

ABFM Practice Test

1. A 16-year-old boy presents with right shoulder pain after being hit during a neighborhood football game while he was attempting to throw the ball. He resists any arm motion and cradles it. During examination, dimpling is noted inferior to the acromion. What is the most likely diagnosis?

- a. Rotator cuff tear
- b. Shoulder dislocation
- c. Rotator cuff impingement
- d. Rupture of the long head of the biceps

2. A 42-year-old woman experiences progressively increasing right foot pain that developed during her regular running routine. She states that at first, she would get relief from resting and icing her foot, but now that no longer helps. She now notes midfoot pain even at night and has had to stop running. What is the most likely diagnosis?

- a. Tendonitis
- b. Plantar fasciitis
- c. Metatarsal stress fracture
- d. Jones fracture

3. Patients with low back pain should be referred to a specialist if they experience:

- a. chronic sciatica for 6 or more weeks or new or progressive neurologic deficit.
- b. herniated nucleus pulposus (HNP) with major muscle weakness.
- c. recurrent back pain.
- d. A and B only.
- e. all of the above.

4. In pharmacologic treatment of patients with mechanical low back pain (LBP), which of the following is true?

- a. Acetaminophen is one of the best first line treatments, followed by NSAIDs
- b. NSAIDs and muscle relaxants work better when in conjunction with one another
- c. Opioids are a typical first-line treatment
- d. A and B are true
- e. All of the above are true

5. A patient presents with a whiplash injury. Upon examination, the patient experiences paraesthesias along the spine when the neck is flexed. This is a positive:

- a. Lhermitte sign.
- b. Lachman test.
- c. Spurling test.
- d. blocker, beggar, kisser, grabber, Spock sign.

6. A 46-year-old Caucasian woman with a family history of basal cell carcinoma, but no melanomas, presents to a clinic with concerns regarding skin cancer. She has numerous nevi, freckles, and some atypical looking nevi. On examination, the physician notes 2 asymmetric nevi with irregular borders. What is the best way to counsel her?

- a. Tell her that recent studies show that due to her family history, she has an 80% lifetime risk of developing malignant melanoma
- b. Counsel her that she has no need to see a dermatologist for a risk assessment
- c. Be watchful for nevi with malignant features and counsel her regarding self-examination
- d. Tell her the best approach to the biopsy of the suspicious nevi is a shave biopsy

7. An 8-month-old boy presents with several large crusted, scaly lesions on his face and a few on the extensor surface of his arms. His mother notes that the lesions bother him, and he tends to scratch at them. According to the mother the lesions have been present for approximately 1 month and appear to be spreading. What is the most likely diagnosis?

- a. Atopic dermatitis
- b. Psoriasis
- c. Seborrheic dermatitis
- d. Tinea corporis

8. A 17-year-old girl presents with moderate acne including papules, pustules, and a few nodules. She has been using over-the-counter benzoyl peroxide, which is no longer helping. What is the best line of treatment?

- a. Isotretinoin
- b. Topical erythromycin 3% + 5% benzoyl peroxide
- c. 5% benzoyl peroxide
- d. Oral once-daily minocycline

9. During a routine well examination, a 62-year-old man is found to have Hgb of 11.5 g/dL. He admits to a poor diet. Further laboratory work reveals hypersegmented neutrophils, MCV of 120 fL, total serum iron of 155, vitamin B₁₂ of 176 pg/mL, RBC folate of 130 pg/L, and a reticulocyte count of 1.1%. This patient has:

- a. anemia of chronic disease.
- b. vitamin B12 deficiency.
- c. iron deficiency anemia.
- d. folic acid deficiency.

10. A patient, who is on day 5 of penicillin for strep pharyngitis, complains of increased headaches, exhaustion, and jaundice. Laboratory work reveals Hgb 9.2 g/dL, increased indirect bilirubin, a low serum haptoglobin level, and a positive direct Coombs test. This patient most likely has:

- a. mononucleosis.
- b. autoimmune hemolytic anemia.
- c. hereditary spherocytosis.
- d. resistant streptococcal pharyngitis.

