

Structured Board Review 1312 Questions: Adults 51-60; Cardio 25-29; Child. 26-30, MSK 11-13; Skin 1-5; Endo 20.

Adults

51. A patient experiences acute weakness of the right arm and leg. He notes gradual numbness with increasing weakness. He goes to the emergency department and within 70 minutes of symptom onset a head computed tomography scan is obtained, revealing no evidence of hemorrhage. The recommended intravenous treatment is:
- A. Recombinant tissue plasminogen activator.
  - B. Streptokinase.
  - C. Heparin.
  - D. Nitroglycerin.
  - E. Tirofiban.
52. A 46-year-old woman presents to your office. She provides ongoing care for her husband's mother, who lives with them, in addition to the couple's two teenage sons. Compared to her noncaregiving peers, this patient is at greater risk of:
- A. Chronic illness.
  - B. Reduced immunity.
  - C. Mortality.
  - D. All of the above.
53. The philosophy of patient self-management encourages:
- A. Information exchange.
  - B. Development of technical skills.
  - C. Development of problem-solving skills.
  - D. A focus on prevention.
  - E. Involvement of the family.
54. A 62-year-old woman has a T-score of -2.8. This is defined as:
- A. Osteopenia.

- B. Osteoporosis.
- C. Normal bone density.
- D. Insufficient information to determine bone density.
55. You are treating a 78-year-old man who abuses alcohol. Which one of the following is not part of the FRAMES model for alcohol intervention?
- A. Providing feedback that he is drinking more than recommended limits.
- B. Prescribing drugs such as acamprosate.
- C. Providing specific recommendations for changing drinking habits.
- D. Showing an understanding of the individual's goals and the role of alcohol in his life.
- E. Validating his confidence in changing his drinking habits.
56. You are treating a 91-year-old patient with depression with citalopram, and you also recommend counseling and increasing social interactions. Satisfactory response does not occur after 2 months. According to the text, you should augment the initial choice of drug with which one of the following?
- A. Trazodone.
- B. Bupropion.
- C. Buspirone.
- D. Amitriptyline.
- E. Mirtazapine.
57. A 61-year-old woman presents for a health maintenance visit. You note a history of herpes zoster when she was 54 years of age and chicken pox as a child. Which one of the following statements is true?
- A. Herpes zoster vaccination is not necessary because she has a documented history of herpes zoster.
- B. She should receive herpes zoster vaccination at 65 years of age.
- C. Serum antibody titers should be measured and herpes zoster vaccine administered if they are low.
- D. Herpes zoster vaccine should be administered at this visit.
58. A 72-year-old man plans to travel to sub-Saharan Africa, and you think yellow fever vaccine is indicated based upon his travel plans. The patient has not received this vaccine previously. With vaccination, this patient has an increased risk of:

- A. Neurologic adverse effects.
- B. Pulmonary adverse effects.
- C. Anaphylaxis.
- D. Stevens-Johnson syndrome.
- E. Carditis.

59. Which one of the following bone density measurements best predicts risk of future hip fracture?

- A. Femoral neck.
- B. Wrist.
- C. Heel.
- D. Vertebral spine.

60. A patient has a consistently elevated blood glucose level, but the level does not meet the diagnostic criteria for diabetes. Which one of the following has the greatest risk-benefit ratio to prevent progression to type 2 diabetes?

- A. Metformin.
- B. Acarbose.
- C. Rosiglitazone.
- D. Diet, physical activity, and weight loss.
- E. Ramipril.

## Cardio

25. Which one of the following statements is correct about administration of statins to patients with acute coronary syndrome?

- A. If a patient is already taking a statin, it should be discontinued temporarily until current lipid levels are measured, and then the dosage should be readjusted if needed.
- B. If angiography is planned, statin therapy should not be started until after the procedure.
- C. Statins should be started during hospital admission only if a patient's low-density lipoprotein cholesterol (LDL-C) level is elevated.
- D. Statins should be started during hospital admission, regardless of the LDL-C level.

26. Which one of the following statements best summarizes the current status of selective aspiration of large thrombi from coronary arteries during percutaneous coronary intervention?
- A. If aspiration is successful, no further antiplatelet therapy is needed.
  - B. It should be reserved only for patients unable to tolerate bypass surgery.
  - C. Its role is still under investigation.
  - D. No benefit of this treatment has been shown.
27. You are providing care for a 32-year-old man who presents to the emergency department (ED) 30 minutes after the onset of angina-like chest pain that began immediately after the use of cocaine. Electrocardiogram shows ST-segment elevation. While the patient is still in the ED, the cardiac monitor shows frequent episodes of ventricular tachycardia. Which one of the following drugs would be most effective for managing this patient's ventricular arrhythmias?
- A. Sodium bicarbonate.
  - B. Bretylium.
  - C. Diazepam.
  - D. Esmolol.
  - E. Lidocaine.
28. Which one of the following is the recommended duration of dual antiplatelet therapy after placement of a bare-metal stent in acute coronary syndrome?
- A. 1 month.
  - B. 3 months.
  - C. 6 months.
  - D. 1 year.
29. Your long-time patient has an acute ST-segment elevation myocardial infarction. Coronary angiography reveals significant left main equivalent disease (ie, stenosis of both the left anterior descending artery and the proximal circumflex) and evidence of a new ventricular septal defect. The cardiology subspecialist recommends bypass surgery. Your patient, who is afraid of surgery, asks your opinion. Which one of the following would you tell your patient is the recommended therapy for this condition?
- A. Coronary artery bypass graft.
  - B. Fibrinolysis followed by medical therapy with 3 antiplatelet drugs.
  - C. Placement of a bare-metal stent in both vessels.

