FACULTY OF MEDICINE

OBSTETRICS & GYNECOLOGY DEPARTMENT

30

M.S. EXAMINATION (2013 BYLAWS)

April 2019 Family planning Time allowed is 3 hours All questions are mandatory

- 1. **Discuss the complications of intrauterine devices** (types, causes of each type, diagnosis, and management of each type)
- 2. Explain the progestational contraception (definitions, types, indications, side effects, management of complications)
- 3. Argue the choice of a contraception (counselling method, choice criteria, eligibility, efficacy, compliance)

Good Luck

FACULTY OF MEDICINE

OBSTETRICS & GYNECOLOGY DEPARTMENT

20

M.S. EXAMINATION (2005 BYLAWS)

April 2019 Family planning Time allowed is 3 hours All questions are mandatory

- 1. **Debate the problem of missed loop** (definition, causes, diagnosis, and management)
- 2. Explain the female sterilization (definitions, types, indications, techniques)
- 3. **Discuss the emergency contraceptive methods** (definitions, types, methods, and protocol of use)

Good Luck

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Good Luck

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M.S. EXAMINATION (2005 BYLAWS)



April 2019 Gynecology Time allowed is 3 hours All questions are mandatory

- 1. **Debate the problem of hyperprolactinemia** (definition, subcategories, causes, diagnosis, and management)
- 2. Evaluate cases of female urinary stress incontinence (definition, etiology, diagnosis, tests, management plan)
- 3. Differentiate cases of endometrial carcinoma (definitions, types, causes, evolution, diagnosis and management plan)
- 4. Explain the uterine malformations (definitions, embryology, types, manifestations, diagnosis, and management)

Good Luck

30

Examination for Master in: Neonatology / Health Care

Course Title: Pediatrics

Date: April 16, 2019

(Paper III)

Time allowed: 3 Hours

Total Assessment Marks: 100

(4 Pages)



All questions should be tried

Neonatology

(75 marks)

Q 1) Long essay:

(15)

Discuss Hemostatic disorders in neonates.

Q 2) Short essay: Discuss in brief:

(3 for each one)

- 1. Delayed cord clamping
- 2. Nasal CPAP
- 3. Neonatal Thermal Regulation
- 4. IUGR
- 5. Apnea of prematurity

Q 3) Short answer: Mention:

(3 for each one)

- 1. Differential diagnosis of pneumoperitoneum in neonates
- 2. Complications of neonatal polycythemia
- 3. Head birth injuries
- 4. Differential diagnosis of neonatal conjunctivitis
- 5. Differential diagnosis of bloody vomitus in neonates

Q 4) Problem Solving:

(3 for each one)

- 1. A full-term newborn is born by normal spontaneous vaginal delivery. He is asymptomatic. His mother was treated with propylthiouracil for hyperthyroidism. The boy was discharged on the second day of life. On the fourth day, he became irritable, restless, anxious, and alert. The maternal history of GBS colonization was missed.
 - 1) The most likely diagnosis:
 - a) GBS meningitis
 - b) Sepsis
 - c) Hyperthyroidism
 - d) Hypothyroidism
 - e) GBS bacteremia
 - 2)Investigations
 - 3)Treatment
- 2. An infant is diagnosed with tetralogy of Fallot and admitted for the modified Blalock-Taussig shunt operation. Two days prior to surgery, in the early morning the infant developed cyanosis, tachypnea, and restlessness. The resident who was on call made the diagnosis hypoxic, 'blue', or 'tet' spells. The infant was placed on the abdomen in knee-chest position, received oxygen, and subcutaneous injection of morphine (0.2 mg/kg). The infant remained cyanotic and developed metabolic

acidosis. The infant received a rapid intravenous infusion of sodium bicarbonate but did not improve.

- 1) The next step in management is:
 - a) Sepsis work up
 - b) Repeat ABG
 - c) Repeat EKG
 - d) Repeat echocardiogram
 - e) Intravenous methoxamine
- 2) Types of congenital cyanotic heart diseases
- 3) Complications
- 3. A pregnant mother was treated with trimethoprim-sulfamethoxazole for urinary tract infection (UTI) 2 weeks prior to delivery. A full-term infant is delivered by normal spontaneous vaginal delivery with good Apgar scores. However, the infant appears pale and jaundice. The complete blood count reveals hemoglobin 8 g/dL, hematocrit 24%, reticulocyte 10%, WBC 15,000 cells/mm³, polymorphnuclear leukocytes 55%, lymphocytes 43%, monocytes 2%, and platelets 250,000. Unstained or supravital preparations of RBCs reveal Heinz bodies. The serum total and direct bilirubin levels are 8 and 0.5 respectively at 4 hours of age.

The mother's blood type is A+, and baby's type is O+ and Coombs negative. The infant is placed under phototherapy.

