Sample PANRE / PANRE-LA Questions

Question 1

A 22-year-old woman, gravida 0, para 0, comes to the office because she has been unable to conceive despite discontinuation of oral contraceptives one year ago. The patient says she has had only two menstrual periods during the past 10 months. Menarche occurred at 14 years of age. Height is 167.6 cm (5 ft 6 in), and weight is 90.7 kg (200 lb). Vital signs are within normal limits. Physical examination shows velvety, verrucous, hyperpigmented lesions on the nuchal area as well as excess hair on the chin and acne on the cheeks and back. Breast and pelvic examinations show no abnormalities. Which of the following is the most likely diagnosis?

A. Cushing syndrome
B. Hypothyroidism
C. Pelvic inflammatory disease
D. Polycystic ovary syndrome
E. Primary adrenal insufficiency

Medical Content Category: Reproductive System

Critique:

This question tests the examinee's ability to recognize polycystic ovary syndrome on the basis of a patient's symptoms and history as well as findings on physical examination.

The correct answer is Option (D), polycystic ovary syndrome. The patient described in the scenario has characteristic signs of this condition, which include obesity, ovarian dysfunction, hirsutism, and androgen excess with clinical features such as acne.

Option (A), Cushing syndrome, is incorrect because this condition is characterized by fatigue, central obesity, peripheral muscle atrophy, and impaired wound healing, none of which are noted in the scenario. Option (B), hypothyroidism, is incorrect because this condition is characterized by weight gain, constipation, intolerance to cold, depression, fatigue, and/or weakness, none of which are described in the scenario. Option (C), pelvic inflammatory disease, is incorrect because this condition is characterized by postcoital bleeding, urinary frequency, purulent cervical discharge, and cervical tenderness on pelvic examination, none of which are described in the scenario. Option (E), primary adrenal insufficiency, is incorrect because this condition is characterized by weakness, anorexia, diarrhea, abdominal pain, muscle and joint pain, and sparse axillary hair, none of which are noted in the scenario.

Question 2

A 40-year-old man who has type 1 diabetes mellitus comes to the office for follow-up examination three weeks after proliferative diabetic retinopathy was diagnosed. He has no other chronic disease conditions. Which of the following findings is most likely on funduscopy in this patient?

A. Arteriovenous nicking
B. Cherry red fovea
C. Drusen
D. Neovascularization
E. Papilledema

Medical Content Category: Eyes, Ears, Nose, and Throat

Critique:

This question tests the examinee's ability to recognize the clinical features associated with proliferative diabetic retinopathy, as noted in the scenario, in a patient with type 1 diabetes mellitus.

The correct answer is Option (D), neovascularization. This finding on funduscopy is a characteristic manifestation of proliferative diabetic retinopathy, as noted in the scenario, which is especially common in patients with type 1 diabetes mellitus.

Option (A), arteriovenous nicking, is incorrect because this finding is related to hypertensive retinopathy and is not related to diabetes mellitus, as noted in the scenario. Option (B), cherry red fovea, is incorrect because this finding is related to retinal artery occlusion and is not associated with diabetes mellitus, as noted in the scenario. Option (C), drusen, is incorrect because this finding is usually seen in patients older than 65 years who have age-related macular degeneration, neither of which is noted in the scenario. Option (E), papilledema, is incorrect because this finding is related to increased intracranial pressure and is not related to diabetes mellitus, as noted in the scenario.

Question 3

A 55-year-old man comes to the emergency department because he has had pressure-like pain in the substernal region of his chest for the past 20 minutes. The patient says the pain radiates to his left arm. He is nauseated and sweating profusely. Medical history includes long-standing hypertension that is well controlled with diuretics. On the basis of this patient's history and symptoms, which of the following pathologic processes is most likely to have occurred first?

