

## 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  $\geq 3$  of the 5 answers are correct. The total score of the 4 articles will be 4 CME points.

### (A) Diagnosing Enteroviral Meningitis Using Real-time RT-PCR with Cerebrospinal Fluid and Stool Specimens

1. What kinds of viruses belongs to Picornaviridae family and has more than 70 different serotypes and contain coxsackieviruses?
  - a. Papillomavirus
  - b. Norovirus
  - c. Enterovirus
  - d. Poxvirus
  - e. Rhinovirus
2. Which of the following is NOT a clinical symptom of Enterovirus infection disease?
  - a. Guillain-Barre syndrome
  - b. central nervous system infections
  - c. heart failure
  - d. meningitis
  - e. transverse myelitis
3. What is the traditional way to detect aseptic meningitis?
  - a. Cerebrospinal fluid analysis
  - b. Respiratory specimen culture
  - c. Sputum culture
  - d. Urine culture
  - e. Blood culture
4. What are the most relevant viruses causing Aseptic meningitis?
  - a. Poxvirus
  - b. Enterovirus
  - c. Paramyxovirus
  - d. Papillomavirus
  - e. Coronavirus

5. How old is the age group most vulnerable to enterovirus infection?
  - a. 40 ~ 50 year old
  - b. 30 ~ 40 year old
  - c. 20 ~ 30 year old
  - d. 10 ~ 20 year old
  - e. 0 ~ 10 year old

### (B) Clinical Characteristics of Childhood Hydatid Disease: A Single Tertiary Centre Experience from Turkey

1. The patient was admitted to hospital with cough, shortness of breath and pain in the chest. Radiologic examination of thorax showed "meniscus sign and snake sign". Which of the following is the most likely diagnosis?
  - a. Tuberculosis
  - b. Hydatid cyst
  - c. Pulmonary embolism
  - d. Hodgkin's lymphoma
  - e. Metastatic cancer
2. Which of the following may be symptoms of pulmonary hydatid disease?
  - a. Cough
  - b. Chest pain
  - c. Dyspnoea
  - d. Haemoptysis
  - e. All of them
3. Which of the following is the most common organ that hydatid cysts localised in humans?
  - a. Lung
  - b. Liver
  - c. Bone marrow
  - d. Spleen
  - e. Kidneys

4. Which of the following drug is used to first choice treatment of Echinococcus granulosus induced hydatid cysts?
  - a. Albendazole
  - b. Metronidazole
  - c. Ornidazole
  - d. Dehydroemetine
  - e. Pyrimethamine
5. Which of the following parasite is used to human as an intermediate host?
  - a. Taenia saginata
  - b. Echinococcus granulosus
  - c. Fasciola hepatica
  - d. Enterobius vermicularis
  - e. Ascaris lumbricoides

**(C) Overweight and Obesity in Children under Phenylalanine Restricted Diet**

1. Phenylketonuria:
    - a. Is an inborn error of amino acid metabolism disorder
    - b. Is a genetic autosomal dominant disorder
    - c. Is presented by elevated tyrosine levels
    - d. Can not be treated
    - e. Is an X-linked disorder
  2. What is the molecular defect that produces classic phenylketonuria?
    - a. Decreased activity of Tyrosine Aminotransferase enzyme
    - b. Decreased activity of Phenylalanine Hydroxylase enzyme
    - c. Defect of metabolism in neutral amino acid pathway
    - d. Decreased activity of Dihydropteridine Reductase enzyme
    - e. Decreased activity of Hystidine Decarboxylase enzyme
  3. Gold standard therapy for phenylketonuria includes:
    - a. A life-long diet with limited intake of phenylalanine
    - b. Enzyme replacement treatment
    - c. Liver transplantation
    - d. Bone-marrow transplantation
    - e. None
4. Obesity,
    - a. is an important health problem
    - b. its frequency is increasing worldwide
    - c. may be related to increased carbohydrate intake in phenylketonuria (PKU) patients
    - d. is a potential risk in PKU patients
    - e. All
  5. How can Phenylketonuria clinically present?
    - a. Mental retardation
    - b. Macrocephaly
    - c. Status epilepticus in the newborn period
    - d. Metabolic crisis with lactic acidosis
    - e. Short Stature

**(D) The Clinical and Molecular Spectrum of 15q Duplication Syndrome in Chinese**

1. Which of the following is not a common feature of 15q duplication syndrome?
  - a. Hypotonia
  - b. Intellectual disability
  - c. Epilepsy
  - d. Distinctive facial gestalt
  - e. Diaphragmatic hernia
2. What are the molecular mechanism(s) for 15q duplication syndrome?
  - a. Interstitial duplication of chromosome 15q11.2
  - b. Extra isodicentric chromosome 15(idic(15)(p11.2-13.3))
  - c. UBE3A mutation
  - d. a and b
  - e. a, b and c
3. Which of the following molecular test(s) can be useful for diagnosis of 15q duplication syndrome?
  - a. Karyotype
  - b. FISH study
  - c. Chromosomal microarray
  - d. Microsatellite study
  - e. All of above

4. Which of the following clinical features is more common in our Chinese cohort of 15q duplication when compared with western populations?
- Squint
  - Autism
  - Intellectual disability
  - Epilepsy
  - Joint laxity
5. Concerning the outcome and prognosis of 15q duplication syndrome, which of following statements is false?
- Duplication in maternal allele of chromosome 15 has better neurological outcome
  - Interstitial duplication of chromosome 15q11.2 is better than extra isodicentric chromosome 15(idic(15)(p11.2-13.3))
  - The recurrence risk for isodicentric chromosome 15 in subsequent siblings of proband is low.
  - a and b
  - All of above

***Answers of January issue 2018***

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

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

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

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