

## Structured Board Review Answers 1404

### Hematology

6. The correct answer is A. Bone marrow aspiration and trephine biopsy are required to establish the diagnosis of multiple myeloma.
7. The correct answer is D. Among patients with multiple myeloma, the regular use of autologous stem cell transplantation has contributed greatly to improved survival rates and has become a significant component of therapy for eligible patients.
8. The correct answer is E. Initial therapy for multiple myeloma should be initiated in patients with symptomatic disease. Early treatment is not indicated in patients with smoldering myeloma because it has not been shown to be beneficial.
9. The correct answer is E. Infection control is a critical consideration for patients with multiple myeloma (MM). Immunization should be offered for influenza, pneumococcus, and *Haemophilus influenzae* type b, although response to immunization can be suboptimal. Bisphosphonates have been shown to decrease the number of skeletal events in patients with MM. They are currently recommended for use in patients with MM and lytic bone lesions on skeletal survey or those with osteoporosis or osteopenia.
10. The correct answer is A. Hodgkin lymphoma tends to spread in a more predictable pattern than non-Hodgkin lymphoma.
11. The correct answer is B. Aggressive lymphomas can manifest as a rapidly growing mass and are more likely to include the classic B symptoms of fever greater than 38°C (100.4°F), weight loss greater than 10% of body weight in the past 6 months, and drenching night sweats.

### Gastrointestinal

12. The correct answer is A. Serum ascites-albumin gradient confirms portal hypertension and is calculated by subtracting the ascitic fluid albumin value from the serum albumin value. A gradient of 1.1 g/dL or more indicates portal hypertension. A gradient of less than 1.1 g/dL suggests that ascites might be caused by something other than cirrhosis with portal hypertension.
13. The correct answer is C. Ongoing antibiotic prophylaxis is recommended for patients who had a previous spontaneous bacterial peritonitis (SBP) because without such treatment, SBP recurs within a year in up to 70% of patients. The best evidence supports use of oral norfloxacin (400 mg/ day).
14. The correct answer is E. Treatment of hepatorenal syndrome involves correcting hypovolemia and administering vasoconstrictors as part of initial therapy. Treatment with vasoconstricting vasopressin analogues (eg terlipressin [not available in the United States], octreotide), sometimes combined with an alpha-adrenergic agonist, such as midodrine, is the recommended approach and effective in up to half of patients.
15. The correct answer is C. Prevention and treatment of hepatic encephalopathy involves removing any precipitating etiologies plus decreasing ammonia absorption from the colon by administering cathartics to remove colonic substrates for nitrogen production by gut flora, or reducing the concentration of those gut flora with nonabsorbable oral antibiotics, such as neomycin or rifaximin.
16. The correct answer is A. There is less than a 4% annual risk that asymptomatic gallstones will become symptomatic. US and European expert guidelines state that surgery is not indicated for treating asymptomatic gallstones because the risk of surgery outweighs the risk of gallstone complications for the majority of patients.

### Children

47. The correct answer is D. The causes of neurodevelopmental delay in patients who have undergone surgical repair of congenital heart defects involve a complex combination of congenital, preoperative, intraoperative, and postoperative factors. Many children with complex congenital heart disease have poor caloric intake and failure to thrive, resulting in inadequate nutrition during the first year after birth, during which 50% of postnatal brain growth occurs.
48. The correct answer is D. In one study, 58% of parents of older children with congenital heart disease (CHD) thought the care of their child with CHD should be comanaged by a family physician and a pediatric cardiology subspecialist.
49. The correct answer is C. For children with congenital heart disease who are scheduled to undergo surgery that might require exposure to antibody-containing blood products, the measles-mumps-rubella and varicella vaccines should be administered at least 14 days before the administration of blood products or else be delayed for 3 to 7 months after transfusion, depending on the blood product and dose administered.
50. The correct answer is B. Palivizumab, a monoclonal antibody used to prevent respiratory syncytial virus (RSV) infection, has been shown to decrease the rate of RSV-related hospitalizations by 45% in children with hemodynamically significant congenital heart disease (CHD). Because optimal cost benefit from immunoprophylaxis is achieved during the peak months of disease outbreak, it currently is recommended that all children with hemodynamically significant CHD who are younger than 2 years at the start of the RSV season receive one injection of palivizumab monthly for 5 months.
51. The correct answer is B. The American Heart Association recommends antibiotic prophylaxis for certain patients with congenital heart disease who are to undergo invasive respiratory tract surgery or surgery on infected skin, skin structure, or musculoskeletal tissue.

## Musculoskeletal

39. The correct answer is A. Initial treatment for metatarsophalangeal instability includes buddy taping of adjacent toes and plantar padding to offload stress.
40. The correct answer is E. Pain relief after injection of local anesthetic or common digital nerve block confirms the diagnosis of Morton neuroma.
41. The correct answer is E. Further evaluation, including routine x-rays or other imaging, beyond physical examination is not indicated unless the diagnosis is in doubt.
42. The correct answer is C. Metatarsus varus, also known as skewfoot, is similar to metatarsus adductus in that forefoot adduction is present. But with metatarsus varus there also is concomitant hindfoot valgus, or turning out of the heel.
43. The correct answer is D. One study reported an 11 times increase (1.1% vs 0.1%) in clubfoot rates in infants whose mothers underwent amniocentesis before 11 weeks' gestation.
44. The correct answer is D. Clubfoot should be treated with casting and bracing according to the Ponseti method. It involves serial casting, plus percutaneous Achilles tendon-lengthening (tenotomy) if needed for correction of equinus.
45. The correct answer is C. Internal tibial torsion typically resolves spontaneously and treatment, including bracing or casting, is not typically needed.
46. The correct answer is B. Genetics is thought to play a role in scoliosis, but the specific mode of inheritance remains undetermined. Twin studies demonstrate a high concordance rate of approximately 73% in monozygous twins and 36% in dizygous twins.

47. The correct answer is B. Risser sign shows the amount of ossification of the iliac crest, which begins anterolaterally and progresses posteromedially with maturity.