A. Activation of factor VII
B. Activation of factor IX
C. Activation of protein S
D. Adhesion of platelets
E. Conversion of fibrinogen to fibrin

Medical Content Category: Cardiovascular System

Critique:

This question tests the examinee's ability to identify the pathologic basis for the sudden development of acute myocardial infarction.

The correct answer is Option (D), adhesion of platelets. The patient described in the scenario has characteristic symptoms of acute myocardial infarction, including pain in the substernal region of the chest that radiates to the left arm as well as diaphoresis. After disruption of the atherosclerotic plaque, platelets attach to the area due to the increase in turbulence as well as the exposed plaque and collagen. This results in aggregation of platelets and increased thrombi in the vasculature.

Option (A), activation of factor VII, is incorrect because tissue factor is first activated before converting factor VII to factor VIIa via the extrinsic pathway. Option (B), activation of factor IX, is incorrect because this is not the first factor activated. Option (C), activation of protein S, is incorrect because protein S acts as a cofactor to deactivate factor Va and factor VIIIa and therefore is not involved in the initial formation of a clot. Option (E), conversion of fibrinogen to fibrin, is incorrect because this represents the end of the coagulation cascade.

Question 4

A 22-year-old man comes to the office because he has had low-grade fever and cough productive of yellow sputum for the past eight days. He has not had nausea or vomiting. He is otherwise healthy and takes no medications. Temperature is 37.3°C (99.2°F), heart rate is 90/min, respirations are 18/min, and blood pressure is 120/78 mmHg. Physical examination shows decreased breath sounds on auscultation of the chest. No enlargement of the cervical lymph nodes is noted. Chest x-ray study shows consolidation in the right lower lobe. Doxycycline therapy is initiated. The patient returns to the office four days later because he has persistent fever to 38.3°C (101.0°F). The most appropriate management at this time is discontinuation of doxycycline and initiation of therapy with which of the following medications?

A. Amoxicillin-clavulanic acid
B. Azithromycin
C. Ceftriaxone
D. Trimethoprim-sulfamethoxazole
E. Vancomycin

Medical Content Category: Pulmonary System

Critique:

This question tests the examinee's ability to recognize community-acquired pneumonia that is worsening despite first-line therapy, on the basis of a patient's symptoms and history, the findings on physical examination, and results of imaging studies, and to identify the appropriate change in drug therapy.

The correct answer is Option (A), amoxicillin-clavulanic acid. The scenario describes a patient with community-acquired pneumonia that is worsening despite therapy with doxycycline, as evidenced by persistent fever for more than 72 hours. In cases such as this, when a patient's condition is resistant to the first-line antibiotic, an antibiotic with a broader spectrum of coverage, such as amoxicillin-clavulanic acid, is indicated.

Option (B), azithromycin, is incorrect because this macrolide antibiotic is indicated as first-line therapy for community-acquired pneumonia, not community-acquired pneumonia that is resistant to doxycycline, as described in the scenario. Option (C), ceftriaxone, is incorrect because this medication is not indicated for management of community-acquired pneumonia in an outpatient setting, as described in the scenario. Option (D), trimethoprim-sulfamethoxazole, is incorrect because this medication is indicated for hospital-acquired pneumonia, not community-acquired pneumonia in an otherwise healthy patient, as described in the scenario. Option (E), vancomycin, is incorrect because this medication is not indicated for management of community-acquired pneumonia, as described in the scenario.

Question 5

A 47-year-old man comes to the emergency department because he has felt feverish and lethargic for the past four days and has had a severe rash involving his face, eyes, lips, torso, abdomen, and genitalia for the past two days. He was treated with penicillin for streptococcal pharyngitis six days ago. Temperature is 39.0°C (102.2°F), heart rate is 100/min, respirations are 14/min and nonlabored, and blood pressure is 160/92 mmHg. Physical examination shows vesicles and sloughing localized to the central area of the face. Oral examination shows hemorrhagic erosions with a grayish white membrane. Purulent discharge from the eyes and injection of the conjunctivae are noted. Coalescing erythematous macules with purpuric centers are noted over the torso and abdomen as well as in the genital region. No other abnormalities are noted. Which of the following is the most likely cause of this patient's current symptoms?