- D. Placement of a drug-eluting stent in both vessels.
- E. Staged multivessel stent placement.

## Children

26. Which one of the following statements about lactase deficiency is most accurate?
- A. Primary lactase deficiency is rare in children of northern European descent.
  - B. Symptoms of lactase deficiency usually manifest before 5 years of age.
  - C. Constipation is a common symptom of lactase deficiency.
  - D. Individuals with primary lactase deficiency cannot tolerate any lactose-containing foods.
  - E. Children with gastroenteritis should not ingest dairy products because of the danger of secondary lactase deficiency.
27. Which one of the following is the best initial diagnostic investigation for lactase deficiency?
- A. 2-week trial of lactose-free diet.
  - B. Hydrogen breath test.
  - C. Lactose tolerance test.
  - D. Fecal pH measurement.
  - E. Intestinal biopsy.
28. Which one of the following statements about childhood food allergies is most accurate?
- A. At least 10% of US children have clinically-detectable food allergies.
  - B. Food allergies typically manifest around 5 to 6 years of age.
  - C. If both parents have atopic conditions, their children will have a 50% chance of developing food allergies.
  - D. Peanuts and tree nuts are common childhood food allergens.
  - E. Food allergies are always immunoglobulin E-mediated.
29. Which one of the following statements about diagnostic testing for food allergies is correct?

- A. Radioallergosorbent tests (RASTs) and fluorescent enzyme immunoassays can detect both cell-mediated and immunoglobulin E-mediated food allergies.
  - B. Skin testing is required to detect cell-mediated food allergies.
  - C. RASTs is more sensitive than skin testing.
  - D. Positive results on skin prick/puncture tests are not apparent for 3 days.
  - E. Patients who experience more severe hypersensitivity reactions require inpatient reintroduction under the guidance of an allergy subspecialist.
- 30.** According to American Academy of Pediatrics recommendations, which one of the following foods should not be introduced into the diet of a child until 36 months of age to limit the risk of food allergy?
- A. Cow's milk.
  - B. Eggs.
  - C. Fish.
  - D. Bread.
  - E. Beef.

## Musculoskeletal

- 11.** Which pattern of disease is most common in patients with systemic lupus erythematosus?
- A. Chronic-active (ie, disease activity for at least 1 year).
  - B. Long-quiescent (ie, no disease activity for 1 year or more).
  - C. Relapsing-remitting (ie, periods of disease activity with at least 2 medical visits 3 months apart, with inactivity during those 3 months).
  - D. Staccato (ie, disease activity alternating nearly every week).
- 12.** Which antibiotic should be avoided in patients with systemic lupus erythematosus because it has been associated with disease exacerbations?
- A. Amoxicillin-clavulanate.
  - B. Ciprofloxacin.
  - C. Imipenem.
  - D. Trimethoprim-sulfamethoxazole.

13. Which one of the following is the most common neuropsychiatric condition in patients with systemic lupus erythematosus?

- A. Cognitive impairment.
- B. Encephalopathy.
- C. Psychosis.
- D. Transverse myelitis.

## Skin

1. A patient with a chronic leg ulcer presents to your office for reassessment. You suspect there is a biofilm on the wound. Should this be debrided?

- A. No, biofilm prevents the wound from drying.
- B. No, biofilm promotes wound healing.
- C. No, biofilm protects the wound from infection.
- D. Yes, biofilm debridement can reduce bacterial burden.
- E. Yes, biofilm debridement allows better absorption of topical antibiotics.

2. A 78-year-old man presents to your office with a venous stasis ulcer on the right lower leg. You decide to apply a multilayer bandage with an elastic component for wound compression. Which one of the following assessments should you consider before applying this type of bandage?

- A. A deep tissue culture test.
- B. Osteomyelitis screening with x-ray.
- C. Ischemia screening with the ankle-brachial index.
- D. Diabetes screening.
- E. Both A and B.

3. Which one of the following, in addition to oral analgesics, can be considered for management of wound pain?

- A. Negative pressure wound therapy.
- B. Hyperbaric oxygen therapy.
- C. Becaplermin gel.

- D. Transdermal lidocaine.
  - E. Bilayered human skin equivalents.
4. Human skin equivalents are bioengineered skin cell tissues thought to act by filling wounds with extracellular matrix and inducing the expression of growth factors and cytokines that contribute to wound healing. In which one of the following situations should human skin equivalents be considered?
- A. Initial treatment for venous stasis ulcers.
  - B. Initial treatment for diabetes-related foot ulcers.
  - C. Second-line treatment for infected foot ulcers.
  - D. Second-line treatment for nonhealing venous stasis or diabetes-related foot ulcers.
  - E. Only within clinical trials, as these are still experimental.
5. A patient with a healing laceration on the face asks about prevention of scar formation. Which one of the following treatments has strong clinical evidence for reducing scarring?
- A. Topical vitamin E.
  - B. Corticosteroid injections.
  - C. Topical 5-fluorouracil.
  - D. Radiation.
  - E. None of the above.

## Endo

20. A patient with type 2 diabetes experiences significant chronic pain due to distal peripheral neuropathy. Which one of the following drugs is approved by the Food and Drug Administration to treat this condition?
- A. Venlafaxine.
  - B. Pregabalin.
  - C. Capsaicin.
  - D. Fluoxetine.
  - E. Desipramine.