

COMPREHENSIVE MOCK EXAM 2

Supplemental to: Pharmacology Board Review for the PANCE 2026-2027

Travis L. Bricker

*NCCPA PANCE — 300 questions, single-best-answer (5 options, A-E),
domain-weighted per official blueprint*

Board-Review Questions

1. A patient with progressive dyspnea on exertion and bilateral lower extremity edema has an echocardiogram showing an ejection fraction of 30%. Which of the following laboratory findings would be most consistent with this presentation?
 - A. A low B-type natriuretic peptide level, ruling out this diagnosis
 - B. A normal troponin level, ruling out this diagnosis entirely
 - C. A low creatinine level, ruling out this diagnosis entirely today
 - D. A normal chest X-ray, ruling out this diagnosis entirely today
 - E. An elevated B-type natriuretic peptide level, consistent with this diagnosis

2. A patient has a blood pressure of 220/130 with new-onset confusion and papilledema. Which of the following is the most appropriate classification and treatment approach?
 - A. Hypertensive urgency, treated with oral medication over 24 to 48 hours
 - B. Normal variant blood pressure, requiring no acute intervention at all
 - C. Hypertensive emergency, requiring immediate intravenous therapy given end-organ damage
 - D. White coat hypertension, requiring no pharmacologic intervention at all
 - E. Isolated systolic hypertension, requiring only lifestyle modification alone

3. A patient with a systolic murmur reports exertional syncope, angina, and dyspnea. Which of the following is the most likely diagnosis?
 - A. Aortic stenosis, strongly suggested by this classic exertional symptom triad
 - B. Mitral regurgitation, given this classic exertional symptom pattern overall
 - C. Mitral stenosis, given this classic exertional symptom pattern overall today
 - D. Tricuspid regurgitation, given this classic exertional symptom pattern overall
 - E. Pulmonic stenosis, given this classic exertional symptom pattern overall today

4. A patient with a history of rheumatic fever has a diastolic rumble with an opening snap on auscultation. Which of the following is the most likely diagnosis?

- A.** Aortic regurgitation, given this classic auscultatory finding pattern overall
- B.** Mitral regurgitation, given this classic auscultatory finding pattern overall today
- C.** Aortic stenosis, given this classic auscultatory finding pattern overall today
- D.** Mitral stenosis, strongly suggested by this classic opening snap finding
- E.** Tricuspid stenosis, given this classic auscultatory finding pattern overall

5. An ECG shows a regular atrial rate of approximately 300 beats per minute with a sawtooth flutter wave pattern. Which of the following is the most likely diagnosis?

- A.** Atrial fibrillation, given this classic ECG pattern, though the pattern differs
- B.** Ventricular tachycardia, given this classic ECG pattern, though quite distinct
- C.** Sinus tachycardia, given this classic ECG pattern, though quite distinct overall
- D.** Multifocal atrial tachycardia, given this classic ECG pattern, though quite distinct
- E.** Atrial flutter, strongly suggested by this classic sawtooth wave pattern

6. An ECG shows a short PR interval and a delta wave. Which of the following is the most likely diagnosis?

- A.** Long QT syndrome, given this classic ECG pattern, though quite distinct overall
- B.** First-degree AV block, given this classic ECG pattern, though quite distinct
- C.** Left bundle branch block, given this classic ECG pattern, though quite distinct
- D.** Brugada syndrome, given this classic ECG pattern, though quite distinct overall
- E.** Wolff-Parkinson-White syndrome, strongly suggested by this classic delta wave finding

7. A patient started on a new medication develops a QTc interval of 510 milliseconds on ECG. Which of the following is the most appropriate concern?

- A.** This QTc value is within the normal range and requires no action
- B.** This prolonged QTc increases the risk of torsades de pointes
- C.** This finding indicates an acute myocardial infarction has already occurred

- D.** This finding is entirely unrelated to the medication recently started
- E.** This finding indicates significant hyperkalemia is present currently instead

8. A patient on chronic digoxin therapy develops nausea, visual disturbances with yellow-green halos, and new cardiac arrhythmias. Which of the following is the most likely explanation?

- A.** An unrelated viral gastrointestinal illness with coincidental timing
- B.** A new, unrelated ophthalmologic condition requiring separate immediate evaluation
- C.** Digoxin toxicity, strongly suggested by this classic visual and cardiac pattern
- D.** An allergic reaction to the medication requiring immediate discontinuation only
- E.** A normal, expected finding requiring no further evaluation or action

9. A patient with suspected pulmonary hypertension requires definitive diagnostic confirmation. Which of the following is the gold standard diagnostic test?

- A.** Transthoracic echocardiography alone as the gold standard diagnostic test
- B.** Right heart catheterization as the gold standard diagnostic confirmatory test
- C.** Chest X-ray alone as the gold standard diagnostic test for this
- D.** Pulmonary function testing alone as the gold standard diagnostic test
- E.** Six-minute walk test alone as the gold standard diagnostic test

10. A patient with a history of tuberculosis develops elevated jugular venous pressure that rises with inspiration and a pericardial knock on auscultation. Which of the following is the most likely diagnosis?

- A.** Cardiac tamponade, given this classic clinical presentation, though the findings differ
- B.** Restrictive cardiomyopathy, given this classic presentation, though quite distinct
- C.** Constrictive pericarditis, strongly suggested by this classic Kussmaul sign and knock
- D.** Acute pericarditis alone, given this classic presentation, though quite distinct
- E.** Dilated cardiomyopathy, given this classic clinical presentation, though quite distinct

11. A child develops migratory polyarthrititis and carditis several weeks after an untreated streptococcal throat infection. Which of the following diagnostic frameworks confirms this diagnosis?

