



**CME4LIFE**

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# Take Home Primary Care Challenge

## “BLUEprint Exam”

### SECTION 2

1. A middle-aged man presents with chest pain. On examination there is a wide pulse pressure, hyperactive left ventricle, diastolic murmur along the left sternal border. ECG shows left ventricular hypertrophy. The most likely diagnosis is:

- a. Aortic stenosis
- b. Aortic regurgitation
- c. Mitral stenosis
- d. Mitral regurgitation
- e. Tricuspid stenosis

2. A 40-year-old patient states that for the last 10 years she has experienced recurrent throbbing headaches that are associated with visual disturbances. She experiences associated photophobia, nausea and vomiting with these headaches. Which of the following is the most likely explanation for these symptoms?

- a. Arteriovenous malformation
- b. Cluster headaches
- c. Migraine headaches
- d. Tension headaches
- e. Slow growing glioma

3. A 32 year-old female presents with complaints of gradual color change in a mole that has been present since birth. The patient also notes the recent onset of tenderness when her clothes rub up against it and itchiness for the past three weeks. An asymmetrical flat plaque with irregular and sharply defined margins with color variegation is noted on examination. Which of the following is the most appropriate diagnostic evaluation?

- a. Diascopy
- b. Patch testing.
- c. Acetowhitening
- d. Excisional biopsy

4. A patient presents with acute pain in his knee. The pain occurred abruptly and there was no preceding trauma. The knee is red and hot. Aspiration of the joint revealed negatively birefringent needle-shaped crystals with an increase in white cells but no bacteria on Gram stain. Which of the following is the most likely diagnosis?

- a. Gout
- b. Pseudogout
- c. Calcium oxalate
- d. Septic arthritis

5. Which of the following anti-hypertensive medications should be used with caution in a patient with preexisting heart block?

- a. Alpha blockers
- b. Beta blockers
- c. Central alpha agonists
- d. Diuretics

6. An eleven-year old obese male presents to the clinic with a 6 month history of knee and hip pain. He has a limp and an externally rotated gait. He most likely has:

- a. Dislocated hip
- b. Legg-Calve-Perthes' disease
- c. Osteomyelitis
- d. Septic arthritis
- e. Slipped capital femoral epiphysis

7. A 36-year-old woman has had increasing dyspnea for several years. She has no cough or increased sputum production. A chest radiograph reveals increased lung volumes with flattening of the diaphragmatic leaves bilaterally. A chest CT scan demonstrates emphysematous changes in all lung fields. Which of the following laboratory findings points to the underlying disease process most likely to explain these findings:

- a. Decreased serum ceruloplasmin
- b. Increased sweat chloride
- c. Elevated blood ethanol
- d. Decreased serum alpha-1-antitrypsin
- e. Positive urine opiates

8. Which answer best describes the following electrocardiogram?



- a. Sinus tachycardia
- b. Atrial flutter
- c. Atrial fibrillation
- d. Ventricular tachycardia
- e. Junctional tachycardia

9. A 26-year-old male presents with gradual onset of nonproductive cough. The patient admits to associated symptoms of headache, malaise and myalgias. The patient denies shortness of breath, chest pain, fever or nasal congestion. Lung exam reveals scattered rales. Chest x-ray shows patchy infiltrates. Which of the following is the most likely diagnosis?

- a. Pulmonary tuberculosis
- b. Pneumococcal pneumonia
- c. Mycoplasma pneumonia
- d. Histoplasmosis

10. A 27-year-old woman complains of headache. She has ceased having menstrual periods but has milky discharge from her breasts. She stopped nursing her child 3 years ago. A pregnancy test is negative. You should suspect:

- a. Hyperthyroidism

- b. A prolactin-secreting pituitary tumor
- c. A growth hormone abnormality
- d. An oxytocin-secreting adrenal tumor
- e. Hypothyroidism

11. A patient presents complaining of sudden onset of chest pain, dyspnea, and hemoptysis. You note that the patient is very anxious and tachypneic. The most likely diagnosis is:

- a. Lung cancer
- b. Tuberculosis
- c. Pulmonary embolism
- d. Bronchitis

12. A 58-year-old male presents to urgent care with complaint of dull discomfort in LLQ of abdomen that began 5 days ago but is now worse, 4/10, and fairly constant. He has decreased appetite and is mildly constipated although did have a small BM today. Temperature is 100.2 F, but he is nontoxic appearing and all other vital signs are stable. He has mild guarding without rebound tenderness in LLQ and mildly decreased bowel sounds in lower quadrants without palpable masses or other peritoneal signs. WBC is mildly elevated at 13,000. Which is the BEST study to confirm your suspicions of diverticulitis?

