

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) Hyponatraemia in Hospitalised Children: A Retrospective Survey in Acute Paediatric Admissions in Hong Kong with Focus on Intravenous Fluid Practices

1. The Holliday Segar formula:
 - a. is an updated recommendation for intravenous fluids in hospitalised children.
 - b. calculates the "ideal" maintenance fluids to contain 0.45% sodium.
 - c. calculates the "ideal" maintenance fluids to contain 10% glucose
 - d. was calculated from healthy children, so may not be appropriate for sick children.
 - e. already takes into account the common occurrence of Syndrome of Inappropriate ADH in hospitalised children.
2. Which is FALSE? Hyponatraemia in hospitalised children:
 - a. is common at admission.
 - b. has been shown to be an important cause of iatrogenic deaths or permanent neurologic impairment.
 - c. is seen in fluid overload cases due to dilutional hyponatraemia.
 - d. has been shown by high quality evidence to be linked with hypotonic intravenous maintenance fluids.
 - e. should not be caused by 0.45% NaCl solutions.
3. Which of the following clinical situations are NOT associated with high ADH levels and hence are at risk of hyponatraemia if given hypotonic fluids?
 - a. Young infants with bronchiolitis
 - b. Child with fever from influenza infection
 - c. Child on carbamazepine admitted for seizure
 - d. Child with nephrocalcinosis and renal concentrating defect
 - e. Child with dehydration from rotavirus gastroenteritis
4. Which of the statements is TRUE?
 - a. If an otherwise well, euvolemic febrile child's admission sodium level is normal, 0.45% NaCl + 5% dextrose at standard maintenance rate will not lead to hyponatraemia.
 - b. If an otherwise well, euvolemic febrile child's admission sodium level is normal, 0.9% NaCl + 5% dextrose at standard maintenance rate may put the child at risk for hypernatraemia.
 - c. If an otherwise well, euvolemic febrile child's admission sodium is low, 0.9% NaCl + 5% dextrose at standard maintenance rate has good chance of normalising the sodium level.
 - d. If an otherwise well, euvolemic febrile child's admission sodium is low, 0.45% NaCl + 5% dextrose at standard maintenance rate will not further decrease the sodium level.
 - e. A and C.
5. Which of the following statements is TRUE?
 - a. 0.3% NaCl + 10% dextrose is an appropriate maintenance fluid for a 2 month old ex-36 weeker admitted for bronchiolitis, since he is around neonatal age.
 - b. Standard maintenance rate of intravenous fluids for a 2 month old ex-36 weeker is 150 ml/kg/day.
 - c. Randomised controlled trials show the risk for hypernatraemia is higher in children given isotonic intravenous maintenance fluids.
 - d. Replacement fluids in a dehydrated child should always be isotonic and calculated separately from maintenance fluids.
 - e. B and D.

(B) Knowledge Enrichment Would Enhance Hand Hygiene Practice in Early Childhood: An Observational Study in Hong Kong

1. Which item most children think does not contain bacteria in this study?
 - a. Towel
 - b. Toys
 - c. Food
 - d. School Bag
 - e. Stationary
2. What is the common infectious disease that could be prevented and controlled by active promotion of proper hand hygiene?
 - a. Acute diarrhoeal diseases
 - b. Mumps
 - c. Scarlet fever
 - d. Hand, foot and mouth disease
 - e. All of above
3. Which handwashing procedure did not show any significant change after the hygiene thematic lectures?
 - a. Wetting hands under running water
 - b. Applying liquid soap
 - c. Rubbing palms, fingers web, nails, back of hands
 - d. Rubbing more than 20 seconds
 - e. Rubbing hands away from running water
4. From the global perspective, what is the percentage of handwashing among the different age groups after contact with excreta?
 - a. Less than 20%
 - b. 30%
 - c. 40%
 - d. 50%
 - e. 60%
5. What is/are the variable(s) on hygiene knowledge that has/have significant difference between the case and reference group?
 - a. One should not go to school when getting sick
 - b. Bacteria could be transmitted through direct contact of wound
 - c. Bacteria could be transmitted through eating the contaminated food
 - d. A and B
 - e. A and C

(C) Pain Response Comparison Between Two Different Vaccinations

1. Which of the followings is a parameter of Modified Behaviour Pain Scale?
 - a. Verbal express of pain
 - b. Vomiting
 - c. Full lunged cry or sobbing
 - d. Loss of consciousness
 - e. Convulsion
2. What is the significant difference between the *diphtheria and tetanus toxoids, acellular pertussis, inactivated poliovirus, and Haemophilus influenzae type b (DTaP-IPV-Hib) conjugate* (DTaP-IPV-Hib) vaccine group and the PCV-13 vaccine group on this study?
 - a. Gender
 - b. Body weight
 - c. Use of pacifier
 - d. Median duration of crying after injection of vaccine
 - e. Feeding style
3. What age group of children were being studied in this research on pain response to vaccination?
 - a. 0-1 month
 - b. 4-6 month
 - c. 12 month
 - d. 18 month
 - e. 6 year old
4. What is the design of this study?
 - a. Randomised controlled trial
 - b. Case control study
 - c. Cross-sectional study
 - d. Case Series Report
 - e. Meta-analysis
5. According to results of this study, which vaccination was more painful than *diphtheria and tetanus toxoids, acellular pertussis, inactivated poliovirus, and Haemophilus influenzae type b (DTaP-IPV-Hib) conjugate vaccination*?
 - a. Hepatitis A vaccination
 - b. Hepatitis B vaccination
 - c. Measles, mumps and rubella vaccination
 - d. 13-valent pneumococcal conjugate (PCV-13) vaccination
 - e. Varicella vaccination

(D) Paediatric Patients with Gastrointestinal Bleeding: 4-year Experience of a Single Centre

1. If palpable purpura appears after a few days of gastrointestinal bleeding, clinical diagnosis should be?
 - a. Haemolytic uraemic syndrome
 - b. Henoch-Schönlein purpura
 - c. Inflammatory bowel disease
 - d. Coagulopathy
 - e. Trauma
2. Diagnosis of *H. pylori* infection should be based on?
 - a. Histopathology
 - b. Stool antigen test
 - c. Serology
 - d. ¹³C-urea breath test
 - e. Urine test
3. The most common cause of painless lower gastrointestinal bleeding is?
 - a. Haemorrhoids
 - b. Anal fissure
 - c. Colorectal polyp
 - d. Inflammatory bowel disease
 - e. Perianal fistula
4. Medication that causes thrombocytopenia and prolongation of bleeding time?
 - a. Levetiracetam
 - b. Vigabatrin
 - c. Phenobarbital
 - d. Valproic acid
 - e. Clonazepam
5. Which has increased risk of colorectal carcinoma?
 - a. Juvenile polyp
 - b. Crohn disease
 - c. Angiodysplasia
 - d. Solitary rectal ulcer
 - e. Lymphonodular hyperplasia

Answers of April issue 2020

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

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

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

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