- A.** The Duke criteria, used specifically for a different diagnosis entirely
- B.** The Jones criteria, the diagnostic framework for this specific condition
- C.** The Wells criteria, used specifically for a different diagnosis entirely
- D.** The Ranson criteria, used specifically for a different diagnosis entirely
- E.** The CHA2DS2-VASc score, used specifically for a different purpose entirely

12. Which of the following patients would most appropriately receive antibiotic prophylaxis before a routine dental procedure?

- A.** A patient with mitral valve prolapse without regurgitation present
- B.** A patient with a prosthetic heart valve undergoing a dental extraction
- C.** A patient with a small, isolated ventricular septal defect repaired years ago
- D.** A patient with well-controlled hypertension and no other cardiac history
- E.** A patient with an innocent childhood murmur and no structural disease

13. A patient presents with bilateral lower extremity edema, and further workup reveals a preserved ejection fraction with elevated filling pressures. Which of the following is the most likely diagnosis?

- A.** Deep venous thrombosis, given this classic bilateral presentation pattern
- B.** Lymphedema alone, given this classic bilateral presentation pattern overall
- C.** Heart failure with preserved ejection fraction, given this classic pattern
- D.** Cellulitis alone, given this classic bilateral presentation pattern overall
- E.** Chronic venous insufficiency alone, given this classic bilateral pattern

14. A patient experiences syncope specifically during physical exertion, with a family history of sudden cardiac death. Which of the following is the most appropriate concern?

- A.** This presentation is classic for benign vasovagal syncope requiring no workup

- B.** This presentation raises concern for an underlying cardiac cause of syncope
- C.** This presentation is classic for orthostatic hypotension requiring no workup
- D.** This presentation is classic for a seizure disorder requiring no cardiac workup
- E.** This presentation requires no further evaluation given the patient's age

15. A patient is being evaluated for cardiac risk before a planned non-cardiac surgery. Which of the following is an important factor in this assessment?

- A.** The patient's functional capacity, measured in metabolic equivalents
- B.** The surgeon's personal preference alone, regardless of patient factors
- C.** The specific hospital where the surgery will be performed alone
- D.** The patient's insurance coverage status alone, regardless of cardiac risk
- E.** The time of day the surgery is scheduled alone, regardless of risk

16. A patient on statin therapy develops diffuse muscle pain and weakness, with an elevated creatine kinase level. Which of the following is the most appropriate management?

- A.** Continue the statin at the same dose without any further evaluation
- B.** Increase the statin dose to improve lipid control despite symptoms
- C.** Add a second statin from a different class immediately today
- D.** Discontinue the statin and reevaluate symptoms and CK level
- E.** Ignore the elevated CK level, since this is an expected finding

17. Which of the following is the primary purpose of the pooled cohort ASCVD risk calculator?

- A.** To diagnose an acute myocardial infarction in a symptomatic patient
- B.** To calculate a patient's specific ejection fraction without imaging
- C.** To determine the need for emergent cardiac catheterization directly
- D.** To calculate a patient's specific stroke risk in atrial fibrillation

E. To estimate 10-year cardiovascular risk and guide statin therapy decisions

18. Which of the following is a contraindication to exercise stress testing?

- A. Stable, well-controlled hypertension without any other cardiac history
- B. A remote history of a fully resolved myocardial infarction years ago
- C. Mild, asymptomatic mitral valve prolapse without regurgitation present
- D. Unstable angina with ongoing chest pain at the time of evaluation
- E. A family history of coronary artery disease without personal symptoms

19. Which of the following is the most appropriate indication for cardiac catheterization?

- A. Routine screening in a completely asymptomatic, low-risk patient
- B. Confirmed, well-controlled hypertension without any other findings
- C. A normal stress test result with no concerning symptoms reported
- D. Ongoing chest pain with a positive stress test suggesting ischemia
- E. A routine annual physical examination without any cardiac symptoms

20. A patient with chest pain has elevated troponin levels but no ST-segment elevation on ECG. Which of the following is the most likely diagnosis?

- A. ST-elevation myocardial infarction, given this classic laboratory pattern
- B. Non-ST-elevation myocardial infarction, given this classic laboratory and ECG pattern
- C. Stable angina, given this classic laboratory and ECG pattern overall
- D. Unstable angina alone, given this classic laboratory pattern, though distinct
- E. Pericarditis alone, given this classic laboratory and ECG pattern overall

21. A patient has new-onset chest pain at rest with a normal troponin level and no ST-segment changes. Which of the following is the most likely diagnosis?

- A.** ST-elevation myocardial infarction, given this classic presentation, though distinct
- B.** Unstable angina, strongly suggested by this classic normal troponin pattern
- C.** Non-ST-elevation myocardial infarction, given this pattern, though troponin differs
- D.** Stable angina alone, given this classic presentation, though the onset differs
- E.** Pericarditis alone, given this classic presentation pattern, though quite distinct

22. A patient presents with progressive heart failure symptoms and an echocardiogram showing a dilated left ventricle with globally reduced systolic function. Which of the following is the most likely diagnosis?

- A.** Dilated cardiomyopathy, strongly suggested by this classic echocardiographic pattern
- B.** Hypertrophic cardiomyopathy, given this classic pattern, though quite distinct
- C.** Restrictive cardiomyopathy, given this classic pattern, though quite distinct overall
- D.** Constrictive pericarditis, given this classic pattern, though quite distinct overall
- E.** Cardiac tamponade, given this classic pattern, though quite distinct overall today

23. A young athlete with a family history of sudden cardiac death is being screened before participation in competitive sports. Which of the following is the most appropriate initial screening test?