A. Allergic reaction to penicillin
B. Impetigo
C. Secondary syphilis
D. Stevens-Johnson syndrome

Medical Content Category: Dermatologic System

Critique:

This question tests the examinee's ability to recognize Stevens-Johnson syndrome on the basis of a patient's history and symptoms as well as the findings on physical examination.

The correct answer is Option (D), Stevens-Johnson syndrome. The patient described in the scenario has characteristic signs and symptoms of Stevens-Johnson syndrome: fever and painful rash progressing to vesicles with mucosal involvement. Therapy with medications such as penicillin, as noted in the scenario, may cause Stevens-Johnson syndrome.

Option (A), allergic reaction to penicillin, is incorrect because this condition does not cause fever, as described in the scenario, and is characterized by either generalized hives or anaphylaxis. Option (B), impetigo, is incorrect because although this infection typically involves the skin of the face, it is characterized by honey-colored, crusted lesions, which differs from the rash described in the scenario. In addition, impetigo does not typically cause fever, as noted in the scenario. Option (C), secondary syphilis, is incorrect because this condition causes a maculopapular rash involving the entire body, including the palms and soles, which differs from the rash described in the scenario.

Question 6

A 78-year-old woman who resides in a nursing home is brought to the emergency department because she had sudden onset of abdominal pain as well as light-headedness and near-syncope one hour ago. Medical history includes hyperlipidemia, temporal arteritis, and dementia. The patient has a history of cigarette smoking, but she has not smoked since she was admitted to the nursing home four years ago. Body mass index is 34 kg/m^2. The patient is in distress, and diaphoresis is noted. Temperature is 37.0°C (98.6°F), and blood pressure is 80/58 mmHg. Physical examination shows a pulsatile mass in the abdomen. Which of the following is the most likely diagnosis?

A. Acute pancreatitis
B. Dissecting abdominal aortic aneurysm
C. Mesenteric ischemia
D. Perforated appendicitis
E. Perforated diverticulitis

Medical Content Category: Cardiovascular System

Critique:

This question tests the examinee's ability to identify the signs and symptoms of dissecting abdominal aortic aneurysm.

The correct answer is Option (B), dissecting abdominal aortic aneurysm. The hallmark of a dissecting abdominal aortic aneurysm is a pulsatile mass, as noted in the scenario. The diagnosis is further supported by the sudden onset of abdominal pain, light-headedness, and near-syncope in this patient.

Option (A), acute pancreatitis, is incorrect because patients with this condition have pain that radiates to the back and do not have a pulsatile mass, as noted in the scenario. Option (C), mesenteric ischemia, is incorrect because patients with this condition do not have a pulsatile mass, as noted in the scenario. Option (D), perforated appendicitis, is incorrect because although patients with this condition have abdominal pain and may have hypotension, a pulsatile mass would not be found, as noted in the scenario. Option (E), perforated diverticulitis, is incorrect because patients with this condition do not have a pulsatile mass, as noted in the scenario. In addition, patients with this condition have fever, whereas the temperature of the patient described in the scenario is within normal limits.

Question 7

A 24-year-old woman comes to the primary care office because she believes she might have a sexually transmitted infection. She is otherwise healthy and takes no medications. Vital signs are within normal limits. Pelvic examination shows edema and slight erythema of the cervix as well as odorless yellow discharge from the cervical os. On the basis of the suspected diagnosis of cervicitis caused by gonorrhea, this patient is at greatest risk for coinfection with which of the following?

A. *Candida albicans*
B. *Chlamydia trachomatis*
C. *Gardnerella vaginalis*
D. Herpes simplex virus
E. Human papillomavirus

Medical Content Category: Infectious Diseases

Critique:

This question tests the examinee's knowledge of risk for coinfection related to cervicitis caused by gonorrhea.