11. What is the best way to treat hypertension in a patient with stage 3 chronic kidney disease?

- a. Advise the patient to decrease their protein, sodium, and alcohol intake to control their hypertension
- b. Use calcium channel blockers and β -blockers in combination
- c. Use angiotensin-converting enzyme inhibitors (ACEI), angiotensin II receptor blockers (ARB), and loop diuretics in combination
- d. Use diuretics, as they are the best treatment at this stage

12. A 33-year-old man presents with pain on urination, increasing back pain, and fever. He states that he avoided coming in for examination until he could no longer tolerate the pain, which is now sharp and stabbing. He also states that he has been having difficulty urinating. On examination there is pronounced left flank pain and a palpable left kidney. Urine dipstick reveals positive nitrites and hematuria. The physician suspects and must immediately rule out which of the following conditions?

- a. Pyonephrosis
- b. Pyelonephritis complicated with nephrolithiasis
- c. Pyelonephritis and dehydration
- d. Staghorn calculus

13. A patient presents with acute right upper quadrant (RUQ) pain. What imaging study is the test of choice to assess this patient?

- a. Ultrasound (US)
- b. Plain films
- c. Abdominal computed tomography (CT)
- d. Endoscopy

14. A 74-year-old woman reports that she has experienced "crampy" left lower quadrant abdominal pain with diarrhea for 4 days. On examination, she has a temperature of 101.5 °F, pulse of 110 beats per minute, decreased capillary refill, and moderate left lower quadrant abdominal pain. The complete blood count shows leukocytosis with a left shift. An abdominal CT helps diagnose diverticulitis and rules out an abscess. What is the best course of treatment?

- a. Instruct the patient to follow a clear liquid diet and return to the office in 2 days for a follow-up appointment
- b. Instruct the patient to follow a clear liquid diet with ciprofloxacin and metronidazole for 10 days
- c. Instruct the patient to follow a clear liquid diet with ciprofloxacin and metronidazole for 10 days, plus add ibuprofen for the pain
- d. Hospitalize the patient with complete bowel rest and broad-spectrum intravenous antibiotics

Answer Key and Explanations

1. B: Patients with rotator cuff tears can present with pain stiffness and occasional weakness around the shoulder, but are often asymptomatic. The symptoms typically have an insidious onset. With a complete tear, patients often exhibit a “drop arm sign” where the arm drops with abduction. Shoulder dislocations are typically sports-related in younger patients and the result of a fall in the elderly. Patients resist or refuse to move their arm. They usually occur when the injury involves the arm in abduction and maximal external rotation. The humeral head can typically be visualized as a bulge and dimpling occurs just inferior to the acromion where the humeral head should be. Rotator cuff impingement is a mainly a clinical diagnosis. The patient presents with dull shoulder pain increasing over weeks to months. The pain is exacerbated during the night with various sleeping positions, especially when the arm is overhead. Range of motion (ROM) is usually normal. However, a painful arc of motion may be noted especially on internal rotation and forward flexion. The “empty can test” (thumb pointing downward with arm abducted 90° and with 30° forward flexion) can test for supraspinatus strength. Finally, patients with a rupture of the long head of the biceps usually present with a rotator cuff tear. With the rupture, the patient notes a pop followed by an immediate decrease in symptoms. Physical examination reveals anterior bruising and a “Popeye muscle” upon flexion of the biceps.

2. C: Tendonitis would elicit specific pain along the offending tendon and is typically described as an acute burning or stabbing pain. Plantar fasciitis is common in runners, and is worse in the morning or after prolonged periods of rest when standing. The pain is located on the plantar surface of the heel, usually with pain upon palpation along the anteromedial section of the calcaneus. Metatarsal stress fractures or “March fractures” are very common in athletes and have an insidious onset. It typically involves the 2nd metatarsal followed by the 3rd and 4th due to the amount of weight-bearing load. Therefore, midfoot or forefoot pain is most commonly described by the patient. While Jones fractures are also metatarsal fractures, they are acute and involve the proximal 5th metatarsal.

3. E: Low back pain (LBP) is the second most common condition encountered in primary care only after upper respiratory infections. This is a significant health problem that can lead to chronic disability. Because of this, it is important to recognize red flags and to determine when a patient should be referred. Red flags include evidence for cancer, infection, acute abdominal aneurysm, fracture, cauda equina syndrome, history of trauma, and neurologic deficit. In the absence of abnormal findings on examination/radiography/laboratory work, and after patients have been treated conservatively for 4-6 weeks, they should be referred to a program that will help them return to normal function especially if it's recurrent or chronic. Patients should be referred to a rheumatologist when inflammatory arthropathy, fibromyalgia, or metabolic bone disease are suspected. Neurology referrals are appropriate when there is sciatica for more than 6 weeks, a new or progressive motor deficit is present, or the patient has leg pain with a negative straight-leg-raise test. Neurosurgery consults are necessary when the herniated disk (HNP) is significant and associated with major muscle weakness.