- A.** Cardiac MRI as the most appropriate initial screening test here
- B.** Cardiac catheterization as the most appropriate initial screening test here
- C.** Coronary CT angiography as the most appropriate initial screening test
- D.** Transthoracic echocardiography as the most appropriate initial screening test
- E.** Exercise stress testing alone as the most appropriate initial screening test

24. A patient with amyloidosis develops heart failure symptoms with a normal ejection fraction but restrictive diastolic filling pattern on echocardiogram. Which of the following is the most likely diagnosis?

- A.** Dilated cardiomyopathy, given this classic pattern, though quite distinct overall

- B.** Hypertrophic cardiomyopathy, given this classic pattern, though quite distinct
- C.** Constrictive pericarditis, given this classic pattern, though quite distinct overall
- D.** Cardiac tamponade, given this classic pattern, though quite distinct overall today
- E.** Restrictive cardiomyopathy, strongly suggested by this classic infiltrative pattern

25. Which of the following patients meets criteria for one-time abdominal aortic aneurysm screening with ultrasound?

- A.** A 40-year-old woman with no smoking history or risk factors
- B.** A 50-year-old man with no smoking history or risk factors
- C.** A 30-year-old man with a strong family history of the condition
- D.** A 68-year-old man with a significant prior smoking history
- E.** A 45-year-old woman with well-controlled hypertension alone

26. A patient with exertional calf pain has an ankle-brachial index of 0.65. Which of the following does this value indicate?

- A.** A normal finding requiring no further evaluation or treatment needed
- B.** Peripheral artery disease, consistent with this reduced ankle-brachial index value
- C.** Venous insufficiency, consistent with this specific laboratory value pattern
- D.** A falsely elevated result requiring immediate repeat testing today
- E.** Acute limb ischemia requiring emergent surgical intervention right now

27. A patient develops sudden onset of a pale, pulseless, painful lower extremity with new sensory loss. Which of the following is the most appropriate immediate action?

- A.** Outpatient vascular surgery referral scheduled within the next week
- B.** Oral anticoagulation alone, without any surgical evaluation needed
- C.** Elevate the limb and reassess in several hours before acting
- D.** Physical therapy alone, without any vascular evaluation needed today

E. Emergent vascular surgery evaluation, given concern for acute limb ischemia

28. A patient reports episodic color changes in the fingers, progressing from white to blue to red, triggered by cold exposure. Which of the following is the most likely diagnosis?

- A. Peripheral artery disease, given this classic episodic color change pattern
- B. Acrocyanosis alone, given this classic episodic color change pattern overall
- C. Raynaud phenomenon, strongly suggested by this classic tricolor change pattern
- D. Chronic venous insufficiency, given this classic episodic pattern, though distinct
- E. Buerger disease, given this classic episodic color change pattern, though distinct

29. A patient develops acute chest pain and heart failure symptoms following a significant emotional stressor. Cardiac catheterization reveals normal coronary arteries despite apical ballooning on echocardiogram. Which of the following is the most likely diagnosis?

- A. ST-elevation myocardial infarction, given this classic pattern, though catheterization differs
- B. Unstable angina, given this classic clinical pattern, though the findings differ
- C. Pericarditis alone, given this classic clinical presentation, though quite distinct
- D. Myocarditis alone, given this classic clinical presentation, though quite distinct
- E. Takotsubo cardiomyopathy, strongly suggested by this classic stress-triggered pattern

30. A patient reports recurrent chest pain at rest, often occurring at night, with transient ST-segment elevation that resolves spontaneously. Which of the following is the most likely diagnosis?

- A. Prinzmetal angina, strongly suggested by this classic vasospastic pattern
- B. Stable angina, given this classic clinical presentation, though the timing differs
- C. Unstable angina alone, given this classic clinical presentation, though distinct
- D. ST-elevation myocardial infarction, given this pattern, though it resolves spontaneously
- E. Pericarditis alone, given this classic clinical presentation, though quite distinct

31. Which of the following cardiovascular risk factors is considered modifiable through lifestyle intervention?

- A.** Tobacco use, a well-recognized modifiable cardiovascular risk factor overall
- B.** Age, a recognized non-modifiable cardiovascular risk factor overall
- C.** Family history, a recognized non-modifiable cardiovascular risk factor
- D.** Biological sex, a recognized non-modifiable cardiovascular risk factor
- E.** Genetic predisposition, a recognized non-modifiable cardiovascular risk factor

32. A patient with an aortic dissection involving only the descending aorta is being managed. Which of the following is the most appropriate initial treatment approach?

- A.** Emergent surgical repair regardless of the specific dissection location
- B.** Immediate thrombolytic therapy regardless of the specific dissection location
- C.** Observation alone, since all dissections resolve without any intervention
- D.** Emergent percutaneous coronary intervention regardless of dissection location
- E.** Blood pressure and heart rate control as the initial medical management

33. A tall, thin patient with a family history of aortic dissection has echocardiographic evidence of aortic root dilation. Which of the following underlying conditions is most likely responsible?