The correct answer is Option (B), Chlamydia trachomatis. The patient described in the scenario has a suspected diagnosis of cervicitis caused by gonorrhea, and patients with gonorrhea are assumed to have a concurrent infection with Chlamydia trachomatis until proven otherwise.

Option (A), *Candida albicans*, is incorrect because although *Candida albicans* infection can occur concurrently with cervicitis caused by gonorrhea, it does not pose the greatest risk of coinfection. In addition, the physical examination findings described in the scenario are not consistent with *Candida albicans* infection. Option (C), *Gardnerella vaginalis*, is incorrect because although *Gardnerella vaginalis* infection can occur concurrently with cervicitis caused by gonorrhea, it does not pose the greatest risk of coinfection. In addition, the physical examination findings described in the scenario are not consistent with *Gardnerella vaginalis* infection. Option (D), herpes simplex virus, is incorrect because although herpes simplex virus infection can occur concurrently with cervicitis caused by gonorrhea, it does not pose the greatest risk of coinfection. In addition, the physical examination findings described in the scenario are not consistent with herpes simplex virus infection. Option (E), human papillomavirus, is incorrect because although human papillomavirus infection can occur concurrently with cervicitis caused by gonorrhea, it does not pose the greatest risk of coinfection. In addition, the physical examination findings described in the scenario are not consistent with human papillomavirus infection.

Question 8

A 10-year-old girl is brought to the office for school physical examination. The patient says she has had pain in her back during the past three months and is worried that she will not be able to participate in sports. Vital signs are within normal limits. On physical examination, forward bend test shows elevation of the paravertebral muscle mass on the left. No tenderness to palpation or percussion of the spine is noted. Assessment of gait shows no abnormalities. Which of the following is the most likely diagnosis?

A. Idiopathic scoliosis
B. Juvenile rheumatoid arthritis
C. Kyphosis
D. Spinal stenosis
E. Spondylolisthesis

Medical Content Category: Musculoskeletal System

Critique:

This question tests the examinee's ability to recognize scoliosis on the basis of a patient's symptoms as well as findings on physical examination.

The correct answer is Option (A), idiopathic scoliosis. The scenario describes a characteristic finding related to scoliosis: elevation of the paravertebral muscle mass on one side on forward bend test, representing side-to-side curvature of the spine. The forward bend test is very sensitive for detecting curves of the thoracic spine. Idiopathic scoliosis is more common in girls than in boys and is usually detected between 10 and 12 years of age, further supporting the diagnosis.

Option (B), juvenile rheumatoid arthritis, is incorrect because this condition typically affects the joints. In addition, juvenile rheumatoid arthritis that affects the back is typically indicative of systemic disease, which is not noted in the scenario. Option (C), kyphosis, is incorrect because this condition causes forward rounding of the upper back, not side-to-side curvature of the spine, as noted in the scenario. Option (D), spinal stenosis, is incorrect because this condition typically causes radicular findings such as numbness, tingling, and weakness in the extremities, which are not described in the scenario. Option (E), spondylolisthesis, is incorrect because the pain caused by this condition typically worsens with extension of the back, which is not noted in the scenario.

Question 9

A 67-year-old woman comes to the clinic for routine physical examination. Medical history includes hypertension, type 2 diabetes mellitus, and dyslipidemia, which are well managed with medications. As the patient walks into the examination room, she describes an aching pain behind her sternum that radiates to her left breast. She says she has never had this type of pain before, and the pain does not worsen when she changes positions. The patient has shortness of breath and is slightly diaphoretic. Heart rate is 105/min and regular, respirations are 24/min, and blood pressure is 146/91 mmHg. Oxygen saturation is 97% on room air. Which of the following is the most likely cause of this patient's symptoms?