- a. KUB
- b. Abdomen obstructive series (3V x-rays).
- c. CT abdomen and pelvis with contrast
- d. MRI abdomen
- e. Ultrasound of abdomen

13. A 27-year-old man who was recently diagnosed with acquired immune deficiency syndrome presents complaining of odynophagia, dysphagia, and severe retrosternal pain. Endoscopic evaluation shows linear yellow-white plaques. The most likely diagnosis is:

- a. Cytomegalovirus
- b. Candidal esophagitis
- c. Herpes simplex esophagitis
- d. Gastroesophageal reflux
- e. Pill-induced esophagitis

14. The earliest manifestation of diabetic nephropathy is usually:

- a. A rising serum creatinine
- b. A declining creatinine clearance
- c. Asymptomatic proteinuria
- d. Acute papillary necrosis
- e. Increasing glycosuria

15. The most common complaint of a patient presenting with an acute aortic dissection is:

- a. Claudication
- b. Severe back pain
- c. Syncope
- d. Palpitations
- e. Shortness of breath

16. A 70-year-old male is seen in the emergency department with a history of biliary disease and acute pain in the left upper quadrant of his abdomen. You suspect pancreatitis. What is the most appropriate next step in his work up?

- a. Serum amylase
- b. Serum lipase
- c. Serum protease
- d. LFTs

17. A Persian Gulf War veteran has returned home. After 6 months, he was involved in a motor vehicle accident. His family started to notice that he was jumping at every little noise and appeared to be emotionally distant. He has expressed to his wife that he has not been sleeping well and has developed recurring nightmares. What is the most likely diagnosis for this patient?

- a. Alcohol withdrawal
- b. Generalized anxiety disorder
- c. Major depressive disorder
- d. Post-traumatic stress disorder

18. A 23-year-old male presents with right lower quadrant pain and tenderness. He also complains of anorexia, nausea, and vomiting. Upon palpation of the abdomen, pain is localized to McBurney point and guarding is present. Vitals include: BP 110/70, Temperature 37C, Pulse 70 BPM, RR 18.

A positive sign for which of the following is most likely to corroborate your suspected diagnosis?

- a. Psoas sign
- b. Murphy's sign
- c. Cullen's sign
- d. Kehr's sign
- e. Grey-Turner's sign

19. A 7-year-old is brought to the emergency department after sustaining a fall onto his outstretched hand. He complains of pain involving the "entire arm" and refuses to move his arm which is held in an anatomical position with the elbow flexed at 90 degrees. On physical examination, there is tenderness to palpation over the elbow with associated swelling and pain on attempted rotation. There is no apparent tenderness to palpation involving the wrist or shoulder, but the child will not allow evaluation of range of motion. X-rays reveal the presence of a positive posterior fat pad sign.

The most likely diagnosis is:

- a. Nursemaid's elbow
- b. Lateral epicondylitis
- c. Medial epicondylitis
- d. Radial head dislocation
- e. Occult fracture of the radial head

20. A 35-year-old female presents with complaints of severe itching. On examination, runs of vesicles and pustules with some excoriation are seen in the web spaces of the fingers. Which of the following will confirm the suspected diagnosis?

- a. Patch testing
- b. Gram stain and culture
- c. Skin scraping and microscopy
- d. Wood's lamp
- e. KOH prep.

21. A 63-year-old man in chronic atrial fibrillation, with no previous history of peripheral arterial disease, presents to the emergency room with a 2-hour history of pain and paresthesias of the left lower extremity. The left femoral and pedal pulses are absent. The right pedal pulses are normal. With a working diagnosis of an arterial embolus, the most important immediate intervention is:

- a. Obtain an arteriogram of the left lower extremity
- b. Apply moist heat to the left foot

- c. Full anticoagulation with intravenous heparin
- d. Obtain a stat echocardiogram to determine the embolic source
- e. Obtain baseline coagulation studies

22. The most reliable sign of acute otitis media (AOM) is

- a. Bulging of the tympanic membrane.
- b. Loss of tympanic membrane mobility.
- c. Reddening of the tympanic membrane.
- d. Air bubbles behind the tympanic membrane.

23. Which of the following clinical conditions typically cause sudden onset of pain, blurred vision, tearing in one eye associated with nausea and vomiting?

- a. Closed-angle glaucoma
- b. Central retinal artery occlusion
- c. Retinal detachment
- d. Temporal arteritis
- e. Vitreous hemorrhage

24. A 16 year-old female G1P0Ab0 is 30 weeks pregnant. Her last two monthly prenatal exams have shown a trace to 1 plus proteinuria. The patient denies any previous history of hypertension, seizures, headache, visual disturbances or spotting. On examination, blood pressure is 150/98. The fundal height is 32 cm, the uterus is soft and nontender and fetal heart tones are 160 BPM. DTRs are +4 / 4 in the upper and lower extremities, and there is moderate pedal edema bilaterally. The skin examination is unremarkable. Based upon these findings what is the most likely diagnosis?

- a. Eclampsia
- b. Pre-eclampsia
- c. Hyperemesis gravidarum
- d. Gestational hypertension

25. Which of the following is the most appropriate immediate therapy for a tension pneumothorax?

- a. Intubation
- b. Tube thoracotomy
- c. Needle thoracotomy
- d. Thoracotomy

26. A 56-year-old man develops slow, progressive paralysis of the facial nerve on the same side as his hearing loss. It took many months for the full-blown paralysis to become obvious. It affects both the forehead and the lower face. He has no pain anywhere and no palpable masses by physical examination. Which of the following is the most likely diagnosis?

