Structured Board Review 1406 Questions –Hemat.17-23; GI 22-30; Child. 57-59; MSK 57-67

Hematology

17. The World Health Organization classification of myelodysplastic syndrome (MDS) uses various peripheral blood cytopenias, bone marrow morphologies, and cytogenetic characteristics of MDS to describe 7 different conditions. Which one of the following is the most commonly diagnosed condition among recently diagnosed patients?

- A. Refractory cytopenia with multilineage dysplasia.
- B. MDS associated with isolated del(5q).
- C. MDS, unclassified.
- D. Refractory anemia.
- E. Refractory anemia with excess blasts-1.

18. Your patient with recently diagnosed myelodysplastic syndrome asks about prognosis. There is no evidence of progression to acute myelogenous leukemia. Which one of the following is another significant prognostic factor?

- A. Cytogenetic analysis results.
- B. Age at diagnosis.
- C. Sex.
- D. Race and ethnicity.
- E. Type of cytopenia.

19. According to guidelines from the National Comprehensive Cancer Network, which one of the following is an indication for iron chelation therapy for patients with myelodysplastic syndrome?

- A. Ferritin level greater than 3,000 ng/mL.
- B. Having undergone 10 units of red blood cell transfusion.
- C. Ongoing transfusion requirements.
- D. Poor prognosis.
- E. Anemia.

20. Your patient with recently diagnosed myelodysplastic syndrome (MDS) has a low International Prognostic Scoring System score. She asks about hematopoietic stem cell transplantation (HSCT). Which one of the following is recommended for a patient at this stage?

A. Immediate HSCT.

B. Postponement of HSCT until disease progression is evident.

C. HSCT is not indicated for patients with MDS.

D. Use of an immunosuppressive drug.

E. Chemotherapy.

21. The most common cancer survivor is an individual who has been treated for which one of the following cancers?

A. Lung.

B. Melanoma.

C. Breast.

D. Colon.

E. Prostate.

22. Compared with patients without a past cancer diagnosis, cancer survivors report:

A. Fewer chronic health conditions.

B. Fewer limitations in activities of daily living.

C. Fewer health-related work limitations.

D. Greater overall health quality.

E. More psychologic conditions.

23. A 23-year-old woman is a survivor of a childhood malignancy. Which one of the following is considered a survivor-related barrier to her longitudinal cancer care?

A. A primary care physician who is unfamiliar with the types of care that should be provided.

B. Lack of capacity of cancer centers to provide continued care after primary treatment.

C. The patient has incomplete information about the type of cancer and its treatment.

D. Suboptimal communication among family physician and subspecialist physician.

Gastrointestinal

22. A 62-year-old man presents with a 4-month history of heartburn, dyspepsia, and progressive odynophagia. He has had an 8-lb (3.6-kg) weight loss. You should:

- A. Perform esophagogastroduodenoscopy.
- B. Refer for ambulatory pH monitoring.
- C. Obtain a double-contrast barium esophagogram.
- D. Prescribe an empiric trial of omeprazole.
- E. Obtain a Bernstein test.

23. You manage a patient with nonerosive reflux disease with a standard dose of a proton-pump inhibitor (PPI). Her symptoms resolve after 4 weeks. You should:

- A. Discontinue the PPI completely.
- B. Treat with an as-needed beta blocker.
- C. Continue the standard dose of the PPI for 6 to 12 months.
- D. Recommend continuous histamine$_2$ receptor blocker.
- E. Test for *Helicobacter pylori* infection.

24. You perform an esophagogastroduodenoscopy on a patient with cirrhosis and discover medium-sized varices. The drug of choice to decrease the risk of bleeding is:

- A. Nadolol.
- B. Spironolactone.
- C. Isosorbide mononitrate.
- D. Losartan.
- E. Diltiazem.

25. Your patient is intolerant of the drugs you have prescribed for primary prophylaxis of variceal bleeding. Which of the following treatments is recommended?

- A. Endoscopic sclerotherapy.
- B. Endoscopic variceal ligation.

