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MCQs

Instruction:

1. Please use pencil to shade the box for the best and correct answer (only one answer for each question).
2. Send back the answer sheet (see loose leaf page) to the Hong Kong College of Paediatricians. One point will be awarded to each article if ≥3 of the 5 answers are correct. The total score of the 4 articles will be 4 CME points.

(A) Post-Operative Prognosis of the Patients with Esophageal Atresia: The 22-Year Experience of a Reference Hospital

1. Which of the followings is the most common type of esophageal atresia?
   a. Atresia with distal fistula
   b. Atresia with double fistula
   c. Atresia with proximal fistula
   d. Atresia without fistula
   e. Fistula

2. Which of the following options is the type of esophageal atresia with the highest mortality?
   a. Atresia with distal fistula
   b. Atresia with double fistula
   c. Atresia with proximal fistula
   d. Atresia without fistula
   e. Fistula

3. The most common postoperative complication of esophageal atresia was given correctly in which of the following options?
   a. Atelectasis
   b. Pneumonia
   c. Anastomosis leakage
   d. Fistula
   e. Haemorrhage
   f. Pneumothorax

4. Factors affecting mortality in the Waterston classification are correct in which of the following options?
   a. Type of the atresia
   b. Birth weight
   c. Congenital anomalies
   d. Pulmonary problems
   e. Gestational age

5. Which system isn't affected in VACTERL association?
   a. Skeletal system
   b. Gastrointestinal system
   c. Cardiovascular system
   d. Urinary system
   e. Central nervous system

(B) Benefits of Providing 2 mmol Calcium/kg/day in Parenteral Nutrition for Premature Infants: A Cohort Study on Biochemical Markers of Metabolic Bone Disease of Prematurity

1. The following radiological features are compatible with metabolic bone disease of prematurity except:
   a. Osteopenia
   b. Fracture of clavicle
   c. Rachitic rosary
   d. Periosteal reaction
   e. Fraying of epiphysis

2. The risk factors for the occurrence of metabolic bone disease of prematurity are:
   a. Prolonged period of parenteral nutrition
   b. Frusemide
   c. Dexamethasone
   d. None of the above
   e. All of the above

3. Which of the following method of investigations is most specific for diagnosis of metabolic bone disease of prematurity if available?
   a. Alkaline phosphatase level
   b. Serum phosphate level
   c. X-ray long bone
   d. DEXA scan
   e. Serum vitamin D level

4. Concerning the prevention of rickets of prematurity, which of the following is true?
   a. Infantrini (a formula with 30 Cal/Oz) is superior to expressed breast milk fortified with human milk fortifier (which provides roughly 24 Cal/Oz)
   b. Human milk fortifier (when used to with expressed breast milk) prevents metabolic bone disease of prematurity because it provides additional calorie and protein, which is useful for building of bone
   c. Total parenteral nutrition is superior to any forms of milk formula in terms of prevention of metabolic bone disease of prematurity because we can currently provide calcium up to 2 mmol/kg/day using parenteral nutrition admixture
   d. Vitamin D 800 IU per day reduces the incidence of metabolic bone disease of prematurity
   e. Currently commercially available premature infant formula contains calcium and phosphate meeting fetal accretion rate of calcium and phosphate and can decrease development of rickets of prematurity

5. Which of the following combination of calcium and phosphate products is most compatible even at high concentrations in preparing parenteral nutrition admixture?
   a. Sodium phosphate and calcium chloride
   b. Sodium glycerophosphate and calcium chloride
   c. Sodium phosphate and calcium gluconate
   d. Potassium phosphate and calcium gluconate
   e. Sodium glycerophosphate and calcium gluconate

(C) The Effect of Breastfeeding on the Rate of Infections in the First 2 Years of Life

1. What is the World Health Organization (WHO) recommendation regarding the duration of exclusive breastfeeding?
   a. Continuation of exclusive breastfeeding for the first 4 months of life.
   b. Continuation of exclusive breastfeeding for the first 6 months of life.
   c. Continuation of exclusive breastfeeding for the first 5 months of life.
   d. Continuation of exclusive breastfeeding for the first 8 months of life.
   e. Continuation of exclusive breastfeeding for the first 7 months of life.

2. What is the recommendation of WHO for the optimal time to start complementary foods?
   a. 4 months of age
   b. 5 months of age
   c. 6 months of age
   d. 7 months of age
   e. 8 months of age

3. What is the recommendation of WHO for total duration of breastfeeding?
   a. Continuation of breastfeeding with appropriate complementary foods for up to 3 years or beyond.
   b. Continuation of breastfeeding with appropriate complementary foods for up to 2 years or beyond.
   c. Continuation of breastfeeding with appropriate complementary foods for up to 1 year or beyond.
   d. Continuation of breastfeeding with appropriate complementary foods for up to 1.5 years or beyond.
   e. Continuation of breastfeeding with appropriate complementary foods for up to 2.5 years or beyond.

4. It is known that optimal breastfeeding lowers morbidity ad mortality. However, the rate of breastfeeding is not that optimal. What is the approximate rate of exclusive breastfeeding among infants worldwide according to the suggested duration of exclusive breastfeeding by WHO?
   a. 60%
   b. 40%
   c. 30%
   d. 70%
   e. 50%

5. Breastfeeding has many known health benefits besides its nutritional benefits. Which of the below could be included as health benefits of breastfeeding?
   I. Reduction in obesity
   II. Reduction in sudden infant death syndrome
   III. Reduction in necrotising enterocolitis
   IV. Reduction in diabetes
   V. Reduction in infections
      a. (i), (iii), (iv), (v)
      b. (i), (ii), (iii), (v)
      c. (i), (ii), (iii), (iv), (v)
      d. (i), (iii), (v)
      e. (i), (iv), (v)

(D) Investigation of the Effectiveness of *Lactobacillus reuteri* DSM 17938 in the Treatment of Infantile Colic: A Double-blind Placebo-controlled Randomised Study

1. Which of the following is not one of the characteristics of infantile colic?
   a. It can be observed in babies of 2 weeks at the earliest
   b. Restlessness and crying crises are observed
   c. Diarrhoea is common
   d. When the baby is 6-8 weeks old, it peaks
   e. It usually regresses when it is 3-4 months old

2. Which of the following is not considered among the aetiology of infantile colic?
   a. Excessive gas production and contraction of the intestines
   b. Hypersensitivity to cow's milk protein
   c. Temporary lactase deficiency
   d. Intestinal microbiota changes
   e. Prematurity

3. What bacteria is deficient in the intestinal microbiota of babies with infantile colic?
   a. Clostridium difficile
   b. Escherichia spp
   c. Klebsiella spp
   d. Lactobacillus
   e. Proteobacteria

4. Which of the following is not among the expected side effects due to the use of *L. reuteri* in our study?
   a. Abdominal pain
   b. Diarrhoea
   c. Distention
   d. Vomiting
   e. Bloating

5. According to the results of our study, what is the effectiveness of *L. reuteri* in infants with infantile colic?
   a. Reduce crying episodes and restlessness times
   b. Ends crying crises completely
   c. Ends fits of restlessness completely
   d. Ends irritability attacks completely
   e. Ends the fuss completely

Answers of April issue 2022

(A) 1. e; 2. a; 3. e; 4. c; 5. d

(B) 1. c; 2. d; 3. e; 4. a; 5. c

(C) 1. d; 2. b; 3. e; 4. b; 5. a

(D) 1. b; 2. b; 3. c; 4. e; 5. e