- a. Acoustic neuroma
- b. Bell's palsy
- c. Hemorrhagic stroke
- d. Parotid gland cancer
- e. Pleomorphic adenoma of the parotid gland

27. A 64-year-old patient presents with a history of increasing difficulty with swallowing. Initially, the difficulty involved solids, such as boluses of meat or dry bread, and later occurred with all foods. Complete obstruction has now developed. Which of the following is the most likely diagnosis?

- a. Traumatic esophagitis
- b. Radiation esophagitis
- c. Esophageal cancer
- d. Gastroesophageal reflux disease (GERD)
- e. Toxic esophagitis

28. A 32-year-old female presents to the office with a 6 month history of loose bowel movements and associated with episodes of bloody diarrhea. She has lost 30 pounds in that period of time. For the last three weeks she has had an intermittent fever. On examination, the patient appears ill. She has generalized abdominal tenderness. Sigmoidoscopy examination reveals friable mucosa, with multiple bleeding points. The most likely diagnosis in this patient is:

- a. Amebiasis
- b. Bacterial dysentery
- c. Crohn's disease
- d. Irritable bowel syndrome
- e. Ulcerative colitis

29. A 60-year-old male presents with a history of severe exertional dyspnea, chronic cough productive with scanty amounts of mucoid sputum, and history of smoking 2-3 packs per day for 40+ years. On physical exam, you note he has a "barrel" chest and uses accessory muscles during respiration. His ABG reveals a P02 of 75 and PC02 of 48 on room air. The most likely diagnosis is:

- a. Asthma
- b. Chronic bronchitis
- c. Emphysema
- d. Legionnaire's disease
- e. Tuberculosis

30. Vitamin D deficiency in childhood is most likely to result in:

- a. Scurvy
- b. Beriberi
- c. Rickets
- d. Xerophthalmia
- e. Pellagra

31. A 24-year-old man presents with a single stab wound just to the left of his sternum. He arrives at the hospital with a blood pressure of 80/60 mm Hg, right arm, supine; pulse of 140 beats per minute and thready; and a respiratory rate of 26 breaths per minute. His skin is cool and clammy, and he is incoherent. Physical examination reveals clear, bilateral bronchovesicular breath sounds, no tracheal deviation, muffled heart sounds, and distended neck veins. Furthermore, you note that the patient's peripheral pulses diminish dramatically with inspiration. Which is the preferred treatment?

- a. Aggressive IV fluids
- b. Vasopressors
- c. Needle thoracotomy
- d. Pericardiocentesis

32. A 43-year-old data entry clerk presents with a one-month history of pain and tingling in the right thumb, index finger, and middle finger. Tinel's sign and Phalen's maneuver are positive on physical examination. The most appropriate initial intervention at this time is

- a. Methylprednisolone (Medrol) dose pack
- b. Splint in neutral position
- c. Observation
- d. Surgery

33. A 34 year-old female G2P1Ab0 at 36 weeks gestation presents to the clinic with a complaint of a sudden gush of fluid from the vagina 18 hours ago. The patient denies any blood in the discharge but describes the fluid as watery. Examination reveals that there is a collection of fluid in the posterior fornix; the Nitrazine test is blue as well as the fluid giving a fern-like crystallization pattern on a slide. Given these findings what is the appropriate clinical intervention?

- a. Observation
- b. Induce labor
- c. Antibiotics
- d. Corticosteroids

34. A 68-year-old woman presents with complaints of new onset unilateral headache, diplopia, and jaw claudication. She also has a 6 month history of shoulder and upper arm myalgias and arthralgias. Which of the following is the most likely diagnosis in this patient?

- a. Trigeminal neuralgia
- b. Polyarteritis nodosa
- c. Rheumatic fever
- d. Migraine cephalalgia
- e. Giant cell arteritis

35. Several weeks following an acute MI, a patient presents with pericarditis, pleuritis, myalgias, fever, arthralgias, leukocytosis, and increased erythrocyte sedimentation rate. Which of the following is the most likely diagnosis?

- a. Levine Syndrome
- b. Tietze's Syndrome
- c. Leriche Syndrome
- d. Dressler Syndrome

36. Which of the following is characteristic of the stools seen with diarrhea caused by Shigella?

- a. Black tarry stools
- b. Blood is present
- c. Undigested food is present
- d. There is little odor
- e. They tend to be greasy and bulky

37. An 18-year-old female college student comes to the emergency room complaining of brief episodes of "fluttering" in her chest and chronic lightheadedness. She has a benign medical history and takes no medications. On physical exam, her skin is pale, her heart rate is 54 and her blood pressure is 88/50. When she reluctantly partially disrobes for further examination, you note an emaciated body. She weighs 78 lbs. and stands 5'6". When you comment on her low body weight, she blithely states, "I'm a fat cow." She says that she



has been exercising for 3-4 hours per day since beginning college 2 years ago. She restricts herself to 900 calories per day, which she counts compulsively. She has not had her period in 14 months. She denies depressed mood and, other than her distorted body image, appears to have intact reasoning. She denies bingeing and purging behavior. The most likely diagnosis is:

- a. Anorexia nervosa
- b. Anxiety disorder
- c. Bulimia
- d. Delusional disorder, somatic type
- e. Major depression

38. A 27-year-old presents with a sustained dysfunctional pattern of coping behaviors that includes a disregard for the rights of others, a lack of empathy, and lack of remorse for harming others. Which of the following is the most likely diagnosis?