- A.** Marfan syndrome, strongly suggested by this classic body habitus and family history
- B.** Down syndrome, given this classic body habitus and family history, though distinct
- C.** Turner syndrome, given this classic body habitus and family history, though distinct
- D.** Williams syndrome, given this classic body habitus and family history, though distinct
- E.** Noonan syndrome, given this classic body habitus and family history, though distinct

34. A patient with a history of sandblasting occupational exposure develops progressive dyspnea. Chest X-ray shows eggshell calcification of the hilar lymph nodes. Which of the following is the most likely diagnosis?

- A.** Asbestosis, given this classic occupational and imaging pattern, though distinct
- B.** Coal worker's pneumoconiosis, given this classic pattern, though quite distinct
- C.** Berylliosis, given this classic occupational and imaging pattern, though distinct
- D.** Hypersensitivity pneumonitis, given this classic pattern, though quite distinct overall
- E.** Silicosis, strongly suggested by this classic eggshell calcification and exposure pattern

35. A former shipyard worker develops progressive dyspnea, and chest imaging shows bilateral pleural plaques. Which of the following is the most likely diagnosis?

- A.** Silicosis, given this classic occupational and imaging pattern, though distinct
- B.** Coal worker's pneumoconiosis, given this classic pattern, though quite distinct
- C.** Berylliosis, given this classic occupational and imaging pattern, though distinct
- D.** Hypersensitivity pneumonitis, given this classic pattern, though quite distinct overall
- E.** Asbestosis, strongly suggested by this classic pleural plaque and exposure pattern

36. An incidental pulmonary nodule measuring 4mm is found on chest CT in a low-risk patient with no smoking history. Which of the following is the most appropriate management?

- A.** Routine follow-up imaging at a later interval, given the low-risk features
- B.** Immediate surgical biopsy regardless of the nodule's size or risk profile
- C.** Immediate PET scan regardless of the nodule's size or risk profile
- D.** No follow-up of any kind is needed regardless of nodule characteristics
- E.** Immediate bronchoscopy regardless of the nodule's size or risk profile

37. A tall, thin young man with no underlying lung disease develops sudden pleuritic chest pain and dyspnea. Chest X-ray confirms a pneumothorax. Which of the following is the most likely underlying cause?

- A.** Chronic obstructive pulmonary disease, given this classic demographic pattern
- B.** Cystic fibrosis, given this classic demographic and clinical pattern, though distinct

- C. Rupture of a subpleural bleb, strongly suggested by this classic demographic pattern
- D. Traumatic injury, given this classic demographic and clinical pattern, though distinct
- E. Underlying malignancy, given this classic demographic and clinical pattern, though distinct

38. A patient with a chest tube placed for pneumothorax has no further air leak and a fully re-expanded lung on repeat imaging. Which of the following is the most appropriate next step?

- A. Immediate surgical intervention regardless of these reassuring findings
- B. Continued chest tube suction indefinitely despite these reassuring findings
- C. Chest tube removal, given resolution of the air leak and re-expansion
- D. Immediate insertion of a second chest tube on the same side now
- E. Continued observation for several additional weeks before any action

39. A patient with ARDS on mechanical ventilation requires PEEP titration. Which of the following best describes the goal of this titration?

- A. Maximizing PEEP regardless of any hemodynamic or barotrauma consequences
- B. Eliminating PEEP entirely to minimize any risk of barotrauma today
- C. Titrating PEEP based solely on the patient's subjective comfort level
- D. Titrating PEEP based solely on the time elapsed since intubation
- E. Balancing adequate oxygenation against the risk of barotrauma and hemodynamic compromise

40. A patient with COPD presents with increased dyspnea, increased sputum volume, and increased sputum purulence. Which of the following is the most appropriate management?

- A. Bronchodilators alone, without any corticosteroids or antibiotics needed
- B. Bronchodilators, corticosteroids, and antibiotics given these three cardinal features present
- C. Antibiotics alone, without any bronchodilators or corticosteroids needed
- D. Observation alone, since exacerbations typically resolve without treatment
- E. Immediate mechanical ventilation regardless of the severity of symptoms

41. Pulmonary function testing shows a reduced forced vital capacity and reduced total lung capacity, with a normal or increased FEV1/FVC ratio. Which of the following patterns does this represent?

- A.** A restrictive pattern, consistent with conditions like pulmonary fibrosis
- B.** An obstructive pattern, consistent with conditions like asthma or COPD
- C.** A mixed pattern requiring further diagnostic pulmonary testing to clarify
- D.** A normal pattern requiring no further pulmonary evaluation at all
- E.** A pattern consistent with pulmonary vascular disease specifically instead

42. A patient with a history of alcohol use disorder and poor dentition develops fever and foul-smelling sputum. Chest imaging shows a cavitory lesion with an air-fluid level. Which of the following is the most likely diagnosis?

- A.** Lung abscess, strongly suggested by this classic cavitory and clinical pattern
- B.** Lung cancer, given this classic clinical and imaging pattern, though quite distinct
- C.** Pulmonary embolism, given this classic clinical and imaging pattern, though distinct
- D.** Simple pneumonia alone, given this classic clinical and imaging pattern overall
- E.** Tuberculosis, given this classic clinical and imaging pattern, though quite distinct

43. A patient has a paroxysmal cough with an inspiratory whoop and posttussive vomiting lasting several weeks. Which of the following is the most likely diagnosis?

- A.** Croup, given this classic clinical presentation pattern, though quite distinct overall
- B.** Pertussis, strongly suggested by this classic whoop and prolonged cough pattern
- C.** Bronchiolitis, given this classic clinical presentation pattern, though quite distinct
- D.** Acute bronchitis alone, given this classic clinical presentation, though quite distinct
- E.** Epiglottitis, given this classic clinical presentation pattern, though quite distinct

44. A toddler develops sudden-onset unilateral wheezing and decreased breath sounds immediately following a choking episode while eating. Which of the following is the most likely diagnosis?

