

## Structured Board Review 1403 Questions Hemat. 1-5; GI 6-11; Child. 42-46; MSK 30-38

### Hematology

1. Your 55-year-old patient presents to the office with fatigue, lethargy, and abdominal discomfort. On physical examination, you find splenomegaly. You suspect the patient has chronic myelogenous leukemia. Which one of the following will confirm the diagnosis?
  - A. Complete blood count.
  - B. White blood cell count.
  - C. CD5 antigen testing.
  - D. Peripheral blood test with lymphocytes and smudge cells.
  - E. Cytogenetic analysis for the Philadelphia, or Ph1, chromosome.
  
2. Which one of the following is the standard first-line therapy for patients with newly diagnosed chronic myelogenous leukemia?
  - A. Imatinib.
  - B. Interferon.
  - C. Cytarabine.
  - D. Dasatinib.
  - E. Allogeneic stem cell transplantation.
  
3. A 68-year-old patient is concerned about progressive fatigue. No abnormalities are identified on physical examination. A complete blood count shows 40,000 white cells/mcL, with 70% lymphocytes. You suspect chronic lymphocytic leukemia (CLL). Which one of the following should you tell the patient?
  - A. CLL is an indolent cancer that requires no treatment for more than 10 years.
  - B. A bone marrow biopsy is needed to confirm the diagnosis.
  - C. Cytogenetic and immunologic analysis should be performed to determine prognosis.
  - D. Treatment with oral alkylating therapy should be initiated.
  - E. Treatment with rituximab should be initiated.
  
4. You are reading a report from your local oncology subspecialist about your patient newly diagnosed with asymptomatic chronic lymphocytic leukemia (CLL) Rai stage 0. Which one of the following is recommended?
  - A. Oral alkylating therapy.

- B. Rituximab.
- C. Observation only at this time.
- D. Combination therapy with fludarabine and rituximab.
- E. Consideration of autologous stem cell transplantation.

5. Your patient with chronic lymphocytic leukemia has been started on an alkylating drug. Which one of the following should be initiated to prevent infection?

- A. Prophylactic antibiotics.
- B. Pneumococcus and *Haemophilus influenzae* vaccination.
- C. Antifungal prophylaxis.
- D. Intravenous gamma globulin.
- E. Observation only at this time.

## GI

6. You are caring for a patient with diabetes who is obese. You note on routine laboratory testing that she has mild elevations of serum aminotransferase levels and you suspect nonalcoholic fatty liver disease (NAFLD). Which one of the following is the first step in diagnosing NAFLD?

- A. Determine the degree of insulin resistance.
- B. Exclude excessive alcohol intake as the cause.
- C. Obtain ultrasound imaging.
- D. Obtain a magnetic resonance imaging study of the liver.
- E. Obtain tests to determine the aspartate aminotransferase-alanine aminotransferase ratio.

7. Which one of the following imaging modalities provides the best images for assessing the amount and degree of fatty liver in patients suspected of having nonalcoholic fatty liver disease?

- A. Computed tomography scan.
- B. Magnetic resonance imaging study.
- C. Ultrasound.

D. Ultrasound with air contrast.

8. Which one of the following statements most accurately reflects the status of bariatric surgery as a nonalcoholic steatohepatitis treatment?

A. Gastric bypass surgery is the best surgical treatment.

B. Only jejunoileal bypass surgery has been found to be an effective treatment.

C. Several randomized trials of surgery versus no surgery have shown benefit of bariatric surgery.

D. Surgery decreases steatosis but not hepatic inflammation and fibrosis.

E. Surgery decreases steatosis, inflammation, and fibrosis.

9. Which one of the following statements most accurately describes the role of insulin-sensitizing drugs, such as thiazolidinediones, in nonalcoholic fatty liver disease and nonalcoholic steatohepatitis treatment?

A. Randomized, placebo-controlled trials consistently show benefit.

B. Some, but not all, randomized placebocontrolled trials have shown benefit.

C. Randomized, placebo-controlled trials consistently show no benefit.

D. The role of thiazolidinediones has never been studied.

10. Which one of the following statements most accurately reflects the prognosis for patients with nonalcoholic steatohepatitis?

A. Patients are at risk of hepatocellular carcinoma.

B. The condition usually resolves spontaneously.

C. The condition usually resolves with long-term pioglitazone therapy.

D. The natural history and prognosis are unknown.

E. Ursodeoxycholic acid therapy resolves histologic evidence of fibrosis in the majority of patients.

11. For most patients, which one of the following modalities is preferred to confirm cirrhosis diagnosis?

A. Computed tomography scan.

B. Liver biopsy.

C. Magnetic resonance imaging study.

- D. Radionuclide imaging.
- E. Ultrasound.