- a. Antisocial personality
- b. Borderline personality
- c. Narcissistic personality
- d. Paranoid personality

39. A 25-year-old sexually active male notices a painless sore on his penis. Two weeks later he goes to the doctor. On physical examination, the sore is still present. On questioning, he denies discharge or pain with urination. He is afebrile, but found to have palpable inguinal lymph nodes which are enlarged but painless. Darkfield exam on the exudates is positive. What is the most likely diagnosis?

- a. Syphilis
- b. Condyloma acuminatum
- c. Chancroid
- d. Gonorrhea

40. A 55-year-old male is admitted to your service for treatment of uncontrolled diabetes. On your admission physical you note that his prostate is moderately enlarged, smooth and nontender. Upon further questioning, he admits having to "bear down" to pass his urine for the past several years. You suspect:

- a. Prostatic cancer, primary site
- b. Cancer metastasized to prostate
- c. Prostatitis secondary to uncontrolled diabetes mellitus
- d. Benign prostatic hypertrophy
- e. Acute prostatitis

41. Which of the following is a physical examination finding of testicular carcinoma?

- a. Tender testicular mass
- b. Erythematous scrotum
- c. Blue discoloration of the scrotum
- d. Non-tender testicular mass
- e. Translucent mass

42. A 52-year-old female presents with complaints of incontinence which has become progressively worse over the past two months. Upon further questioning she relates that she will have an extreme urge to urinate, but is unable to make it to the bathroom prior to leakage of urine. She denies incontinence with coughing or sneezing, muscle weakness or suprapubic discomfort. Examination is essentially unremarkable including presence of good rectal sphincter tone. Which of the following is the most appropriate intervention?

- a. Topical estrogen cream

- b. Oxybutynin
- c. Intermittent urinary catheterization
- d. Instruction in pelvic muscle exercises

43. A 30 year-old presents with swollen right upper eyelid. On examination the lid is swollen, red, and very painful. Which of the following is the most likely diagnosis?

- a. Dacryocystitis
- b. Entropion
- c. Blepharitis
- d. Hordeolum

44. Which of the following lesions is often associated with the nodular type of basal cell carcinoma?

- a. Spider vein
- b. Cherry angioma
- c. Spider angioma
- d. Telangiectasias

45. Which of the following physical diagnostic tests measures cerebellar function?

- a. Finger-to-nose testing
- b. Stereognosis
- c. Graphesthesia
- d. Two-point discrimination

46. A 43 year-old male presents with complaint of fever, fatigue and increasing dyspnea. The patient denies cough, chills, night sweats or smoking history. Physical exam reveals a tired appearing male in no acute distress. Lungs are clear to auscultation bilaterally. Hepatosplenomegaly is noted on abdominal exam. Chest x-ray findings include bilateral hilar adenopathy and diffuse reticular infiltrates. Labs reveal leukocytopenia, elevated sedimentation rate and hypercalcemia. What is the most likely diagnosis in this patient?

- a. Pulmonary tuberculosis
- b. Sarcoidosis
- c. Chlamydial pneumonia
- d. Pneumoconiosis

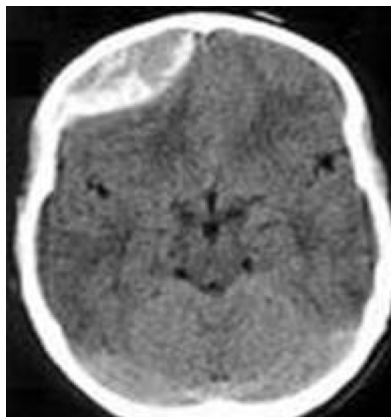
47. Which of the following is the most effective long-term management for idiopathic (autoimmune) thrombocytopenic purpura?

- a. Splenectomy
- b. Platelet transfusion
- c. Prednisone
- d. Plasmapheresis
- e. Vitamin K

48. Which of the following medications used to treat angina pectoris requires drug-free periods to avoid tolerance effect?

- a. Isosorbide dinitrate
- b. Metoprolol
- c. Aspirin
- d. Diltiazem
- e. Sublingual nitroglycerin spray

49. A 14-year-old boy is hit over the right side of baseball bat. He loses consciousness for a few recovers promptly and continues to play. One hour



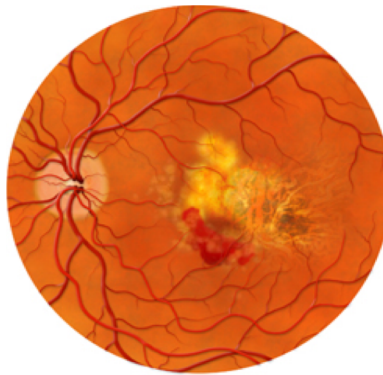
the head with a minutes, but later he is

found unconscious in the locker room. His right pupil is fixed and dilated. He is emergently transported to the nearest emergency department and a non-contrast head CT scan is performed. The image is shown below. What is the diagnosis?