A. Communication between ventricles
B. Dilation of the aortic root
C. Ectopic electrical activity
D. Inflammation of the pericardial sac
E. Plaque rupture with platelet aggregation

Medical Content Category: Cardiovascular System

Critique:

This question tests the examinee's ability to recognize myocardial infarction, on the basis of a patient's symptoms and history, and to identify the underlying pathologic process of this condition.

The correct answer is Option (E), plaque rupture with platelet aggregation. The patient described in the scenario has characteristic symptoms of myocardial infarction, including chest pain, shortness of breath, and diaphoresis. The underlying pathologic process of myocardial infarction is plaque rupture with platelet aggregation.

Option (A), communication between ventricles, is incorrect because although conditions caused by this process, such as ventricular septal defect, cause shortness of breath, they are characterized by heart murmur, which is not noted in the scenario. Option (B), dilation of the aortic root, is incorrect because patients with this condition typically have no symptoms, which differs from the patient described in the scenario. Option (C), ectopic electrical activity, is incorrect because this process causes conduction disorders, which are characterized by palpitation and dizziness, neither of which is noted in the scenario. Option (D), inflammation of the pericardial sac, is incorrect because this process represents pericarditis and is characterized by chest pain that worsens with changes in position, but the patient described in the scenario has chest pain that is not exacerbated by position changes.

Question 10

A 74-year-old woman who completed therapy for herpes zoster five months ago comes to the office because she has had continued burning pain in the area where the rash had been located. The patient says she has tried taking acetaminophen, but it was not effective in relieving the pain. She is otherwise healthy. Physical examination shows resolution of the rash; no vesicles or lesions are present. On the basis of this patient's history and symptoms, initiation of therapy with which of the following medications is most appropriate?

A. Acyclovir
B. Amantadine
C. Fluoxetine
D. Gabapentin
E. Prednisone

Medical Content Category: Infectious Diseases

Critique:

This question assesses the examinee's ability to recognize postherpetic neuralgia, on the basis of a patient's history and symptoms as well as findings on physical examination, and to identify the appropriate therapy.

The correct answer is Option (D), gabapentin. The patient described in the scenario has postherpetic neuralgia, based on the history of continued pain in the area where the herpes zoster rash has resolved. Gabapentin is the appropriate therapy for this complication of herpes zoster.

Option (A), acyclovir, is incorrect because this medication is appropriate therapy for herpes zoster but not postherpetic neuralgia, as described in the scenario. Option (B), amantadine, is incorrect because this medication is indicated for treatment of influenza and Parkinson disease but not postherpetic neuralgia, as described in the scenario. Option (C), fluoxetine, is incorrect because this medication is indicated for treatment of major depressive disorder but not postherpetic neuralgia, as described in the scenario. Option (E), prednisone, is incorrect because this medication has not been shown to be effective therapy for postherpetic neuralgia, as described in the scenario.

Question 11

A 62-year-old woman with acute hepatitis A infection comes to the clinic because she has had worsening fatigue, malaise, and anorexia over the past week. Heart rate is 88/min, respirations are 12/min, and blood pressure is 138/90 mmHg. On the basis of this patient's history and current symptoms, which of the following findings on physical examination is most likely?

A. Generalized enlargement of the lymph nodes
B. Holosystolic murmur
C. Pleural friction rub
D. Scleral icterus
E. Splinter hemorrhages under the fingernails

Medical Content Category: Gastrointestinal System/Nutrition

Critique:

This question tests the examinee's knowledge of physical examination findings that are typical in a patient with acute hepatitis A infection.

The correct answer is Option (D), scleral icterus. In a patient with acute hepatitis A infection, as described in the scenario, scleral icterus is a typical finding and correlates with the hyperbilirubinemia that develops with hepatic injury.