C. Injection of N-butyl-2-cyanoacrylate.

D. Placement of detachable clips or snares to occlude the lumen.

26. You are evaluating a patient with suspected esophageal cancer. Which of the following is most useful in detecting metastatic disease?

A. Positron emission tomography scan.

B. Computed tomography.

C. Endoscopic ultrasonography.

D. Magnetic resonance imaging study.

27. You are evaluating a patient who you suspect has an esophageal origin of dysphagia with symptoms that include difficulty swallowing solids. The initial test of choice is:

A. Esophagogastroduodenoscopy.

B. Barium swallow study.

C. Chest x-ray.

D. Chest computed tomography scan.

E. Ultrasound.

28. A patient has 4 months of dysphagia within the preceding year but has negative results of an evaluation for structural or biochemical causes. The treatment of choice is:

A. Nitrates.

B. Antisecretory therapy.

C. Calcium channel blockers.

D. Beta blockers.

E. Selective-serotonin reuptake inhibitors.

29. A 31-year-old patient presents with dyspepsia. She has no history of peptic ulcer or use of nonsteroidal antiinflammatory drugs. There is no weight loss, anemia, gastrointestinal bleeding, dysphagia, odynophagia, or vomiting. On physical examination, there is no jaundice or epigastric mass present. The next step in managing this patient is:

A. Order an esophagogram.

B. Perform esophagogastroduodenoscopy.

C. Test and treat for *Helicobacter pylori*.

D. Prescribe an empiric trial of proton-pump inhibitor.

30. A patient with a long history of peptic ulcer disease develops recurrent episodes of large-volume emesis occurring more frequently at the end of the day, persistent bloating or fullness after eating, and early satiety. He reports a 10-lb weight loss. If esophagogastroduodenoscopy confirms your suspicion of gastric outlet obstruction, which of the following treatments should be avoided?

A. Gastric decompression.

B. Histamine$_2$ blockers.

C. Proton-pump inhibitors.

D. Prokinetic agents.

Children

57. Which one of the following statements is correct about congenital heart disease (CHD) and nuchal translucency (NT) in a fetus?

A. NT refers to a hyperechoic space in the posterior neck.

B. Increased first trimester NT is an indication for fetal echocardiography.

C. Increased NT is associated with an increased risk of CHD, but the thickness of the NT has no relationship to the magnitude of that risk.

D. Most cases of CHD are associated with increased NT.

E. Very large areas of NT are present with specific types of cardiac defects, such as outflow tract defects and coarctation of the aorta.

58. Which one of the following statements is correct about 22q11 microdeletion?

A. 22q11 microdeletion is a chromosomal abnormality associated with conotruncal (outflow tract) congenital heart disease (CHD).

B. Children with 22q11 microdeletion typically have an abnormal karyotype.

C. It is the most common chromosomal abnormality present in children with atrial septal defects.

D. Presence of the 22q11 microdeletion indicates the presence of invariably fatal CHD.

E. Testing for 22q11 microdeletion should be obtained when ultrasound examination shows increased nuchal translucency.

59. Which one of the following statements is correct about in utero surgical procedures for correction of congenital heart defects?

- A. Surgery-related mortality rates are lower for in utero procedures than for ex utero procedures.
- B. The best outcomes are associated with repair of ventricular septal defects.
- C. The best outcomes are associated with ultrasound-guided balloon valvuloplasty.
- D. They typically are considered experimental.
- E. They result in better outcomes for infants compared with ex utero procedures.

Musculoskeletal

57. Which one of the following is most characteristic of systemic onset juvenile idiopathic arthritis?

- A. Absence of cutaneous findings.
- B. High risk of uveitis.
- C. High-spiking fever
- D. Monoarticular arthritis.
- E. Positive antinuclear antibody test.

58. Which one of the following is the typical mode of presentation of psoriatic juvenile idiopathic arthritis?

- A. Arthritis precedes rash.
- B. Rash and arthritis develop simultaneously.
- C. Rash precedes arthritis.