- a. Subdural hematoma
- b. Acute cerebral hemorrhage
- c. Subarachnoid hemorrhage
- d. Acute epidural hematoma

50. Which one of the following is the most common cause of central vision loss in the elderly with the following example of a fundusoscopic examination?

- a. Brain tumor
- b. Diabetic retinopathy
- c. Intraocular tumor
- d. Macular degeneration
- e. Stroke



51. A 40-year-old female is seen in arthritis clinic with the following symptoms: arthritis involving the MCP joints with AM stiffness, ulnar deviation of the MCP joints, anemia, and fatigue.

These findings are consistent with:

- a. Gout
- b. Osteoarthritis
- c. Rheumatoid arthritis
- d. Syphilitic arthritis
- e. Systemic lupus erythematosus



52. Which of the following is increased in patients with emphysema-dominant chronic obstructive pulmonary disease?

- a. Diffusing capacity of the lung for carbon monoxide (DLCO)
- b. Forced vital capacity (FVC)
- c. Forced expiratory volume in 1 second (FEV1)
- d. Residual volume (RV)
- e. Alpha-1 antitrypsin levels

53. A 40-year-old male is diagnosed with active tuberculosis. In educating the patient, he is told to avoid tyramine containing foods and the possibility of developing hepatitis and peripheral neuropathy. Which of the following medication is the patient being educated about?

- a. Rifampin
- b. Isoniazid
- c. Pyrazinamide
- d. Ethambutol
- e. Streptomycin

54. A 23-year-old female presents with double vision and drooping of eyelids especially with upward gaze for the last 3 days. The weakness seems to worsen at the end of the day. She also complains of generalized body aches, weakness as well as dysphagia that are worsened with prolonged chewing. Her pupils are equal bilaterally and there is atrophy of the muscles of the arms or hand. Which of the following tumors are most commonly associated with the above symptoms?

- a. Non Hodgkin lymphoma
- b. Hodgkin lymphoma
- c. Thymoma
- d. Small cell lung cancer
- e. Non small cell lung cancer

55. An 8-year-old boy is recovering from an upper respiratory infection. His mother states that she noticed for the last 3 days, he has had swelling around his testicles and puffiness around his eyes, especially in the morning. The child denies any testicular or ocular pain. A urinalysis is performed, which shows 3+ proteinuria and Maltese cross-shaped oval fat bodies on polarized microscope examination of the urine. Which of the following is the management of choice?

- a. Prednisone
- b. Cyclophosphamide
- c. Simvastatin
- d. Amoxicillin
- e. Intravenous immunoglobulin

56. Which of the following is a class 1 antiarrhythmic that has been shown to prolong repolarization and the refractory period?

- a. Procainamide
- b. Metoprolol
- c. Amiodarone
- d. Verapamil
- e. Digoxin

57. Which of the following is the most common cause of secondary amenorrhea?

- a. Premature ovarian failure
- b. Pregnancy
- c. Hypothalamic pituitary dysfunction
- d. Androgen insensitivity
- e. Turner's syndrome

58. A 35-year-old female presents with the fevers, joint pain and the following rash after a 2 week vacation in the Dominican Republic. Which of the following lab values would most likely be elevated?

- a. Anti double stranded DNA antibodies
- b. Anti centromere antibodies
- c. Anti-Mi-2 antibodies
- d. Anti smooth muscle antibodies
- e. Anti endomysial IgA antibodies



59. Which of the following diseases classically presents with a pneumomediastinum?

- a. Mallory-Weiss tears
- b. Duodenal ulcer
- c. Boerhaave syndrome
- d. Pericardial tamponade
- e. Zenker's diverticulum

60. A 57-year-old male with a history of hypertension and diabetes mellitus presents with right-sided facial weakness and slurred speech that began 30 minutes ago as witnessed by his daughter while they were sitting on a park bench. On physical examination, there is upper extremity weakness that is more pronounced than the weakness in his lower extremities. Which of the following is the next most appropriate step in the management of this patient?

- a. Have the patient chew an aspirin
- b. Administer alteplase
- c. Administer streptokinase
- d. Obtain a non-contrast CT scan of the head
- e. Obtain an MRI of the brain

61. What is the antibiotic of choice to treat *Pasteurella multocida*?

- a. Clarithromycin
- b. Amoxicillin/clavulanic acid
- c. Gentamycin
- d. Vancomycin
- e. Rifampin

62. Which of the following is most commonly seen on peripheral smear in patients with alpha thalassemia intermedia?

- a. Clumping of the red blood cells
- b. Hypersegmented neutrophils
- c. Heinz bodies
- d. Macrocytosis
- e. Rouleaux formation

63. A 27-year-old female at 37 weeks gestation with a longstanding history of hypertension is brought to the emergency room because she thinks she is having "Braxton Hicks" contractions. She states that she has been having abdominal pain preceded by painful contractions and thought her "water broke" because she saw dark red blood in the toilet. Her blood pressure is 150/90 mmHg; she is afebrile with otherwise stable vital signs. On physical examination, the uterus is tender and rigid. The vaginal pH is normal, a Nitrazine test is negative, no ferning is seen and there is no maternal leukocytosis. Which of the following is the most likely diagnosis?