4. D: LBP may be classified as nonspecific or mechanical, LBP possibly caused by radiculopathy or spinal stenosis, or LBP with possible other causes due to presence of red flags. When it is determined that LBP is mechanical (or nonspecific and lasting less than 4weeks), pharmacotherapy may include acetaminophen, NSAIDs, muscle relaxants, or opioids. Acetaminophen remains one of the best first-line treatments because of its efficacy and low side-effect profile. Studies suggest that NSAIDs and muscle relaxants work better when used concurrently and are frequently prescribed

together in the primary care setting. Opioids are reserved for extreme pain since they are only slightly more effective than other analgesics and can lead to dependency. Topically applied lidocaine patches are also useful in acute LBP.

5. A: The Lhermitte sign is positive for when the patient experiences paraesthesias along the spine or upper extremities when the head flexes anteriorly. This may indicate spondylosis, multiple sclerosis, or myelopathy. The Lachman test checks for anterior cruciate ligament injury in the knee and is characterized by being able to displace the tibia anteriorly. A positive Spurling test involves pain radiating to the posterior shoulder or arm on the ipsilateral downward pressure on the head. This test has a high specificity for cervical radiculopathy. The Blocker (C5), beggar (C6), kisser (C7), grabber (C8), Spock (T1) mnemonic is helpful in remembering the motor innervations of the cervical roots.

6. C: To date no study has documented a way to predict that this patient has an 80% lifetime risk of having melanoma. Risk factors for developing malignant melanoma include changing moles, having dysplastic nevi with a family history of melanoma, having more than 50 nevi (bigger than 2 mm), and having one or more family members with malignant melanoma. Minor risk factors include freckling, sun sensitivity, and a history of severe, blistering sunburns. In the United States the risk for developing malignant melanoma is ~0.6% or 1 in 150. The lifetime risk does increase in familial atypical mole and melanoma syndrome (FAMM). Criteria for FAMM include malignant melanoma in at least one 1st- or 2nd-degree relative, more than 50 nevi (some being atypical), and certain histological changes. This patient does not appear to have FAMM, but does have some risk factors for skin cancer. Due to her risk factors she would benefit from a dermatology consultation. The best way to counsel this patient would be to educate her regarding recognizing the ABC's melanoma as well as being observant. Also, suspicious nevi should have an excisional or punch biopsy.

7. A: Atopic dermatitis typically appears in the first year of life with pruritus being the hallmark of the disease. Lesions usually involve the face in infants become excoriated with weeping and crusting. Eventually lesions become scaly and lichenified. Unlike seborrheic dermatitis, it does not typically follow the distribution of oil glands. Psoriasis typically appears after infancy and tinea corporis spreads slower.

8. B: For moderate acne, topical antibiotics are the treatment of choice and work best in conjunction with benzoyl peroxide. Isotretinoin is reserved for severe nodulocystic acne.

9. D: This patient presents with a macrocytic anemia (nl MCV=80-100 fL and nl male Hgb=13.5-17.5 g/dL). Iron deficiency anemia and anemia of chronic disease are both microcytic anemias. Since the levels of vitamin B₁₂, iron, and reticulocyte count are normal (nl B₁₂=150-900 pg/mL and nl iron=50-170 µg/dL, and nl retic=0.5-1.5%) and folate levels are low (less than 150 pg/L), he must have a folic acid deficiency.

10. B: Penicillin, methyl dopa, and quinidine are known to produce a warm antibody autoimmune reaction which is supported by the positive direct Coombs test (indicates hemolysis), elevated indirect bilirubin (increases in hemolysis), and low serum haptoglobin (which indicates a moderate to severe hemolysis).

11. C: Stage 3 of chronic kidney disease is defined as those with a moderate decreased in glomerular filtration rate (GFR) of 30-59. The goal in these patients is to slow the deterioration in renal function, to keep the BP below 130/80 and to protect against cardiovascular disease. The combination of ACEIs, ARBs, and loop diuretics has been shown in multiple trials to help patients