

Structured Board Review 1404 Questions- Hemat. 6-11; GI 12-16; Child.47-51; MSK 39-47

Hematology

6. Your patient, a 70-year-old man with back pain and a compression fracture, is suspected of having multiple myeloma based on laboratory test results. Which one of the following is recommended to confirm the diagnosis?
- A. Bone marrow aspiration and trephine biopsy.
  - B. No further testing is needed.
  - C. A skeletal survey.
  - D. Metaphase cytogenetic analysis, fluorescence in situ hybridization, and flow cytometry.
  - E. Both A and C.
7. Recent advances in the management of multiple myeloma have improved survival rates. Which one of the following has become a significant component of therapy for eligible patients?
- A. Alkylating agents.
  - B. Dexamethasone.
  - C. Prophylactic antibiotics.
  - D. Autologous stem cell transplantation.
  - E. None of the above.
8. Your patient returns from the oncology subspecialist after confirmation of multiple myeloma (MM) diagnosis by bone marrow aspiration and trephine biopsy. No end-organ damage, hypercalcemia, renal insufficiency, anemia, or bone lesion is found. She is still asymptomatic and considered to have smoldering disease. Which one of the following is the recommended treatment?
- A. Alkylating agent and dexamethasone.
  - B. Lenalidomide or bortezomib-containing regimen.
  - C. Bortezomib-containing regimen.
  - D. Autologous stem cell transplantation.
  - E. No MM-specific treatment.
9. To prevent complications, which one of the following is recommended for symptomatic patients with multiple myeloma and lytic lesions?
- A. Erythropoietin.

- B. Influenza, pneumococcus, and *Haemophilus influenzae* type b vaccination.
- C. Bisphosphonates.
- D. Corticosteroids.
- E. B and C.

10. Which one of the following distinguishes non-Hodgkin lymphoma (NHL) from Hodgkin lymphoma?

- A. NHL tends to spread in a less predictable pattern.
- B. NHL is marked by the presence of Reed-Sternberg cells.
- C. NHL typically begins as a painless enlargement of the lymph nodes.
- D. None of the above.

11. A 48-year-old woman presents to your office reporting low-grade fever, drenching night sweats, and weight loss she attributes to early menopause. Her menses are regular. Based on these symptoms, which one of the following types of lymphoma do you suspect?

- A. Indolent B-cell lymphoma.
- B. Aggressive B-cell lymphoma.
- C. Low-grade B-cell lymphoma.
- D. Hodgkin lymphoma.
- E. Indolent T-cell lymphoma.

GI

12. Which one of the following statements is correct about the serum ascites-albumin gradient?

- A. A low value indicates that ascites might not be caused by portal hypertension.
- B. A low value is an indication for immediate albumin infusion.
- C. A low value predicts that fluid restriction will reduce the amount of ascites.
- D. A low value predicts that sodium restriction will reduce the amount of ascites.
- E. It cannot be measured accurately in patients with renal insufficiency.

13. Which one of the following antibiotics is supported by the best evidence and, thus, the preferred drug to provide long-term antibiotic prophylaxis against future episodes of spontaneous bacterial peritonitis (SBP) in a patient who had an episode of SBP?
- A. Cefotaxime.
  - B. Ciprofloxacin.
  - C. Norfloxacin.
  - D. Penicillin G.
  - E. Trimethoprim-sulfamethoxazole.
14. Which one of the following classes of drugs is recommended as part of the initial treatment of patients with hepatorenal syndrome?
- A. Arterial vasodilators.
  - B. Dopaminergics.
  - C. Fluoroquinolone antibiotics.
  - D. Loop diuretics.
  - E. Vasopressin analogues.
15. Which one of the following statements is correct about rifaximin for prevention and treatment of hepatic encephalopathy?
- A. It is effective for prevention but not treatment.
  - B. It is effective for treatment but not prevention.
  - C. It is effective for prevention and treatment.
  - D. There is no evidence that it is effective for either purpose.
16. You are caring for a pregnant 34-year-old overweight woman. A routine ultrasound reveals the presence of gallstones. After an uncomplicated delivery, the symptoms from the gallstones resolves. One year after delivery, she presents for routine care. She is no longer breastfeeding and asks you about treatment for the gallstones. Which one of the following would you recommend?
- A. She should not consider surgery unless the gallstones become symptomatic.
  - B. She should undergo a small-incision cholecystectomy (mini-laparotomy).
  - C. She should undergo a laparoscopic cholecystectomy.
  - D. She should undergo an open cholecystectomy.

- E. She should undergo repeat ultrasound to determine if the stones are still present.

## Children

47. Which one of the following statements is correct about neurodevelopmental delay in children with surgically repaired congenital heart disease (CHD)?
- A. Developmental delay, when it occurs, is limited to cognitive function; gross and fine motor delays do not occur.
- B. Modern surgical and anesthetic techniques prevent hypoxic-ischemic reperfusion injury that previously caused neurodevelopmental delay.
- C. Most children who have undergone surgical repair of CHD require supplemental educational support and rehabilitation services.
- D. Poor nutrition can contribute to neurodevelopmental delay.
- E. The incidence of neurodevelopmental delay is the same in children with repaired CHD as it is in children without CHD.
48. Which one of the following is the attitude held by most parents of older children with congenital heart disease (CHD) about the role family physicians should play in their child's medical care?
- A. Care should be provided by a multidisciplinary team at the tertiary care center at which the child's CHD was initially treated.
- B. Care should be provided by a pediatric cardiology subspecialist, not a family physician.
- C. Once the child's condition is stable, care should be provided by the family physician.
- D. The family physician should comanage the child's care in collaboration with a pediatric cardiology subspecialist.
- E. The family physician only should provide preventive care, such as immunizations; other routine care should be provided by a pediatric cardiology subspecialist.
49. A 15-month-old child with congenital heart disease (CHD) is scheduled to undergo surgery that likely will involve blood transfusion. Which one of the following statements is correct about administration of measles-mumps-rubella (MMR) vaccine for this child?
- A. If the surgery will involve cardiac bypass, MMR vaccine administration should be delayed for at least 1 year.
- B. MMR vaccine can be administered either up until the time of the blood transfusion or at least 6 months after transfusion.
- C. MMR vaccine can be administered at least 14 days before the transfusion or at least 3 months after transfusion.
- D. MMR vaccine should not be administered if the CHD was caused by congenital rubella infection.
- E. MMR vaccine should not be administered to children with CHD
50. Which one of the following statements is correct about palivizumab therapy for children with congenital heart disease (CHD)?