- a. Chorioamnionitis
- b. Placenta previa
- c. Vasa previa
- d. Abruptio placentae
- e. Mild preeclampsia

64. A 43-year-old male with a history of hyperlipidemia, hypertension and type II diabetes mellitus presents with crushing, substernal chest pain of 45 minutes duration with radiation to the left arm. His prior ECG a month ago showed normal sinus rhythm with no abnormalities. Which of the following new ECG findings are considered an ST-elevation myocardial infarction equivalent?

- a. "M" shaped p waves in lead II, biphasic p wave in lead V1 (terminal component larger than initial)
- b. R waves larger than S waves in V1 with the R waves measuring > 7mm
- c. Wide QRS complexes with broad, slurred R waves in V5 and V6 with a deep S waves in V1
- d. Deep S waves in lead I, isolated Q waves in lead III, inverted T waves in lead III
- e. Wide QRS complexes in an RsR' pattern in leads V1 and V2. Wide S waves in V6

65. A 63-year-old Caucasian male comes in for a well visit. The physician assistant notices a lesion on his nose. The lesion is a small, translucent papule with central ulceration, telangiectasias and rolled borders. Which of the following is the next most appropriate step?

- a. Punch biopsy
- b. Avoid hot and cold weather, hot drinks, hot baths, spicy food and alcohol
- c. Avoid the sun and use sunscreen
- d. Apply acetic acid to look for whitening
- e. Topical corticosteroids.

66. A 43-year-old male develops sudden onset of fever, right upper quadrant pain that is persistent and jaundice. Labs are significant for an increased alkaline phosphatase with an increase in gamma glutamyl transpeptidase (GGT). Which of the following is the most likely diagnosis?

- a. Acute cholecystitis
- b. Choledocholithiasis
- c. Acute cholangitis
- d. Primary sclerosing cholangitis
- e. Carcinoma of the head of the pancreas

67. A 40-year-old female presents with bilateral anterior shin redness that is tender to palpation. She is also complaining of eye pain and redness as well as the insidious onset of a nonproductive cough. A chest radiograph is performed, showing bilateral hilar lymphadenopathy. You notice a rash on her face consistent with lupus pernio. Which of the following describes the basic pathophysiology of the suspected diagnosis?

- a. The production of caseating granulomas with central necrosis of the granulomas
- b. Small vessel vasculitis associated with granulomatous inflammation and necrosis
- c. Idiopathic, exaggerated T cell response with the formation of noncaseating granulomas
- d. The presence of antibodies against Type IV collagen in the alveoli
- e. Inflammatory reaction to an organic antigen

68. A 50-year-old male smoker presents to the clinic with painless gross hematuria that he says occurs from the start of urination through until the end of urination. He states he has no history of recent trauma. On

physical examination, the prostate is firm and mobile with no nodules or tenderness. A urinalysis is performed, showing >10 red blood cells per high power field but otherwise unremarkable. Which of the following is the most appropriate next step in the evaluation of this patient?

- a. CT scan of abdomen and pelvis without contrast
- b. CT scan of the abdomen and pelvis with contrast and cystoscopy
- c. Fasting plasma glucose
- d. Observation and nephrologist follow up if hematuria persists
- e. Kidney biopsy

69. A 59-year-old male presents to the clinic with a 3-day history of redness to the face. He states he has been having four days of fevers and chills. On physical examination, there is an erythematous, tender, sharply demarcated lesion on the right cheek and the nose with raised edges. There is no streaking, papules or pustules. There is no redness to the eye or ocular pain. Which of the following is the most likely diagnosis?

- a. Acne rosacea
- b. Lymphangitis
- c. Erysipelas
- d. Intertrigo
- e. Chagas disease

70. A 45-year-old male presents to the emergency room with fever, nausea, vomiting and left lower quadrant pain. Which of the following is the most likely CT scan finding?

- a. Inflammation of the appendix
- b. Inflammation of a diverticulum
- c. Inflammation of the gall bladder
- d. Inflammation of the ileum
- e. Irritable bowel syndrome

71. Which of the following is not a classic manifestation of opioid withdrawal?

- a. Piloerection
- b. Miosis
- c. Rhinorrhea
- d. Increased lacrimation
- e. Tachycardia

72. A 32-year-old male returns from the Dominican Republic and develops cyclical fevers every 72 hours, leukopenia and thrombocytopenia. A thin and thick peripheral smear shows intracellular parasites in the red blood cells consistent with plasmodium falciparum. Which of the following is the recommended first-line agent?

- a. Doxycycline
- b. Chloroquine
- c. Atovaquone
- d. Clindamycin
- e. Azithromycin

73. In a patient with a normal blood urea nitrogen and creatinine levels, which of the following radiograph findings are most consistent with osteomalacia not due to renal disease?

- a. "Salt and pepper" appearance of the skull
- b. "Punched out lesions" appearance of the skull
- c. The presence of Looser zones

- d. "Cotton wool" appearance of the skull
- e. Pathologic fractures and radiologic evidence of kyphosis

74. Which of the following most reliably distinguishes chronic primary adrenocortical insufficiency from secondary adrenocortical insufficiency?

