### Structured Board Review Answers 1312

## Adults

- 51. The correct answer is A. Alteplase (Activase) (recombinant tissue plasminogen activator) is the only intravenous agent approved for treating ischemic stroke by the Food and Drug Administration.
- 52. The correct answer is D. Caregivers experience a higher risk of chronic illness, reduced immunity, and increased mortality rate compared to noncaregiving peers.
- 53. The correct answer is C. Although traditional health counseling provides information and technical skills, selfmanagement goes further to develop problem-solving skills and enhance self-efficacy in the patient.
- 54. The correct answer is B. Osteoporosis is defined by the World Health Organization as a bone mineral density of 2.5 standard deviations below the bone mineral density of a young healthy population (a T-score of less than -2.5).
- 55. The correct answer is B. Prescribing drugs such as acamprosate is not part of the FRAMES model.
- 56. The correct answer is B. If satisfactory response with sertraline or citalopram for treatment of depression in elderly individuals does not occur within 6 to 12 weeks, augmentation with bupropion may be successful.
- 57. The correct answer is D. In adults 60 years of age and older, a single dose of herpes zoster vaccine (Zostavax) is indicated to prevent shingles, and, more importantly, to reduce the incidence of postherpetic neuralgia. (Prevention of postherpetic neuralgia is an off-label use of this vaccine.) The Advisory Committee on Immunization Practices also recommends vaccination of patients who have had clinical shingles to reduce the chances of recurrence.
- 58. The correct answer is A. Yellow fever vaccine (YF-VAX) can affect older patients adversely. It has been associated with an increase in neurologic and systemic adverse effects, particularly after initial immunization.
- 59. The correct answer is A. Measuring bone density at the femoral neck best predicts risk of future hip fracture.
- 60. The correct answer is D. The benefits of diet, exercise, and weight loss have a greater risk-benefit ratio overall for prevention of type 2 diabetes than the pharmacologic interventions.

### Cardio

- 25. The correct answer is D. A statin should be started in all patients with acute coronary syndrome during hospital admission, regardless of the baseline level of low-density lipoprotein cholesterol.
- 26. The correct answer is C. Selective thrombus aspiration in patients with large thrombi has been associated with a decrease in infarct size as well as a decrease in reinfarction rate. This procedure is considered a reasonable therapy but is still under investigation.
- 27. The correct answer is A. Early-onset ventricular arrhythmias (possibly due to cocaine ingestion) can be managed with sodium bicarbonate, whereas

late-onset ventricular arrhythmias (probably related to ischemia) can be managed with intravenous lidocaine.

- 28. The correct answer is D. Acetylsalicylic acid (aspirin) (162 to 325 mg/day) and clopidogrel 75 mg are administered daily for 1 year after placement of a bare-metal stent in acute coronary sydrome.
- 29. The correct answer is A. Coronary artery bypass surgery is the preferred therapy for left main coronary disease, left main equivalent disease (ie, high-grade proximal stenosis of the left anterior descending and circumflex arteries), and diffuse 3-vessel disease.

#### Children

- 26. The correct answer is A. Only approximately 2% of northern Europeans develop primary lactase deficiency during their lifetimes.
- 27. The correct answer is A. The simplest method of diagnosis of lactase deficiency is a 2-week trial of a lactose-free diet.
- 28. The correct answer is D. The most common offending foods include cow's milk, chicken eggs, peanuts, tree nuts, and sesame seeds.
- 29. The correct answer is E. For patients who experience minor allergic reactions, a reintroduction of the food can be performed in the outpatient office setting. Patients who experience more severe hypersensitivity reactions require inpatient reintroduction under the guidance of an allergy subspecialist.
- 30. The correct answer is C. The American Academy of Pediatrics recommends introducing the least allergenic foods at age 6 months, and delaying introduction of cow's milk until age 12 months, eggs until age 24 months, and peanuts, nuts, and fish until age 36 months for primary prevention of food allergies in all children.

# Musculoskeletal

- 11. The correct answer is A. Three patterns of systemic lupus erythematosus disease activity have been identified: chronic-active, relapsing-remitting, and long-quiescent. The chronic-active pattern is most common (58%).
- 12. The correct answer is D. Sulfonamide antibiotics, including trimethoprim-sulfa-methoxazole, are associated with systemic lupus erythematosus (SLE) exacerbations and should be avoided in patients with SLE.
- 13. The correct answer is A. Multiple neuropsychiatric conditions can occur in patients with systemic lupus erythematosus. The most common is cognitive impairment, which occurs in 80% of patients by 10 years after diagnosis.

## Skin

- The correct answer is D. Debridement of a chronic wound or necrotic tissue that contains a biofilm might be necessary to resolve infection or reduce bacterial burden in a nonhealing wound.
- 2. The correct answer is C. Venous stasis ulcers heal more quickly when compression is applied. A multilayer bandage with an elastic component is the most effective method of compression. Coexisting peripheral artery disease must be ruled out before application of compression (for example, by screening for ischemia with the ankle-brachial index) to prevent iatrogenic ischemia.

- 3. The correct answer is D. Topical therapy can include transdermal lidocaine patches applied to intact skin around the wound for 12 hours/day.
- 4. The correct answer is D. Human skin equivalents should be considered for patients with venous stasis ulcers and diabetes-related foot ulcers that do not heal with comprehensive standard therapy.
- 5. The correct answer is E. Studies of vitamin E have found no benefit in scar reduction. Corticosteroid injections, topical 5-fluorouracil, bleomycin injections, radiation, and surgical excision can help decrease scar formation, but clinical evidence to support these therapies is poor.

# Endo

20. The correct answer is B. Two drugs are Food and Drug Administration-approved to manage chronic pain associated with distal peripheral neuropathy: duloxetine (Cymbalta) and pregabalin (Lyrica).