Option (A), generalized enlargement of the lymph nodes, is incorrect because this finding is caused by acute systemic infections but is not characteristic of infectious hepatitis, as described in the scenario. Option (B), holosystolic murmur, is incorrect because acute hepatitis infection, as described in the scenario, does not typically cause cardiac murmurs. Option (C), pleural friction rub, is incorrect because this is a typical finding in patients with primary pulmonary conditions such as pneumonia, tuberculosis, or asbestosis but not in those with hepatitis, as described in the scenario. Option (E), splinter hemorrhages under the fingernails, is incorrect because this is a typical finding in patients with subacute infective endocarditis, scleroderma, systemic lupus erythematosus, or rheumatoid arthritis but not hepatitis, as described in the scenario.

Question 12

A 42-year-old man comes to the office because he has had fatigue for the past three months. Medical history includes alcohol use disorder. The patient does not use illicit drugs. Vital signs are within normal limits. Physical examination shows pale skin and inflammation of the tongue. No focal neurologic deficits are noted. On laboratory studies in this patient, which of the following abnormal results is most likely to be noted?

A. Decreased serum folate level
B. Decreased serum potassium level
C. Elevated serum ferritin level
D. Elevated serum magnesium level
E. Increased platelet count

Medical Content Category: Hematologic System

Critique:

This question tests the examinee's ability to recognize folate deficiency anemia, on the basis of a patient's symptoms and history as well as findings on physical examination, and to identify the likely abnormal result on laboratory studies.

The correct answer is Option (A), decreased serum folate level. The patient described in the scenario has characteristic signs and symptoms of folate deficiency anemia, including fatigue and the physical finding of glossitis. In addition, the patient described in the scenario has a history of alcohol use disorder, which has been shown to cause deficiency of folate.

Option (B), decreased serum potassium level, is incorrect because this abnormal laboratory result is not characteristic of folate deficiency anemia, as described in the scenario. Option (C), elevated serum ferritin level, is incorrect because this abnormal laboratory result is not characteristic of folate deficiency anemia, as described in the scenario. Option (D), elevated serum magnesium level, is incorrect because this abnormal laboratory result is not characteristic of folate deficiency anemia, as described in the scenario. Option (E), increased platelet count, is incorrect because this abnormal laboratory result is not characteristic of folate deficiency anemia, as described in the scenario.

Question 13

A 43-year-old man comes to the emergency department because he has had persistent nosebleed from the right naris for the past two hours, since he was struck in the nose with a pitched softball during a game. Application of pressure to the nose has not relieved the bleeding. On physical examination of the nose, bleeding from the right septum is visualized. Which of the following is the most appropriate management of this patient's condition at this time?

A. Administration of nasal corticosteroid spray
B. Application of thrombogenic foam
C. Arterial embolization
D. Blood transfusion
E. Chemical cauterization

Medical Content Category: Eyes, Ears, Nose, and Throat

Critique:

This question assesses the examinee's knowledge of management of epistaxis.

The correct answer is Option (E), chemical cauterization. The patient described in the scenario has a persistent anterior nosebleed, as evidenced by visualization of a bleeding vessel on physical examination. Because application of pressure has not relieved the bleeding, the most appropriate management of this patient's condition is chemical cauterization of the affected vessel.

Option (A), administration of nasal corticosteroid spray, is incorrect because this medication is known to cause epistaxis and is not used for management of persistent anterior nosebleed, as noted in the scenario. Option (B), application of thrombogenic foam, is incorrect because although this medication is used for management of epistaxis, as described in the scenario, it is not the most appropriate next step. Option (C), arterial embolization, is incorrect because this procedure is indicated for management of recalcitrant posterior bleeding, which differs from the description in the scenario. Option (D), blood transfusion, is incorrect because this intervention is not effective for control of nasal bleeding, as described in the scenario.

Question 14

A 47-year-old woman with chronic bronchitis comes to the urgent care clinic because she has had worsening of her cough over the past 10 days. During this time, she also has had worsening shortness of breath and increased sputum production. Temperature is 38.0°C (100.4°F), heart rate is 80/min, respirations are 20/min, and blood pressure is 146/94 mmHg. Oxygen saturation is 92% on room air. On physical examination, auscultation of the chest shows rhonchi and wheezing throughout all lung fields. In addition to an oral antibiotic, which of the following medications is the most appropriate oral therapy for the current acute exacerbation of this patient's chronic condition?