- a. The presence of fatigue
- b. The presence of hyperkalemia
- c. The presence of muscle weakness
- d. The presence of hyponatremia
- e. The presence of skin hyperpigmentation

75. A 23-year-old woman has a positive pregnancy test. She states that her last menstrual period was July 10 and that her periods are regular. Which of the following most accurately describes her estimated date of delivery according to Naegele's rule?

- a. April 17
- b. April 3
- c. October 17
- d. October 10
- e. May 17

76. A 36-year-old woman with no past medical history presents to the emergency room with sudden onset of left-sided chest pain and shortness of breath. She denies any trauma but states that she recently drove 24 hours from Florida to New York in her car. She is on oral contraceptive pills and she smokes half a pack of cigarettes a day. Her vital signs are as follows: Temp: 98.6, HR: 128 and regular, BP 130/88, RR: 26, O2 sat 92% on room air. Her physical examination is remarkable. Which of the following is the most appropriate next step in the evaluation of this patient.

- a. Pulmonary angiography
- b. Venous Doppler of the lower extremities
- c. Ventilation perfusion scan
- d. Spiral CT scan of the chest with contrast
- e. D-dimer

77. Which of the following is used in the treatment of acetaminophen toxicity?

- a. Flumazenil
- b. Naloxone
- c. N-acetylcysteine
- d. Pralidoxime

78. A 43-year-old previously healthy female presents to the emergency room with chest pain and palpitations. The symptoms continue despite oxygen and IV fluid therapy. Her blood pressure is 80/60 mmHg. She is diaphoretic, dizzy and unable to speak in full sentences. Her pulses are palpable but rapid. An ECG is performed, showing a regular, narrow complex tachycardia at 180 BPM. There are no ST or T wave changes consistent with myocardial infarction and the patient has no significant cardiac risk factors. Which of the following is the recommended management of this patient?

- a. Atropine
- b. Synchronized cardioversion
- c. Adenosine
- d. Amiodarone
- e. Unsynchronized cardioversion

79. A 20-year-old thin female presents to the clinic with multiple episodes of chest pain, panic attacks, and dizziness whenever she exercises or exerts herself. On physical examination, there is the presence of a systolic ejection click. Which of the following is the recommended management of this patient?



- a. Reassurance that the disease is self-limiting
- b. Education that she may develop the murmur of mitral stenosis
- c. Propranolol for the autonomic symptoms
- d. Aspirin to reduce the chest pain symptoms
- e. Nitroglycerin as needed for the chest pain and other symptoms

80. Pulmonary fibrosis and thyroid disorders are classic side effects of which of the following medications?

- a. Propranolol
- b. Amiodarone
- c. Adenosine
- d. Procainamide
- e. Verapamil

81. A 30-year-old woman with a history of Raynaud's Phenomenon presents to the clinic with difficulty swallowing. An esophagram shows esophageal motility abnormalities. On physical exam, she has clawed hands and calcified lesions on her shins. Her skin is thin and shiny on the face and neck as well as distal to the elbows and knees. Which of the following antibodies would most likely be seen in this patient?

- a. Anti-La antibodies
- b. Anti-Centromere antibodies
- c. Anti-Smooth muscle antibodies
- d. Anti-Mi2 antibodies
- e. Anti-SRP antibodies

82. Which of the following skin conditions is linked to hepatitis C?

- a. Oral lichen planus
- b. Oral hairy leukoplakia
- c. Erythroplakia
- d. Telangiectasias
- e. Aphthous ulcers

83. Which of the following is required in the diagnostic evaluation of a patient suspected of having osteoporosis?

- a. Plain radiographs of the spine and hip
- b. Bone scan
- c. Dual energy x-ray absorptiometry scan
- d. Alkaline phosphatase levels
- e. Magnetic resonance imaging of the spine and the hip

84. A 32-year-old football player sustained a deceleration pivoting injury while playing football and felt a sudden pop with subsequent swelling of the left knee associated with buckling of the knee. He denies locking or popping of the knee. A radiograph of the knee is obtained and shows an avulsion of the lateral tibial condyle (Segond fracture). Which of the following tests would most likely be positive?

- a. Valgus stress test
- b. Varus stress test
- c. McMurray test
- d. Lachman test
- e. Posterior drawer test

85. A 60-year-old male with a 50 PPY smoking history is evaluated for recent unintentional weight loss. A biopsy of a small mass found on chest radiograph is consistent with squamous cell carcinoma with no evidence of metastasis. Which of the following is the recommended management of choice?

- a. Radiation
- b. Surgical resection
- c. Chemotherapy
- d. Bronchoscopy
- e. Palliative care

86. A 53-year-old male with a history of diabetes mellitus complains of right auricular pain and discharge. There is noticeable tenderness, warmth and erythema to the right mastoid process. Which of the following organisms is most likely responsible for these symptoms?

- a. Staphylococcus aureus
- b. Pseudomonas aeruginosa
- c. Rhizopus
- d. Haemophilus influenza
- e. Moraxella catarrhalis

87. A 43-year-old patient is diagnosed with active tuberculosis. Ethambutol is one of the four drugs used to treat his active disease. A week into the treatment, he develops painless central blind spots in the right eye. On fundoscopic examination, there is a normal disc to cup ratio. During a swinging light test, when the light is shone from the left eye to the right eye, the pupil appears to dilate. The cornea looks normal in appearance and there is no conjunctival erythema. There is no blurring of the optic disc on fundoscopic examination. Which of the following is the most likely diagnosis?