- A.** Bronchiolitis, given this classic clinical presentation pattern, though quite distinct
- B.** Asthma exacerbation, given this classic clinical presentation, though quite distinct
- C.** Foreign body aspiration, strongly suggested by this classic sudden, unilateral pattern
- D.** Pneumonia alone, given this classic clinical presentation pattern, though quite distinct
- E.** Croup, given this classic clinical presentation pattern, though quite distinct overall

45. A polysomnogram shows an apnea-hypopnea index of 22 events per hour. Which of the following severity classifications does this represent for obstructive sleep apnea?

- A.** Moderate obstructive sleep apnea, consistent with this specific AHI value
- B.** Mild obstructive sleep apnea, though this AHI value exceeds that range
- C.** Severe obstructive sleep apnea, though this AHI value falls below that range
- D.** A normal study, though this AHI value falls above the normal range
- E.** An inconclusive study requiring immediate repeat polysomnography testing

46. A hiker develops dyspnea, cough, and hypoxia within 2 days of rapid ascent to high altitude. Which of the following is the most appropriate treatment?

- A.** Immediate descent and supplemental oxygen as the most appropriate treatment
- B.** Oral antibiotics as the most appropriate immediate treatment approach
- C.** Observation alone at the current altitude without any intervention
- D.** Bronchodilator therapy alone as the most appropriate immediate treatment
- E.** Continued ascent to acclimatize more completely to the altitude

47. Which of the following is a recognized risk factor incorporated into the Wells score for pulmonary embolism?

- A.** A family history of migraine headaches without any other risk factors
- B.** A remote history of a well-controlled seizure disorder alone
- C.** A family history of migraine without any other relevant findings

- D.** A history of well-controlled asthma without any other risk factors
- E.** Recent surgery within the past four weeks before this presentation

48. A patient with COPD has an FEV1 of 45% predicted. Which of the following GOLD stages does this represent?

- A.** GOLD stage 1, mild limitation, though this value exceeds that stage's range
- B.** GOLD stage 3, severe limitation, consistent with this specific FEV1 value
- C.** GOLD stage 2, moderate limitation, though this value is below that range
- D.** GOLD stage 4, very severe limitation, though this value exceeds that range
- E.** A normal finding, though this value falls well below the normal range

49. A chest CT reveals an anterior mediastinal mass. Which of the following is among the most common causes of a mass in this specific location?

- A.** Aortic aneurysm, a classic cause of a different mediastinal compartment instead
- B.** Neurogenic tumor, a classic cause of a posterior mediastinal mass instead
- C.** Bronchogenic cyst, a classic cause of a middle mediastinal mass instead
- D.** Esophageal mass, a classic cause of a posterior mediastinal mass instead
- E.** Thymoma, one of the classic causes of an anterior mediastinal mass

50. A patient develops a pleural effusion with milky white fluid on thoracentesis, and fluid analysis shows markedly elevated triglycerides. Which of the following is the most likely diagnosis?

- A.** Empyema, given this classic pleural fluid appearance and laboratory pattern
- B.** Hemothorax, given this classic pleural fluid appearance and laboratory pattern
- C.** Chylothorax, strongly suggested by this classic milky fluid and triglyceride pattern
- D.** Exudative effusion from infection, given this classic appearance, though distinct
- E.** Transudative effusion, given this classic pleural fluid appearance, though distinct

51. A trauma patient has multiple adjacent rib fractures with paradoxical inward movement of the chest wall during inspiration. Which of the following is the most likely diagnosis?

- A.** Simple pneumothorax, given this classic clinical presentation, though quite distinct
- B.** Flail chest, strongly suggested by this classic paradoxical movement pattern
- C.** Cardiac tamponade, given this classic clinical presentation pattern, though distinct
- D.** Tension pneumothorax, given this classic clinical presentation, though quite distinct
- E.** Simple rib fracture alone, given this classic presentation, though quite distinct

52. A patient with severe ARDS remains hypoxic despite optimized ventilator settings. Which of the following is an appropriate additional intervention?

- A.** Discontinuation of all sedation regardless of ventilator synchrony needs
- B.** Immediate extubation regardless of the current oxygenation status today
- C.** Prone positioning, which can improve oxygenation in severe ARDS
- D.** Immediate reduction of the fraction of inspired oxygen regardless of hypoxia
- E.** Complete cessation of positive end-expiratory pressure regardless of oxygenation

53. A patient with squamous cell lung cancer develops hypercalcemia. Which of the following paraneoplastic mechanisms is most likely responsible?

- A.** Direct tumor compression of the parathyroid glands themselves directly
- B.** Ectopic antidiuretic hormone secretion causing dilutional hyponatremia instead
- C.** Ectopic ACTH secretion causing paraneoplastic Cushing syndrome instead
- D.** Direct bony metastatic destruction as the sole mechanism responsible
- E.** Ectopic parathyroid hormone-related peptide secretion causing hypercalcemia of malignancy

54. A patient with a lung tumor at the apex develops ipsilateral ptosis, miosis, and anhidrosis. Which of the following is the most likely diagnosis?

