HK J Paediatr (new series) 2019;**24**:253-255

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) Treatment Outcome for Therapy-related Myeloid Neoplasm in Children

1. What is the usual time interval between primary cancer and therapy-related myeloid leukaemia?
   a. 3 to 6 months
   b. 1- 5 years
   c. 6-10 years
   d. 10-20 years
   e. >10-20 years

2. The 5-year event-free survival of de novo acute myeloid leukaemia is about
   a. 10%
   b. 90%
   c. 80%
   d. 30%
   e. 60%

3. The 5-year event-free survival of therapy-related myeloid neoplasm is about
   a. 10%
   b. 90%
   c. 80%
   d. 40%
   e. 70%

4. Which of the following belongs to therapy-related myeloid neoplasm?
   a. Acute myeloid leukaemia
   b. Acute lymphoblastic leukaemia
   c. Malignant brain tumour
   d. Osteosarcoma
   e. Rhabdomyosarcoma

5. Which of the following is a treatment option of therapy-related myeloid neoplasm?
   a. Salvage chemotherapy with allogeneic stem cell transplantation
   b. Observation and wait for remission
   c. Surgical excision
   d. Salvage chemotherapy and observation after remission
   e. Radiotherapy

(B) Overview of Treatment of Childhood Acute Lymphoblastic Leukaemia in Hong Kong

1. Which of the following is the most common childhood malignant disease entity?
   a. Osteosarcoma
   b. Acute myeloid leukaemia
   c. Acute lymphoblastic leukaemia
   d. Chronic myeloid leukaemia
   e. Central nervous system (CNS) germinoma

2. The 5-year event-free survival (EFS) of standard risk acute lymphoblastic leukaemia (ALL) is about
   a. 30%
   b. 50%
   c. 60%
   d. 90%
   e. 100%

3. The main treatment modality of acute lymphoblastic leukaemia is
   a. Chemotherapy
   b. Radiotherapy
   c. Allogeneic stem cell transplantation
   d. Observation
   e. Plasmapheresis

4. The approximate duration of treatment of acute lymphoblastic leukaemia is about
   a. 3 months - 6 months
   b. 6 months - 12 months
   c. 12 months - 18 months
   d. 18 months - 24 months
   e. 24 months - 30 months

5. Which of the following is NOT a known long term complication of acute lymphoblastic leukaemia?
   a. Risk of second malignancies
   b. Osteoporosis
   c. Risk of diabetes mellitus / impaired glucose tolerance
   d. Diabetes insipidus
   e. Avascular necrosis of bone

(C) Long-term Therapy Related Side Effect on Endocrine System Among Paediatric Survivors with Brain Tumour and Acute Lymphoblastic Leukaemia

1. Which of the following statements is correct?
   a. Endocrine complications were observed to be more common among survivors of childhood leukaemia than brain tumour
   b. Endocrine complications were observed to be more common among survivors of brain tumour than childhood leukaemia
   c. Endocrine complications were rare in brain tumour survivors
   d. Endocrine complications were rare in childhood leukaemia survivors
   e. Among all the brain tumours patients, craniopharyngioma patients had the lowest incidence of endocrine complication

2. Which of the following endocrine conditions is the commonest among leukaemia and brain tumour survivors?
   a. Hypothyroidism
   b. Adrenal insufficiency
   c. Growth hormone deficiency
   d. Diabetes mellitus
   e. Hypogonadism

3. Which of the following conditions had the lowest incidence of endocrine complications?
   a. Leukaemia
   b. Ependymoma
   c. Craniopharyngioma
   d. Medulloblastoma
   e. Germ cell tumour

4. What are the risk factors for the development of hypogonadism:
   1. Use of alkylating agent
   2. Total body irradiation (TBI)
   3. Use of steroids
   a. 1 only
   b. 2 only
   c. 3 only
   d. 1 & 2 only
   e. All of the above

5. Which of the following statements about growth hormone deficiency is/are correct?
   a. Cranial radiotherapy was observed to be a risk factor for the development of growth hormone deficiency.
   b. Use of alkylating agent was observed to be associated with the development of growth hormone deficiency.
   c. Growth hormone deficiency was the commonest endocrine complication observed in childhood leukaemia survivors.
   d. All of the above
   e. None of the above

(D) Comparison on Treatment Outcomes on Paediatric Acute Promyelocytic Leukaemia: ICC APL 2001 Versus HKPHOSG AML 1996 Protocol

1. Which of the following is a unique presentation in acute promyelocytic leukemia (APL) that is not commonly seen in other types of myeloid leukaemias?
   a. Anaemia
   b. Coagulopathy
   c. Hepatosplenomegaly
   d. Hyperleucocytosis
   e. Tumour lysis syndrome

2. What is the most useful investigation in confirming the diagnosis of APL promptly in emergency situation?
   a. Bone marrow aspirate for cytogenetic study
   b. Bone marrow trephine biopsy for morphology
   c. Immunophenotyping by flow cytometry
   d. Molecular study for PML-RAR fusion transcripts
   e. Peripheral blood smear for promyelocytes

3. Once diagnosis of APL is confirmed, which of the following therapeutic agents should be given promptly to improve the outcome of disease?
   a. All trans retinoic acid (ATRA)
   b. Dexamethasone (Dexa)
   c. L-asparaginase (L-asp)
   d. Methotrexate (MTX)
   e. Vincristine (VCR)

4. When patients with APL develop treatment-related differentiation syndrome, what would be the evidence-based first line management?
   a. Anti-pyretics
   b. Antibiotics
   c. Inotropes
   d. Diuretics
   e. Steroid

5. What is the major cause of death of patients with APL?
   a. Disease refractoriness to conventional chemotherapy
   b. Early relapse despite aggressive treatment
   c. Late relapse non-salvageable by haemopoietic stem cell transplant
   d. Lethal haemorrhage at initial presentation
   e. Secondary malignancies related to cytotoxic use

Answers of July issue 2019

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

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

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

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