

## Structured board Review Answers 1406

### Hematology

17. The correct answer is D. Refractory anemia is the most common classification of patients with recently diagnosed myelodysplastic syndrome in the United States.
18. The correct answer is A. Cytogenetic testing of bone marrow cells is essential and provides valuable prognostic information. Mortality has been found to correlate closely with evolution of myelodysplastic syndrome into acute myelogenous leukemia, and univariate analysis has shown that myeloblast percentage, cytogenetic status, and number of cytopenias are highly discriminant.
19. The correct answer is C. National Comprehensive Cancer Network guidelines recommend chelation therapy for patients in International Prognostic Scoring System low and intermediate-1 risk groups who are expected to survive for several years with ongoing transfusion requirements, who have undergone more than 20 to 30 units of red blood cell transfusion, and have a ferritin level greater than 2,500 ng/mL.
20. The correct answer is B. Because patients with myelodysplastic syndrome in low or intermediate-1 International Prognostic Scoring System risk groups often survive several years with symptoms controlled by erythropoietic agents and transfusions, hematopoietic stem cell transplantation is typically postponed until evidence of disease progression develops.
21. The correct answer is C. An estimated 60% of the current survivorship cohort is composed of individuals diagnosed with cancers of the breast (22%), prostate (18%), colon/rectum (10%), or gynecologic organs (10%).
22. The correct answer is E. Cancer survivors experience significant challenges, including a higher incidence of psychologic conditions (5.4% among cancer survivors versus 2.8% among individuals without cancer).
23. The correct answer is C. Survivor-related barriers to longitudinal care include incomplete information about type of cancer and treatment, limited recognition of potential late effects of treatment, and inadequate recognition of long-term risks.

### Gastrointestinal

22. The correct answer is A. Esophagogastroduodenoscopy (EGD), which enables documentation and grading of the extent of mucosal injury and histologic evaluation, is the gold standard for diagnosis of erosive gastroesophageal reflux disease. EGD typically is performed in patients with red flag symptoms (eg, dysphagia, odynophagia, weight loss, gastrointestinal bleeding).
23. The correct answer is D. In patients with nonerosive reflux disease, therapy with an on-demand proton-pump inhibitor or continuous histamine<sub>2</sub> antagonist is suggested after initial symptom resolution to minimize recurrence in the absence of continued treatment (40% over 6 months).
24. The correct answer is A. Nonselective beta blockers (propranolol 80 to 160 mg/day or nadolol 80 mg/day) (this is an off-label use) at doses titrated to achieve a 25% decrease in heart rate (or a decrease to 55 to 60 beats/minute) have been found to decrease bleeding risk in individuals with medium to large varices. Adding isosorbide mononitrate may be helpful in those not responding to beta blockers alone, although this is an off-label use of isosorbide mononitrate.
25. The correct answer is B. Endoscopic variceal ligation should be performed on all patients who are nonadherent to the treatment regimen, have contraindications to or who are intolerant of beta blockers, have large varices, or have signs of an increased risk of bleeding.

26. The correct answer is A. Positron emission tomography scan using fludeoxyglucose F18 is more accurate than computed tomography scan and endoscopic ultrasonography in detecting metastatic esophageal cancer.
27. The correct answer is B. Patients with certain structural lesions (suspected esophageal origin of symptoms and dysphagia with solids) probably should be evaluated initially with a barium swallow study to minimize potential damage during esophagogastroduodenoscopy. If no structural defects are seen, endoscopy can be performed safely.
28. The correct answer is B. Patients with dysphagia lasting at least 12 weeks within the preceding 12 months and negative evaluation for a structural or biochemical cause meet the criteria for functional dysphagia. Patients with functional dysphagia can be treated with 4 to 8 weeks of antisecretory therapy.
29. The correct answer is C. Patients with dyspepsia and no red flag symptoms, such as this patient, should be tested and treated for *Helicobacter pylori*.
30. The correct answer is D. If symptomatology suggests gastric outlet obstruction, esophagogastroduodenoscopy or oral contrast study (using diatrizoate meglumine 66% and diatrizoate sodium 10% [36.7% iodine] [Gastrografin] or barium) is recommended to determine the site, cause, and degree of obstruction because malignancy may account for as much as 50% of gastric outlet obstructions. Typically, patients respond well to gastric decompression and histamine<sub>2</sub> receptor antagonists or proton-pump inhibitors within a few days of treatment. Prokinetic agents should not be used.

## Children

57. The correct answer is B. Fetal indications for fetal echocardiography include extracardiac anomalies identified on a standard screening ultrasound, chromosomal abnormalities, arrhythmias, hydrops, increased first trimester nuchal translucency, and multiple gestations.
58. The correct answer is A. A study of 251 patients with conotruncal abnormalities showed that 17.9% had a microdeletion of the 22q11 chromosome.
59. The correct answer is D. In utero procedures to correct congenital heart defects have not been accepted as general practice and typically are considered to be experimental.

## Musculoskeletal

57. The correct answer is C. Systemic onset juvenile idiopathic arthritis commonly presents with rash and a characteristic high-spiking fever that lasts 2 weeks.
58. The correct answer is A. The rash of psoriasis typically develops much later than the arthritis, and is an International League of Associations for Rheumatology criterion for diagnosis.
59. The correct answer is D. Severe side effects of the anti-tumor necrosis factor drugs include a potential for invasive fungal infections, reactivation of tuberculosis, and development of lymphoma and other malignancies.
60. The correct answer is A. In a Cochrane review of herbal therapies, gamma-linolenic acid was found to be superior to placebo in 6 out of 7 studies.
61. The correct answer is A. The European League Against Rheumatism evidence-based diagnostic guidelines list 3 symptoms (ie, persistent knee pain, limited morning stiffness, decreased function) and 3 signs (ie, crepitus, restricted movement, bony enlargement) as most useful in the diagnosis of osteoarthritis.

62. The correct answer is B. The American College of Sports Medicine and four guideline developers (ie, American Academy of Orthopedic Surgeons, Royal College of Physicians/National Institute for Health and Clinical Excellence, European League Against Rheumatism, and Osteoarthritis Research Society International) recommend weight-loss programs for overweight patients. One study that monitored patients for 10 years showed that a 4.5-kg (10-lb) weight loss decreased the likelihood of knee osteoarthritis (OA) development by 50%. The relationship between amount of weight loss and the incidence of OA appears to be linear, suggesting even modest weight loss is beneficial.
63. The correct answer is A. The Royal College of Physicians/National Institute for Health and Clinical Excellence recommends manipulative therapy as an adjuvant to exercise for all patients with arthritis. There is some evidence for use of manipulative therapy for treatment of hip osteoarthritis (OA) but not for knee or ankle OA.
64. The correct answer is D. A Cochrane review found that the Rotta preparation (ie, crystalline glucosamine sulfate) was associated with greater effectiveness of glucosamine than placebo in reduced pain and functional impairment in patients with symptomatic osteoarthritis.
65. The correct answer is E. A recent Cochrane review showed that the intake of avocado and soybean unsaponifiables provides long-term symptom relief for patients with osteoarthritis (OA), particularly those with hip OA.
66. The correct answer is E. Most patients with rheumatoid arthritis (RA) have positive cyclic citrullinated peptide (CCP) antibody test results. The presence of CCP antibodies is useful in predicting which patients with RA will likely develop erosive disease.
67. The correct answer is C. In management of rheumatoid arthritis, the emphasis is on early use of disease-altering drugs and tailored therapy based on 3 aspects of the disease: duration, activity, and the presence of adverse prognostic factors.