- A. It has been shown to decrease the occurrence of respiratory syncytial virus (RSV) infection in children with CHD but has no effect on the rate of hospitalizations.
  - B. Children with hemodynamically significant CHD who are younger than 2 years should receive one injection of palivizumab monthly for 5 months beginning at the start of the RSV season.
  - C. It should be administered throughout the year to all children with hemodynamically significant CHD.
  - D. It should be administered to all children with CHD at the start of the RSV season.
  - E. The regimen for administration involves two doses given 1 month apart.
- 51.** A patient with congenital heart disease requires infective endocarditis prophylaxis before an invasive procedure. According to American Heart Association recommendations, prophylaxis is indicated for which one of the following procedures?
- A. Coronary angiography.
  - B. Incision and drainage of an infected abscess on the arm.
  - C. Repair of pyloric stenosis.
  - D. Routine dental cleaning.
  - E. Repair of vesicoureteral reflux.

## Musculoskeletal

- 39.** A college athlete with an elongated second toe presents with second toe metatarsalgia, stating that he feels like he is walking on a rock. He has tenderness of the second metatarsal and a positive drawer test. Which of the following should be recommended as initial treatment to prevent chronicity?
- A. Buddy taping and plantar padding.
  - B. Surgical referral.
  - C. Custom-made orthotics.
  - D. Corticosteroid injection.
  - E. Sodium hyaluronate injection.
- 40.** A 50-year-old woman presents with burning pain in the third webspace of her right foot with toe cramping. The pain is particularly bad when she drives her car and at night. You suspect Morton neuroma. Which of the following confirms the diagnosis?
- A. Pain with lateral foot squeeze.
  - B. Numbness of the top of the foot.

- C. The coexistence of a hammer toe.
  - D. A negative Mulder test result.
  - E. Pain relief after injection of local anesthetic.
41. Your examination of an otherwise healthy newborn reveals likely metatarsus adductus. Which one of the following statements is correct about imaging for this newborn?
- A. Magnetic resonance imaging study is preferred over standard x-rays.
  - B. Serial x-rays should be performed at least once every 6 months to monitor resolution or improvement of the deformity.
  - C. Special views should be obtained for documenting the degree of deformity.
  - D. Spinal imaging should be performed to rule out occult spina bifida.
  - E. X-rays are not routinely indicated.
42. Which one of the following distinguishes metatarsus adductus from metatarsus varus (skewfoot)?
- A. Family history.
  - B. High arch (cavus).
  - C. Hindfoot valgus (turning out of the heel).
  - D. Inability to straighten the foot with passive movement.
  - E. Shortening of the Achilles tendon.
43. Which one of the following statements is correct about the relationship between amniocentesis and clubfoot?
- A. Amniocentesis is contraindicated in women with a family history of clubfoot.
  - B. The rate of clubfoot is increased only if there is an amniotic fluid leak after amniocentesis.
  - C. The rate of clubfoot is only increased if oligohydramnios develops after the procedure.
  - D. The rate of clubfoot is substantially increased when amniocentesis is performed early in pregnancy.
  - E. There is no relationship between amniocentesis and clubfoot.

**44. Which one of the following is considered the standard approach to treatment of most patients with clubfoot?**

- A. Daytime bracing beginning in infancy.
- B. Passive manipulation followed by bracing.
- C. Serial casting beginning at approximately age 6 months.
- D. Serial casting in infancy, with lengthening of the Achilles tendon if needed.
- E. Surgical release of soft tissue.

**45. Which one of the following is the recommended treatment for most children with internal tibial torsion?**

- A. Avoidance of W-sitting.
- B. Corrective serial casting.
- C. No treatment; spontaneous resolution occurs.
- D. Passive range of motion exercises.
- E. Surgery (tibial osteotomy).

**46. Which one of the following statements is correct about the genetics of idiopathic adolescent scoliosis?**

- A. A woman with severe idiopathic adolescent scoliosis that required surgery should be offered amniocentesis when she becomes pregnant to determine if her baby is at risk of developing severe scoliosis.
- B. If scoliosis develops in a teenage girl who has an identical twin sister, the identical twin also is likely to develop scoliosis.
- C. Panels of genetic markers are available to predict who will develop scoliosis.
- D. The mode of inheritance for scoliosis is autosomal dominant with incomplete penetrance.
- E. There is no evidence that genetic factors are involved in the etiology of scoliosis.

**47. Which one of the following describes the Risser sign?**

- A. A double thoracic curve in a patient with scoliosis.
- B. A measure of skeletal maturity determined by assessing the extent of ossification of the iliac crest.
- C. A measurement of the angle of curvature of thoracic scoliosis.
- D. Dyspnea on exertion due to thoracic volume restriction from severe scoliosis.
- E. Progression of scoliosis in excess of 5% per year.