- 1)The most likely diagnosis is:
 - a) Urinary tract infection with jaundice
 - b) Rh-incompatibility with hemolytic jaundice
 - c) ABO-incompatibility with hemolytic jaundice
 - d) G6PD deficiency with hemolytic jaundice
- 2) Other investigations
- 3) Complications
- 4. A newborn infant appears with a cluster of vesicular lesions on the scalp at the time of delivery. He was born by NSVD with Appar scores of 9 and 9 at 1 and 5 minutes respectively. The rest of the physical examination is unremarkable. The mother has no active genital lesions.
 - 1) The next step in management is:
 - a) Admit the infant in a well baby nursery.
 - b) Rupture the vesicle and send for a bacterial culture.
 - c) Rupture the vesicle, send a culture, and begin antibiotics therapy.
 - d) Begin acyclovir therapy after appropriate laboratory testing
 - e) Admit the infant in NICU and observe the infant. If the infant becomes symptomatic, beign amphoteric B therapy.
 - 2) Differential diagnosis
 - 3) Complications
- 5. You are asked to review a baby on the postnatal ward who has not been feeding well. It is a 1-day-old girl, who is the first baby of a 23-year-old woman. She was born at 39 weeks' gestation and the pregnancy was uncomplicated. The baby was

- c) Hyperreflexia
- d) Lethargy
- 6. A newborn is diagnosed with transient tachypnea of the newborn (TTNB). The chest x-ray findings include all of the following EXCEPT:(2.5)
 - a) Fluid lines in the fissures
 - b) Over aeration of both lungs
 - c) Flat diaphragm
 - d) Coarsely granular pattern

Health Care (25 marks)

- Q1) Define, classify and give examples for the passive immunization in pediatrics.(9)
- Q 2) Mention in brief bioactive components of breast milk. (6)

Q 3) Problem solving:

(6)

An 8-month-old female infant presented with gastroenteritis and polyuria. She was moderately dehydrated and had generalized hypotonia. Three months earlier, she received iron supplementation and repeated injections of vitamin D over a period of 6 weeks. Laboratory investigations of serum revealed B.urea 105 ,S.creatinine 1.9 albumin of 3.2 g/L, calcium of 3.94 mmol/L, phosphorus of 1.16 mmol/L, and alkaline phosphatase of 109 IU/L. After administration of IV fluids, the blood urea and serum creatinine had normalized, but the serum calcium was still high at 4.0 mmol/L, and serum phosphorus was 1.48 mmol/L.

- 1-What is the possible diagnosis?
- 2-What are the possible differential diagnoses?
- 3-What is the appropriate treatment for this case?

Q 4) MCQs:

- 1. Which of the following onset intervals of severe adverse events following immunization is probably not due to the given vaccine: (2)
 - a) Vaccine-associated paralytic poliomyelitis (VAPP) occurring 10 days after OPV.
 - b) Febrile seizures occurring 3 days following measles vaccination.
 - c) Prolonged crying for 24 hours after DTP vaccination.
 - d) Anaphylaxis occurring 7 days after MMR vaccination.
- 2. An 18-month child is edematous, has a dark desquamating skin rash over most of the pressure points on the body, has very thin reddish hair. Of the following, what laboratory test is most likely to be present? (2)
 - a) serum sodium of 143 meg/L
 - b) serum albumin of 2.3 g/dL
 - c) serum potassium of 2 meg/L
 - d) serum prealbumin of 25 mg/dL

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Chairman of Department Prof. Hamed El Sharkawy delivered with a ventouse and weighed 3.2 kg (25th-50th centile). The mother reports that the baby has not been very active since she was born and that she has hardly latched on to the breast.

Examination

The baby looks alert and is not dysmorphic. Head circumference is 34.5 cm (50th centile) and the anterior fontanelle is normal. She makes almost no antigravity movements and lies in a 'frog leg' posture. Respiratory, cardiovascular and abdominal examinations are unremarkable. She appears to make conjugate eye movements in all directions, there is no facial asymmetry and she has normal facial expression. Red reflexes are normal. Tone appears to be symmetrically reduced in the upper and lower limbs, and tendon reflexes cannot be elicited. When she is held vertically, she feels like she is slipping downwards, and she is unable to raise her head at all when held horizontally under her abdomen. The sucking reflex is very weak and there appears to be fasciculation of the tongue.

- a. What can be concluded from the neurological examination?
- b. What is the most likely diagnosis?
- c. Management

Q 5) MCQs:

(2.5 for each one)

- 1. The daily amount of intralipid required in preterm infants to prevent essential fatty acid deficiency is: (2.5)
 - a) 0.5 mg/kg
 - b) 1.0 mg/kg
 - c) 1.5 mg/kg
 - d) 2.0 mg/kg
- 2. In hypernatremic dehydration, a rapid correction results in seizures due to:(2.5)
 - a) Idiogenic osmoles inside the brain cells
 - b) Decreased size of brain cells
 - c) Rupture of brain cells
 - d) Increased size of the ventricles

3. The triad of NEC is:

(2.5)

- a) Prematurity, breast milk, and pathogenic organism
- b) Prematurity, oral formula feedings, and intestinal ischemia
- c) Full term, oral formula feedings, and intestinal ischemia
- d) Intestinal ischemia, oral formula feedings, and pathogenic organisms
- 4. All of the following clinical features are noted in neonatal cold injury EXCEPT:

(2.5)

- a) Blueness of the face, hands, and feet
- b) Edema
- c) Apnea
- d) Bradycardia
- 5. All of the following clinical features are noted in hypermagnesemia EXCEPT:(2.5)
 - a) Hypoventilation
 - b) Hyporeflexia