - D. Hepatic encephalopathy grade III or grade IV.

10. The following are true regarding BCG vaccine except
- A. It's given at birth or at first contact up to 2 years
 - B. It protects against complicated forms of tb
 - C. It's given on the left forearm in Kenya
 - D. It is light sensitive
11. Which of the following is not a feature in the classic triad of foreign body in the airway?
- A. Wheeze
 - B. Cough
 - C. Diminished breath sounds
 - D. History of choking
12. The following is true regarding conversion disorder except?
- A. Is a diagnosis of exclusion
 - B. Is defined as the presence of symptom(s) of altered voluntary motor or sensory function in the absence of any identifiable neurological or medical cause
 - C. It's the same as malingering or factitious disorders
 - D. Onset is generally from late childhood to early adulthood
13. In diarrheal disease in children; which of the following is not a cause of chronic diarrhea
- A. Rotavirus infection
 - B. Lactose intolerance
 - C. Short bowel syndrome
 - D. Cow milk protein allergy
14. Which of the following is true regarding myasthenia gravis
- A. Autoantibodies form against the nicotinic acetylcholine postsynaptic receptors
 - B. Is a common autoimmune disease
 - C. Does not involve the ocular muscles
 - D. Ocular symptoms are frequently symmetrical.

15. In the diagnosis of a child with ADHD (attention deficit hyperactivity disorder); which of the following is false regarding the symptoms?
- A. Be present often for at least 6 months
 - B. Be more pronounced than expected for the child's developmental level
 - C. Occur in at least 1 situation (e.g, home or school)
 - D. Be present before age 12 (at least some symptoms)
16. Which of the following is not a true regarding of severe dehydration?
- A. Inability to drink is one of the clinical features
 - B. Management is with intravenous fluids
 - C. 5% dextrose is the fluid of choice
 - D. The initial rehydration is over 6 hours in an infant below 12 months
17. the following are factors that influence the biologic response to radiation except?
- A. Tissue radiosensitivity
 - B. patient's gender
 - C. Dose rate
 - D. Duration of exposure
18. The following is false regarding nutrition in liver cirrhosis
- A. Protein intake should not be restricted in the absence of hyperammonemia.
 - B. Enteral feeding is preferred mode of providing nutrition
 - C. Long-chain triglycerides should be eliminated from the diet
 - D. Deficiency of lipid-soluble vitamins levels must be carefully monitored
19. the following are red flags/early symptoms of autism except
- A. Easily plays with peers
 - B. Has trouble understanding other people's feelings or talking about their own feelings
 - C. Has delayed speech and language skills
 - D. Repeats words or phrases over and over (echolalia)
20. Which of the following is true regarding in acute flaccid paralysis (AFP)?

- A. Weakness does not involve respiratory muscles
- B. Spinal MRI is not important in the evaluation of the patient
- C. Poliomyelitis is an anterior horn cell disease
- D. Immunomodulatory and antivirals are very effective in the treatment of ATP