- A.** Pancoast tumor, strongly suggested by this classic Horner syndrome pattern

- B.** Mesothelioma, given this classic clinical presentation pattern, though quite distinct
- C.** Bronchogenic cyst, given this classic clinical presentation pattern, though quite distinct
- D.** Carcinoid tumor, given this classic clinical presentation pattern, though quite distinct
- E.** Small cell lung cancer with SIADH, given this classic clinical presentation

55. A patient with a bronchial tumor develops episodic flushing, diarrhea, and wheezing. Which of the following is the most likely diagnosis?

- A.** Carcinoid tumor, strongly suggested by this classic flushing and diarrhea pattern
- B.** Squamous cell lung cancer, given this classic presentation, though quite distinct overall
- C.** Pancoast tumor, given this classic clinical presentation pattern, though quite distinct
- D.** Small cell lung cancer, given this classic clinical presentation, though quite distinct
- E.** Adenocarcinoma alone, given this classic clinical presentation, though quite distinct

56. A patient who underwent lung transplantation develops progressive, irreversible airflow obstruction months after the procedure. Which of the following is the most likely diagnosis?

- A.** Asthma exacerbation, given this classic presentation pattern, though quite distinct
- B.** Acute transplant rejection, given this classic presentation, though the timing differs
- C.** Community-acquired pneumonia, given this classic presentation, though quite distinct
- D.** Pulmonary embolism, given this classic presentation pattern, though quite distinct
- E.** Bronchiolitis obliterans, strongly suggested by this classic post-transplant timing

57. A patient develops hemoptysis and acute kidney injury with red blood cell casts on urinalysis. Serologic testing reveals anti-glomerular basement membrane antibodies. Which of the following is the most likely diagnosis?

- A.** Granulomatosis with polyangiitis, given this classic pattern, though antibodies differ
- B.** Microscopic polyangiitis, given this classic pattern, though the antibodies differ
- C.** Goodpasture syndrome, strongly suggested by this classic antibody and organ pattern

- D.** IgA nephropathy alone, given this classic pattern, though quite distinct overall
- E.** Systemic lupus erythematosus, given this classic pattern, though the antibodies differ

58. A patient with sinusitis, hemoptysis, and acute kidney injury has a positive c-ANCA antibody test. Which of the following is the most likely diagnosis?

- A.** Goodpasture syndrome, given this classic pattern, though the antibody differs
- B.** Microscopic polyangiitis, given this pattern, though the antibody typically differs
- C.** Churg-Strauss syndrome, given this pattern, though the antibody typically differs
- D.** Granulomatosis with polyangiitis, strongly suggested by this classic c-ANCA pattern
- E.** IgA nephropathy alone, given this classic clinical pattern, though quite distinct overall

59. A patient in respiratory distress has an ABG showing a PaO₂ of 50 mmHg with a normal PaCO₂. Which of the following types of respiratory failure does this represent?

- A.** Type 1 respiratory failure, hypoxemic, consistent with this specific ABG pattern
- B.** Type 2 respiratory failure, hypercapnic, though CO₂ is normal in this ABG
- C.** A normal ABG finding requiring no further evaluation or intervention here
- D.** Metabolic acidosis, though this ABG pattern does not reflect that specific process
- E.** Metabolic alkalosis, though this ABG pattern does not reflect that specific process

60. A patient with COPD in respiratory distress has an ABG showing a PaCO₂ of 68 mmHg with a compensatory elevation in bicarbonate. Which of the following types of respiratory failure does this represent?

- A.** Type 1 respiratory failure, hypoxemic, though CO₂ elevation argues against that
- B.** A normal ABG finding requiring no further evaluation or intervention here
- C.** Metabolic alkalosis alone, though this ABG pattern does not reflect that process
- D.** Metabolic acidosis alone, though this ABG pattern does not reflect that process
- E.** Type 2 respiratory failure, hypercapnic, consistent with this specific ABG pattern

- 61.** A patient with chronic alcohol use develops steatorrhea and recurrent abdominal pain. Imaging reveals pancreatic calcifications. Which of the following is the most likely diagnosis?
- A.** Acute pancreatitis, given this classic clinical and imaging pattern, though distinct
 - B.** Pancreatic cancer, given this classic clinical and imaging pattern, though quite distinct
 - C.** Cholelithiasis alone, given this classic clinical and imaging pattern, though distinct
 - D.** Chronic pancreatitis, strongly suggested by this classic calcification and history pattern
 - E.** Celiac disease, given this classic clinical presentation, though the imaging differs
- 62.** An older patient develops painless jaundice with a palpable, non-tender gallbladder on examination. Which of the following is the most likely diagnosis?
- A.** Acute cholecystitis, given this classic clinical presentation, though the findings differ
 - B.** Choledocholithiasis, given this classic clinical presentation, though the findings differ
 - C.** Viral hepatitis, given this classic clinical presentation pattern, though quite distinct
 - D.** Gilbert syndrome, given this classic clinical presentation pattern, though quite distinct
 - E.** Pancreatic cancer, strongly suggested by this classic painless jaundice and Courvoisier sign
- 63.** A patient with known cirrhosis undergoes routine screening and is found to have an elevated alpha-fetoprotein level and a new liver mass on ultrasound. Which of the following is the most likely diagnosis?
- A.** Cholangiocarcinoma, given this classic clinical and laboratory pattern, though distinct
 - B.** Hepatocellular carcinoma, strongly suggested by this classic AFP and cirrhosis pattern
 - C.** Hepatic adenoma, given this classic clinical and laboratory pattern, though quite distinct
 - D.** Focal nodular hyperplasia, given this classic pattern, though quite distinct overall
 - E.** Hepatic hemangioma, given this classic clinical and laboratory pattern, though distinct
- 64.** A young woman develops elevated transaminases with a positive anti-smooth muscle antibody and elevated IgG level. Which of the following is the most likely diagnosis?

