Structured Board Review Answers 1311

Adults

- 42. The correct answer is B. According to Figure 1, this patient has a score of 4 on the Wells Clinical Prediction Rrule for Deep Venous Thrombosis (DVT), indicating an intermediate to high pretest probability. When patients have a high pretest probability of DVT or an intermediate pretest probability and high D-dimer level, two ultrasound examinations with normal findings performed 1 week apart are necessary to exclude DVT.
- **43**. The correct answer is C. A thrombophilic state is likely to develop if an idiopathic venous thromboembolism occurs before age 45 years or in association with pregnancy, with the postpartum period, or with estrogen therapy. Such patients should be evaluated for activated protein C resistance by polymerase chain reaction and for the prothrombin gene mutation, and levels of plasma antithrombin III, protein C, and protein S should be measured. Obtain laboratory tests when off warfarin therapy for at least 2 weeks.
- 44. The correct answer is B. The 2006 American College of Cardiology/American Heart Association guidelines on perioperative beta blockers recommend that beta blockers be given to high-risk patients undergoing vascular surgery and be considered for intermediate- to high-risk patients undergoing high-risk operations.
- 45. The correct answer is A. Maintaining tight perioperative glycemic control (glucose levels 70 to 110 mg/dL) after major cardiovascular surgery or in patients dependent on a ventilator after noncardiac surgery significantly reduces the incidence of sepsis, renal failure, and mortality.
- **46**. The correct answer is D. Patients' use of herbal products may cause potential adverse effects during the perioperative period. *Panax* (ginseng) can cause hypoglycemia and bleeding, and should be discontinued 7 days preoperatively.
- **47**. The correct answer is B. This patient is at risk for healthcare-acquired pneumonia from contact with the visiting nurse, although he is community dwelling. Based on expert opinion, empiric antibiotic therapy for such individuals should include an antipseudomonal agent, such as ceftazidime, a respiratory fluoroquinolone such as levofloxacin (Levaquin), and either vancomycin or linezolid (Zyvox).
- **48**. The correct answer is A. This patient has relative adrenal insufficiency. A multicenter, randomized controlled trial showed a significant survival benefit from administering hydrocortisone 200 mg/day and fludrocortisone 50 mcg/day for 7 days to patients who have relative adrenal insufficiency.
- **49**. The correct answer is B. Given the high incidence of concomitant endocarditis, many experts recommend an echocardiogram (preferably transesophageal) to guide therapy duration for all patients with methicillin-resistant *Staphylococcus aureus* bacteremia.
- 50. The correct answer is C. If primary coronary intervention is unavailable in patients with unstable angina/non-ST segment elevation myocardial infarction with continued ischemia, a glycoprotein IIb/IIIa agent, such as eptifibatide (Integrilin) or tirofiban (Aggrastat), should be administered.
- 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.

Cardio

- 20. The correct answer is B. The preferred screening test for chronic thromboembolic pulmonary hypertension is ventilation-perfusion scanning, which will show multiple wedge-shaped perfusion defects, or on occasion, a single large defect.
- 21. The correct answer is B. If a coronary artery clot is nonocclusive, patients more commonly develop unstable angina or non-ST-segment elevation

myocardial infarction.

- 22. The correct answer is A. Coronary embolus is associated with valvular heart disease, cardiomyopathy, or chronic atrial fibrillation.
- 23. The correct answer is D. The initial dose of aspirin for patients with ST-segment elevation myocardial infarction should be chewed, rather than swallowed whole.
- 24. The correct answer is D. Intravenous beta blockers should be reserved for select patients with ongoing ischemia and significant hypertension.

Children

- 21. The correct answer is E. Symptoms of gastroesophageal reflux disease include bleeding, food refusal, poor weight gain, and recurrent aspiration.
- 22. The correct answer is A. The history and physical examination typically are sufficient for diagnosis and initial management of childhood gastroesophageal reflux disease.
- 23. The correct answer is A. Nonpharmacologic treatments for infants with suspected gastroesophageal reflux disease include positional therapy, thickened foods, avoidance of overfeeding, and replacement of regular formula with semi-elemental formula. Feeding with thickened foods, such as dry rice cereal (1 tablespoon of rice cereal per ounce of formula) has been shown to be more effective than positional therapy.
- 24. The correct answer is D. Proton pump inhibitors have been found to be more effective in relieving symptoms and healing esophagitis than histamine₂-receptor antagonists.
- 25. The correct answer is B. Common adverse effects of omeprazole therapy are headache, diarrhea, and abdominal pain.

Skin

- 16. The correct answer is C. Alkali burns cause liquefactive necrosis, and pain onset can be delayed. Alkali burns are often deeper due to dehydration of underlying cells.
- 17. The correct answer is B. Pink skin with brisk capillary refill and blistering is indicative of second-degree burn. For estimation of smaller areas, the palm and fingers of each hand can be estimated to comprise approximately 1% total body surface area.
- 18. The correct answer is E. According to American Burn Association guidelines, indications for referral to a burn center include partial-thickness burns of greater than 10% of the total body surface area; third-degree burns in any age group; electrical burns, including lightning injury; chemical burns; and inhalation injury.
- 19. The correct answer is D. Patients with deep partial-thickness burns that are nonhealing at 2 weeks should be referred to a surgeon to be evaluated for excision and grafting to prevent delayed healing and subsequent hypertrophic scarring.
- 20. The correct answer is A. To minimize scarring, preventing infection and promoting rapid healing are critical in addition to early surgical referral,

when indicated.

Infectious Disease

- 11. The correct answer is B. The goal of highly active antiretroviral therapy is to suppress viral load to the lowest level possible.
- 12. The correct answer is C. Highly active antiretroviral therapy consists of treatment with three drugs from two different classes—an approach also known as triple-drug therapy.

Endo

- 16. The correct answer is C. Metformin is associated with lactic acidosis, a condition more common in patients with cardiac disease, congestive heart failure, chronic lung disease, advanced age, renal insufficiency, and poor perfusion.
- 17. The correct answer is E. Pharmacologic treatment of patients with type 2 diabetes and hypertension includes either an angiotensin-converting enzyme inhibitor, such as lisinopril, or an angiotensin II receptor blocker.
- 18. The correct answer is D. When a second drug is needed to treat hypertension in a patient with type 2 diabetes, patients with an estimated glomerular filtration rate greater than 50 mL/min should be started on a thiazide diuretic.
- **19**. The correct answer is E. Patients with type 2 diabetes should undergo a dilated, comprehensive eye examination performed by an ophthalmology subspecialist or optometry subspecialist experienced in the diagnosis and management of diabetic retinopathy. The initial examination should be performed at the time of type 2 diabetes diagnosis, with subsequent examinations annually.