59. Which one of the following statements is correct about the use of drugs that inhibit tumor necrosis factor to treat juvenile idiopathic arthritis (JIA)?

- A. Lack of benefit from methotrexate therapy predicts lack of benefit from these drugs.
- B. The Food and Drug Administration has not approved them for use in children with JIA.
- C. They should only be used in combination with disease-modifying anti-rheumatic drugs, such as methotrexate or sulfasalazine.
- D. Use of these drugs increases the risk of developing lymphoma.

E. When used in adolescents, pustular acne is the most common side effect.

60. Which one of the following integrative medicine treatments has been shown to have some benefit compared to placebo for treatment of joint symptoms in patients with juvenile idiopathic arthritis?

A. Gamma-linolenic acid.

B. Glucosamine-chondroitin sulfate.

C. Kava kava.

D. Milk thistle (*Silybum marianum*).

E. *Panax ginseng*.

61. According to the European League Against Rheumatism, which 3 signs on physical examination are most useful in the diagnosis of osteoarthritis?

A. Crepitus, restricted movement, and bony enlargement.

B. Pain in the joint line, limited motion, and bony enlargement.

C. Antalgic gait, morning stiffness, and ligamentous laxity.

D. Bony enlargement, pain on palpation, and popping with motion.

E. Crepitus, pain on palpation, and popping with motion.

62. A 48-year-old overweight man presents for his annual physical examination. He has just been to see his mother, who has severe osteoarthritis (OA) and is recovering from knee replacement surgery. He is anxious to prevent OA. Which one of the following should you advise?

A. Aerobic exercise.

B. A 4.5-kg (10-lb) weight loss.

C. Avoidance of running as exercise.

D. Glucosamine.

E. Nothing can be done to prevent OA.

63. An 80-year-old woman with hip osteoarthritis continues to experience difficulty with activities of daily living because of pain. She was unable to perform prescribed exercises because of pain. She is taking acetaminophen in adequate doses. Which one of the following is a reasonable next option to reduce pain and increase her ability to exercise?

A. Refer her for manipulative therapy

B. Prescribe a short-term narcotic drug.

C. Recommend a trial of acupuncture.

D. Prescribe a transcutaneous electrical nerve stimulation unit.

E. Recommend hip surgery.

64. A patient with osteoarthritis presents to your office for follow-up. She reports continued knee pain despite adequate doses of acetaminophen and an exercise program. She asks about other treatment options. Which one of the following should you recommend based on strong scientific evidence?

A. Intra-articular hyaluronic acid joint injections.

B. Knee bracing.

C. Arthroscopic debridement.

D. A Rotta preparation of glucosamine.

E. Manipulative therapy.

65. A patient with severe hip osteoarthritis presents to your office to discuss hip replacement surgery. She has tried physical therapy, manipulative therapy, and acupuncture with no sustained benefit. She is experiencing difficulty sleeping and limitations in performing daily activities. You agree to provide a referral to an orthopedic surgeon, but you suggest she try which one of the following therapies?

A. Transcutaneous nerve stimulation.

B. Continued physical therapy.

C. Glucosamine.

D. Electroacupuncture.

E. Avocado and soybean unsaponifiables.

66. Which one of the following tests is useful in predicting which patients with rheumatoid arthritis will likely develop erosive disease?

A. Erythrocyte sedimentation rate.

B. C-reactive protein.

C. Rheumatoid factor.

D. Platelet count.

E. Cyclic citrullinated peptide antibody.

67. You are seeing a patient with early rheumatoid arthritis to plan her treatment program. Which one of the following 3 aspects of the condition should be assessed to plan tailored therapy?

A. X-ray evidence of osteopenia, joint space narrowing, and bony erosions.

B. Presence of bony abnormalities, serum markers, and pain.

C. Disease duration, activity, and the presence of adverse prognostic factors.

D. Concurrent medical conditions, cigarette smoking, and alcohol consumption.

E. Disease duration, concurrent medical conditions, and health habits.