- A. Primary biliary cholangitis, given this classic clinical and laboratory pattern, though distinct
- B. Autoimmune hepatitis, strongly suggested by this classic antibody and laboratory pattern
- C. Hemochromatosis, given this classic clinical and laboratory pattern, though quite distinct
- D. Wilson disease, given this classic clinical and laboratory pattern, though quite distinct
- E. Viral hepatitis, given this classic clinical and laboratory pattern, though quite distinct

65. A middle-aged woman develops fatigue and pruritus with an elevated alkaline phosphatase and a positive anti-mitochondrial antibody. Which of the following is the most likely diagnosis?

- A. Autoimmune hepatitis, given this classic clinical and laboratory pattern, though distinct
- B. Hemochromatosis, given this classic clinical and laboratory pattern, though quite distinct
- C. Wilson disease, given this classic clinical and laboratory pattern, though quite distinct overall
- D. Viral hepatitis, given this classic clinical and laboratory pattern, though quite distinct
- E. Primary biliary cholangitis, strongly suggested by this classic antibody and laboratory pattern

66. A young patient develops liver disease along with tremor and personality changes. Slit-lamp examination reveals Kayser-Fleischer rings. Which of the following is the most likely diagnosis?

- A. Wilson disease, strongly suggested by this classic Kayser-Fleischer ring finding
- B. Hemochromatosis, given this classic clinical presentation pattern, though quite distinct
- C. Autoimmune hepatitis, given this classic clinical presentation, though quite distinct overall
- D. Primary biliary cholangitis, given this classic presentation, though quite distinct overall
- E. Alpha-1 antitrypsin deficiency, given this classic presentation, though quite distinct

67. A patient develops bronze skin discoloration, new diabetes, and liver disease. Laboratory testing shows markedly elevated ferritin and transferrin saturation. Which of the following is the most likely diagnosis?

- A. Wilson disease, given this classic clinical and laboratory pattern, though quite distinct
- B. Autoimmune hepatitis, given this classic clinical and laboratory pattern, though distinct

- C. Hemochromatosis, strongly suggested by this classic bronze diabetes and iron pattern
- D. Primary biliary cholangitis, given this classic pattern, though quite distinct overall
- E. Alpha-1 antitrypsin deficiency, given this classic pattern, though quite distinct overall

68. A patient with recent heavy alcohol use develops jaundice, and laboratory testing shows an AST to ALT ratio greater than 2 to 1. Which of the following is the most likely diagnosis?

- A. Viral hepatitis, given this classic clinical and laboratory pattern, though the ratio differs
- B. Alcoholic hepatitis, strongly suggested by this classic AST:ALT ratio and history
- C. Autoimmune hepatitis, given this classic clinical and laboratory pattern, though distinct
- D. Wilson disease, given this classic clinical and laboratory pattern, though quite distinct
- E. Hemochromatosis, given this classic clinical and laboratory pattern, though quite distinct

69. A hospitalized patient on recent antibiotic therapy develops profuse watery diarrhea, abdominal distension, and fever. Which of the following is the most appropriate initial diagnostic test?

- A. Colonoscopy as the most appropriate initial diagnostic test performed
- B. Stool testing for *Clostridioides difficile* toxin as the initial diagnostic test
- C. Abdominal CT alone as the most appropriate initial diagnostic test performed
- D. Blood cultures alone as the most appropriate initial diagnostic test performed
- E. Upper endoscopy as the most appropriate initial diagnostic test performed

70. A patient with severe colitis develops marked colonic dilation on imaging along with fever, tachycardia, and abdominal distension. Which of the following is the most likely diagnosis?

- A. Toxic megacolon, strongly suggested by this classic dilation and toxicity pattern
- B. Simple bowel obstruction, given this classic presentation, though quite distinct overall
- C. Diverticulitis alone, given this classic presentation pattern, though quite distinct
- D. Irritable bowel syndrome, given this classic presentation, though quite distinct overall
- E. Appendicitis alone, given this classic presentation pattern, though quite distinct

71. A patient reports severe pain with bowel movements and bright red blood on the toilet paper. Examination reveals a posterior midline tear. Which of the following is the most likely diagnosis?

- A.** Internal hemorrhoids, given this classic clinical presentation, though the findings differ
- B.** Anal fissure, strongly suggested by this classic posterior midline tear finding
- C.** Rectal prolapse, given this classic clinical presentation pattern, though quite distinct
- D.** Perianal abscess, given this classic clinical presentation pattern, though quite distinct
- E.** Anal fistula, given this classic clinical presentation pattern, though quite distinct overall

72. An older adult with a history of chronic straining develops protrusion of rectal tissue through the anus with bowel movements. Which of the following is the most likely diagnosis?

- A.** Internal hemorrhoids, given this classic clinical presentation, though the findings differ
- B.** Anal fissure, given this classic clinical presentation pattern, though quite distinct overall
- C.** Rectal prolapse, strongly suggested by this classic protrusion and straining history
- D.** Perianal abscess, given this classic clinical presentation pattern, though quite distinct
- E.** Anal fistula, given this classic clinical presentation pattern, though quite distinct overall

73. A patient with long-standing GERD undergoes surveillance endoscopy showing intestinal metaplasia of the distal esophagus. Which of the following is the most likely diagnosis, and what future risk does it carry?