A. Dextromethorphan
B. Diphenhydramine
C. Guaifenesin
D. Prednisone
E. Theophylline

Medical Content Category: Pulmonary System

Critique:

This question tests the examinee's knowledge of appropriate pharmacotherapy for acute exacerbations of chronic bronchitis.

The correct answer is Option (D), prednisone. The scenario describes a patient with chronic bronchitis who is having an acute exacerbation of that condition. In addition to oral antibiotic therapy, the appropriate first-line therapy for this acute exacerbation is an oral corticosteroid such as prednisone.

Option (A), dextromethorphan, is incorrect because this medication is a cough suppressant, and drugs of this type, as well as sedatives, should be avoided in patients with acute exacerbations of chronic bronchitis, as noted in the scenario. Option (B), diphenhydramine, is incorrect because this medication is an antihistamine, and drugs of this type have no beneficial effect on acute exacerbations of chronic bronchitis, as noted in the scenario. Option (C), guaifenesin, is incorrect because this medication is an expectorant, and drugs of this type have not been shown to be beneficial in management of acute exacerbations of chronic bronchitis, as noted in the scenario. Option (E), theophylline, is incorrect because although this medication, which is a methylxanthine, can be used for management of chronic bronchitis, as noted in the scenario, it is not recommended as a first-line therapy.

Question 15

A 22-year-old woman who is a college student comes to the primary care office because she has had diarrhea, irregular menstrual periods, and unintentional weight loss during the past three months. For the past two weeks, the patient also has had palpitations, fatigue, and anxiety. She says she finished taking her final exams one day ago. Temperature is 36.6°C (97.9°F), heart rate is 110/min and regular, and blood pressure is 112/68 mmHg. Physical examination shows bilateral lid lag, increased patellar reflexes, and fine resting tremor. No other abnormalities are noted. Results of rapid heterophile antibody test and urine pregnancy test are negative. Results of complete metabolic panel, thyroid function tests, measurement of serum adrenocorticotropic hormone level, and urine drug screening are pending. Which of the following is the most likely diagnosis?

A. Generalized anxiety disorder
B. Paroxysmal supraventricular tachycardia
C. Primary adrenal insufficiency
D. Substance use disorder
E. Thyrotoxicosis

Medical Content Category: Endocrine System

Critique:

This question tests the examinee's ability to identify thyrotoxicosis on the basis of a patient's symptoms and history, findings on physical examination, and results of laboratory studies.

The correct answer is Option (E), thyrotoxicosis. The scenario describes a patient with characteristic signs and symptoms of thyrotoxicosis, including history of diarrhea, irregular menstrual periods, unintentional weight loss, palpitations, fatigue, and anxiety as well as lid lag, increased patellar reflexes, and resting tremor noted on physical examination.

Option (A), generalized anxiety disorder, is incorrect because although this condition can cause anxiety, palpitations, and weight loss, it is not characterized by lid lag or hyperreflexia, as noted in the scenario. Option (B), paroxysmal supraventricular tachycardia, is incorrect because this condition is characterized by heart rate in the range of 166 to 200/min, but the patient described in the scenario has a resting heart rate of 110/min. In addition, the patient described in the scenario has lid lag, which is not a characteristic sign of paroxysmal supraventricular tachycardia. Option (C), primary adrenal insufficiency, is incorrect because although this condition can cause fatigue and diarrhea, it is not characterized by lid lag, hyperreflexia, or resting tremor, as noted in the scenario. Option (D), substance use disorder, is incorrect because although use of substances such as cocaine and amphetamines can cause palpitations, tremor, tachycardia, and anxiety, it is not characterized by fatigue, irregular menstrual periods, or lid lag, as noted in the scenario.