## Children

42. In infants who are discharged from the hospital with no suspicion of congenital heart disease (CHD) and later present with CHD, what is the most common clinical presentation?
- A. Asymptomatic heart murmur.
  - B. Cardiogenic shock.
  - C. Poor feeding.
  - D. Peripheral cyanosis.
  - E. Respiratory symptoms.
43. When evaluating a heart murmur in an infant who is otherwise asymptomatic, which one of the following is the most commonly diagnosed congenital heart disease?
- A. Atrial septal defect.
  - B. Hypoplastic left heart syndrome.
  - C. Pulmonary branch stenosis.
  - D. Transposition of great arteries.
  - E. Ventricular septal defect.
44. You are working in the local emergency department when a mother brings in her 2-month-old child with tachypnea and hypoxemia who demonstrates poor feeding. In considering the possibility that this child has congenital heart disease (CHD) with congestive heart failure (CHF), which one of the following statements is correct?
- A. Brain natriuretic peptide level has no value in diagnosing CHF in infants.
  - B. Symptoms of CHD with CHF can be difficult to distinguish from those of sepsis.
  - C. If there is no history of heart murmur, CHD is an unlikely cause of the patient's symptoms.
  - D. The absence of cyanosis suggests a diagnosis other than CHD.
  - E. The first step in treating this patient is a hyperoxia test.

45. Which one of the following findings would suggest that a heart murmur is pathologic rather than innocent?
- A. Diastolic murmur.
  - B. Grade 1/6 to 2/6 murmur.
  - C. Murmur detected at supraclavicular area.
  - D. Musical quality.
  - E. Vibratory quality.
46. Which one of the following forms of congenital heart defects usually can be repaired completely (ie, with restoration of both cardiac anatomy and function)?
- A. Bicuspid aortic valve.
  - B. Pulmonary atresia.
  - C. Tetralogy of Fallot.
  - D. Transposition of great arteries.
  - E. Truncus arteriosus.

## Musculoskeletal

30. After several months of treatment with a topical agent, a patient requests "something stronger" to get rid of her plantar wart. Which of the following is true of cryotherapy for treating plantar warts?
- A. It should be used as a first-line agent.
  - B. Nonprescription freeze products are as effective as liquid nitrogen.
  - C. Cryotherapy duration of more than 10 seconds seems more effective than 10 seconds or less.
  - D. Cryotherapy at 2-week intervals seems more effective than 4-week intervals.
  - E. Prolonged cryotherapy for more than 3 months is most effective.
31. A patient with psoriasis presents with concerns about her fingernails. She is concerned that she has developed a fungal infection and requests treatment. Which of the following features differentiates psoriatic nail involvement from likely fungal infection?
- A. Involvement of the toenails in psoriasis.
  - B. Unilateral involvement of the fingernails in psoriasis.

- C. Nodules on the distal joints of the fingers in psoriasis.
  - D. Fine pitting of the nail in psoriasis.
  - E. Both C and D.
- 32.** Confirmation of fungal infection before treatment is considered the gold standard based on expert opinion. Which of the following appears to be the best sample for confirming this diagnosis?
- A. Culture from a sample clipped from the distal edge of the involved nail.
  - B. Culture from a standard curettage from the involved nail bed.
  - C. Culture after drilling a vertical hole in the involved nail.
  - D. Direct microscopy with potassium hydroxide of nail scrapings.
  - E. All of the above.
- 33.** Which of the following causative factors for ingrown toenail is most common?
- A. Improper nail trimming.
  - B. Foot perspiration causing toenail softening.
  - C. Natural aging causing toenail thickening.
  - D. Constricting footwear.
  - E. Repetitive trauma.
- 34.** You see a patient with an ingrown toenail who prefers to try conservative treatment before considering surgery. Which of the following can be recommended, based on scientific evidence?
- A. Oral antibiotics.
  - B. Warm soaks 2 times/day.
  - C. Topical antibiotic or steroid cream.
  - D. Wisps of cotton or dental floss placed under the ingrown nail edge.
  - E. All of the above.

35. A patient with recurrent ingrown toenail returns to discuss surgical treatment options. She has diabetes and appears to have an infection in the lateral nail fold. Which of the following surgical options should be avoided?
- A. Partial nail avulsion combined with phenolization.
  - B. Partial nail avulsion without phenolization.
  - C. Complete surgical excision of the nail matrix.
  - D. Partial avulsion with nail matrix excision.
  - E. Partial matricectomy with electrodesiccation.
36. Hallux rigidus involves progressive first metatarsophalangeal joint arthritic degeneration. Which patient population is most at risk of this condition?
- A. Women who wear high-heeled shoes.
  - B. Male football players.
  - C. Laborers who must squat.
  - D. Dancers who stand on the balls of their feet.
  - E. C and D.
37. In addition to analgesics and footwear modification, such as stiff rocker bottom soled shoes, which of these nonsurgical options are helpful for patients with hallux rigidus?
- A. Ultrasound treatment.
  - B. Corticosteroid injection.
  - C. Foot exercises.
  - D. Crutches for nonweight-bearing.
  - E. None of the above.
38. Radiologic evaluation with x-ray is important for which of the following conditions causing metatarsalgia?
- A. Hallux valgus.
  - B. Metatarsophalangeal instability.
  - C. Sesamoiditis.

D. Morton neuroma.

E. All of the above.