

Structured Board Review Answers 1403

Hematology

1. The correct answer is E. Identification of reciprocal translocation between chromosomes 9 and 22 confirms the diagnosis of chronic myelogenous leukemia. Techniques to test for the Philadelphia, or Ph1, chromosome include conventional cytogenetic analysis, fluorescence in situ hybridization analysis, and reverse transcription polymerase chain reaction.
2. The correct answer is A. Therapy for chronic myelogenous leukemia (CML) was revolutionized with the Food and Drug Administration approval of imatinib in 2001. This orally active tyrosine kinase inhibitor has become the standard first-line therapy for patients with chronic phase CML.
3. The correct answer is C. In patients with chronic lymphocytic leukemia, cytogenetic and immunologic analysis of abnormal lymphocytes is now possible and provides information about prognosis.
4. The correct answer is C. Therapy is indicated when a patient develops constitutional B symptoms that signal disease transformation (eg, fever, chills, night sweats, weight loss) or symptoms related to adenopathy, anemia, or thrombocytopenia. Oncology subspecialists typically do not consider patients with chronic lymphocytic leukemia eligible for therapy until the condition has progressed to the advanced stage.
5. The correct answer is B. Patients with chronic lymphocytic leukemia should receive pneumococcal vaccine every 5 years, *Haemophilus influenzae* type b vaccine once, and both influenza vaccines annually.

Gastrointestinal

6. The correct answer is B. The first step in diagnosing nonalcoholic fatty liver disease or nonalcoholic steatohepatitis is to exclude excessive alcohol intake.
7. The correct answer is B. Magnetic resonance imaging study is superior to ultrasound or computed tomography scan for measuring the amount and degree of fatty liver.
8. The correct answer is D. Bariatric surgery, including biliointestinal bypass and gastric banding procedures, has shown promise in treating nonalcoholic fatty liver disease. Liver biopsies obtained at the time of surgery and repeated 1 year postoperatively showed improvement in steatosis. However, no change in inflammation and fibrosis is noted.
9. The correct answer is B. There is some suggestion from controlled trials that use of insulin-sensitizing drugs can lead to beneficial changes for patients with nonalcoholic fatty liver disease and nonalcoholic steatohepatitis. However, not all studies support this conclusion.
10. The correct answer is A. Nonalcoholic steatohepatitis is now recognized as a significant risk for cirrhosis and hepatocellular carcinoma.
11. The correct answer is E. Ultrasonography is noninvasive, widely available, inexpensive, and involves no risks to the patient, making it the preferred method for confirming the presence of cirrhosis in most patients.

Children

42. The correct answer is B. Among newborns in whom the diagnosis was made after discharge from the hospital, the most common presentation was

cardiogenic shock.

43. The correct answer is E. The most common congenital heart disease defects associated with a murmur in an asymptomatic newborn are ventricular septal defect, coarctation of the aorta, and tetralogy of Fallot.
44. The correct answer is B. Symptoms of congestive heart failure can be similar to those of sepsis, but the conditions frequently can be differentiated by laboratory test results (eg, negative results of sepsis evaluation, elevated brain natriuretic peptide levels) and chest x-ray.
45. The correct answer is A. Common characteristics of pathologic murmurs include grade 3/6 or greater, precordial activity (eg, heaves, thrills), decreased femoral pulses, abnormal second heart sound, clicks, diastolic murmur, harsh or mechanical quality, and an increase in intensity when the patient is standing.
46. The correct answer is D. Types of congenital heart defects for which surgery completely repairs and restores cardiac anatomy and function include patent ductus arteriosus, simple ventricular septal defects, most atrial septal defects, coarctation of the aorta, and transposition of great arteries.

Musculoskeletal

30. The correct answer is C. Aggressive cryotherapy (10 seconds or greater) appears to be more effective than gentle cryotherapy (10 seconds or less) (cure rate of 52% versus 31%).
31. The correct answer is E. Psoriasis can be differentiated from onychomycosis by the presence of fine pitting on the nail surface, bilateral involvement of fingernails, nodules on the distal joints of the toes and fingers, and/or bursitis.
32. The correct answer is C. One study determined that drilling a 3-mm vertical hole in the nail to act as an electrical curette was superior to either standard curettage from the nail bed or clipping the distal nail edges.
33. The correct answer is A. Expert opinion states the most common cause of ingrown toenail is improper nail trimming (rounding the nail and cutting it too short) or tearing off the edges.
34. The correct answer is D. A study of the use of wisps of cotton under the ingrown lateral nail edge using a nail elevator or a small curette found a 79% rate of symptomatic improvement over a period of 24 weeks. Dental floss inserted obliquely under the ingrown nail edge is effective in relieving mild cases of ingrowing after a few days to weeks, offering moderate pain relief and resumption of normal activities; infection risk is not increased.
35. The correct answer is A. Phenolization should not be performed when an active infection manifests, because the risk of postoperative infection increases.
36. The correct answer is E. Repetitive dorsiflexion of the first metatarsophalangeal joint worsens symptoms. Individuals who engage in repetitive squatting and dancers who stand on the balls of their feet are particularly at risk.
37. The correct answer is B. Corticosteroid injections can provide significant relief from the pain associated with hallux rigidus, even in individuals with severe pain.
38. The correct answer is C. X-ray evaluation is important for suspected sesamoid pathology.