- a. Papilledema
- b. Papillitis
- c. Retrobulbar neuritis
- d. Acute angle closure glaucoma
- e. Chronic open angle glaucoma

88. A 55-year-old male presents with symptoms and echocardiographic evidence consistent with infective endocarditis. On physical examination, there are painless macules that are seen on his palms and soles. Which of the following is the most likely diagnosis?

- a. Osler's nodes
- b. Janeway lesions
- c. Keratoderma blennorrhagicum
- d. Roth spots
- e. Erythema marginatum

89. Which of the following echocardiogram findings is most consistent with restrictive cardiomyopathy?

- a. Diastolic dysfunction with marked dilation of both atria
- b. Global systolic dysfunction
- c. Thickened ventricular septal wall > 15mm
- d. Apical ballooning of the left ventricle
- e. Diastolic collapse of the ventricles

90. In which of the following patients is the pneumococcal vaccine not indicated?

- a. A 7-year-old with sickle cell disease
- b. A 70-year-old patient who lives in a nursing home
- c. A 50-year-old with chronic renal failure

- d. A 40-year-old patient with a history of hypertension
- e. A 45-year-old male with a history of diabetes mellitus

91. Which of the following is a test used to assess for congenital hip dislocation/dysplasia?

- a. Ober test
- b. Barlow test
- c. Moro reflex
- d. McRoberts maneuver
- e. Woods maneuver

92. Which of the following is a classic side effect of metformin?

- a. Lactic acidosis
- b. Macrocytic anemia
- c. Diarrhea
- d. Positive hepatojugular reflex
- e. Rhonchi

93. A 22-year-old female presents to the emergency room with painful urination and pelvic pain. On physical examination, she is febrile, there is lower abdominal tenderness to palpation with rebound tenderness and cervical motion tenderness. There are no associated skin rashes or desquamation of the skin. A CBC shows a white blood cell count of 15,000 cells/mm<sup>3</sup> (normal 5,000-10,000 cells/mm<sup>3</sup>). Beta HCG levels are undetectable. Which of the following is the management of choice?

- a. IV doxycycline + ceftriaxone
- b. IV clindamycin + oxacillin
- c. IV clindamycin + vancomycin
- d. Oral methotrexate
- e. IV ampicillin/sulbactam

94. A 44-year-old male is brought in by his wife because she is concerned that the voices he hears are occurring with increased frequency. She states that over the last 8 months, he has been hearing voices and over the last month, he refused to have intercourse with her because he believes "the FBI placed a microchip in my penis" to spy on him. His symptoms have caused him to lose his job and he hasn't been able to look for a new job or help her raise their children. Upon trying to ascertain a history, he has a cold, blunt affect and is very distrustful that the doctors at the hospitals are "working for the FBI". Which of the following is the most likely diagnosis?

- a. Schizophrenia
- b. Bipolar disorder
- c. Paranoid personality disorder
- d. Schizophreniform disorder
- e. Schizotypal personality disorder

95. A 24-year-old male with a longstanding history of dandruff presents with erythematous plaques covered with fine white scales on his eyebrows, cheeks, and chest area. Which of the following is not considered part of the routine management of this condition?

- a. Selenium sulfide
- b. Ketoconazole
- c. Corticosteroids
- d. Sodium sulfacetamide
- e. Metronidazole

96. A 32-year old woman at 35 weeks gestation presents to the emergency room with painful contractions. A pelvic examination is done, revealing 4 cm cervical dilation with 81% effacement. There is a positive fern test

and the L:S ratio is <2:1. There are no signs of fetal distress upon testing. She is afebrile and there is no uterine tenderness or vaginal discharge. Which of the following is the most appropriate management at this time?

- a. Administration of prostaglandins
- b. Administration of magnesium sulfate and corticosteroids
- c. Administration of terbutaline
- d. Observation until 85% effacement
- e. Administration of oxytocin to induce labor

97. "H-shaped" vertebrae with central endplate depressions are seen with which of the following disorders?

- a. Spondylolisthesis
- b. Spondylolysis
- c. Ankylosing spondylitis
- d. Spinal stenosis
- e. Sickle cell disease

98. Which of the following is a complication for the treatment for osteoporosis?

- a. Orthostatic hypotension
- b. Rash to extensor surface
- c. Elevated liver function tests
- d. Raynaud's
- e. Esophagitis

99. Which of the following is not a side effect of lisinopril?

- a. Teratogenicity
- b. Hypotension
- c. Hypokalemia
- d. Azotemia
- e. Dry cough and angioedema

100. A 7-year-old patient with a history of sickle cell disease develops osteomyelitis. A gram stain is performed and shows pink staining bacilli. Which of the following is the management of choice for this patient?

- a. IV Oxacillin
- b. IV Ciprofloxacin
- c. IV Clindamycin
- d. IV Ceftriaxone
- e. IV Vancomycin