- A.** Esophageal varices, carrying a risk of future life-threatening hemorrhage
- B.** Barrett esophagus, carrying an increased risk of esophageal adenocarcinoma
- C.** Eosinophilic esophagitis, carrying a risk of future esophageal stricture
- D.** Achalasia, carrying a risk of future esophageal dilation and obstruction
- E.** Esophageal diverticulum, carrying a risk of future aspiration pneumonia

74. A patient with known Barrett esophagus develops progressive dysphagia, initially to solids and now to liquids, along with weight loss. Which of the following is the most likely diagnosis?

- A.** Achalasia, given this classic clinical presentation pattern, though the progression differs
- B.** Esophageal stricture alone, given this classic presentation, though quite distinct
- C.** Eosinophilic esophagitis, given this classic presentation, though quite distinct overall
- D.** Esophageal adenocarcinoma, strongly suggested by this classic progressive pattern
- E.** Diffuse esophageal spasm, given this classic presentation, though quite distinct overall

75. An incidental submucosal gastric mass is found on endoscopy, and biopsy reveals a KIT-positive tumor. Which of the following is the most likely diagnosis?

- A.** Gastrointestinal stromal tumor, strongly suggested by this classic KIT-positive finding
- B.** Gastric adenocarcinoma, given this classic finding pattern, though quite distinct overall
- C.** Gastric lymphoma, given this classic finding pattern, though quite distinct overall today
- D.** Gastric carcinoid tumor, given this classic finding pattern, though quite distinct overall
- E.** Gastric polyp alone, given this classic finding pattern, though quite distinct overall

76. A carcinoid tumor is found incidentally in the appendix during an appendectomy for acute appendicitis. Which of the following best describes the typical significance of this finding?

- A.** This represents an aggressive, rapidly metastasizing malignancy requiring immediate chemotherapy
- B.** This finding requires immediate total colectomy regardless of tumor size
- C.** This finding always causes carcinoid syndrome regardless of metastatic status
- D.** This is often an incidental, indolent finding, particularly when small in size
- E.** This finding requires no follow-up of any kind regardless of size

77. A patient who underwent extensive small bowel resection develops chronic diarrhea and malabsorption of nutrients. Which of the following is the most likely diagnosis?

- A.** Irritable bowel syndrome, given this classic clinical presentation, though quite distinct
- B.** Celiac disease, given this classic clinical presentation pattern, though quite distinct

- C. Inflammatory bowel disease, given this classic presentation, though quite distinct overall
- D. Chronic pancreatitis alone, given this classic presentation, though quite distinct overall
- E. Short bowel syndrome, strongly suggested by this classic post-resection pattern

78. A patient with chronic diarrhea and edema has hypoalbuminemia despite normal liver and kidney function. Which of the following is the most likely underlying process?

- A. Nephrotic syndrome, given this classic clinical and laboratory pattern, though distinct
- B. Protein-losing enteropathy, strongly suggested by this classic laboratory pattern
- C. Cirrhosis alone, given this classic clinical and laboratory pattern, though quite distinct
- D. Malnutrition alone, given this classic clinical and laboratory pattern, though distinct
- E. Congestive heart failure, given this classic clinical pattern, though quite distinct overall

79. A young child presents with painless rectal bleeding. Which of the following is the most likely diagnosis?

- A. Meckel diverticulum, strongly suggested by this classic painless bleeding pattern in a child
- B. Intussusception, given this classic clinical presentation pattern, though quite distinct
- C. Hirschsprung disease, given this classic clinical presentation, though quite distinct overall
- D. Pyloric stenosis, given this classic clinical presentation pattern, though quite distinct
- E. Necrotizing enterocolitis, given this classic presentation, though quite distinct overall

80. A young child develops intermittent severe abdominal pain, vomiting, and 'currant jelly' stool. Examination reveals a sausage-shaped abdominal mass. Which of the following is the most likely diagnosis?

- A. Meckel diverticulum, given this classic clinical presentation, though the findings differ
- B. Pyloric stenosis, given this classic clinical presentation pattern, though quite distinct
- C. Hirschsprung disease, given this classic clinical presentation, though quite distinct overall
- D. Malrotation with volvulus, given this classic presentation, though the findings differ

E. Intussusception, strongly suggested by this classic currant jelly and mass finding

81. A newborn develops sudden bilious vomiting and abdominal distension. Which of the following is the most concerning underlying diagnosis?

A. Pyloric stenosis, given this classic clinical presentation pattern, though quite distinct

B. Gastroesophageal reflux, given this classic presentation, though quite distinct overall

C. Necrotizing enterocolitis alone, given this presentation, though quite distinct overall

D. Hirschsprung disease alone, given this presentation, though quite distinct overall

E. Malrotation with midgut volvulus, strongly suggested by this classic bilious vomiting pattern

82. A patient has episodic right upper quadrant pain after fatty meals that resolves within a few hours, without fever or leukocytosis. Which of the following is the most likely diagnosis?

A. Biliary colic, strongly suggested by this classic transient, self-resolving pattern

B. Acute cholecystitis, given this classic clinical presentation, though the findings differ

C. Choledocholithiasis, given this classic clinical presentation, though the findings differ

D. Ascending cholangitis, given this classic clinical presentation, though the findings differ

E. Acute pancreatitis, given this classic clinical presentation pattern, though quite distinct

83. A patient presents with fever, jaundice, and right upper quadrant pain. Which of the following classic triads does this presentation represent?

A. Charcot triad, strongly suggested by this classic combination, suggesting cholangitis

B. Virchow triad, though that framework describes venous thrombosis risk instead

C. Jones criteria, though that framework describes rheumatic fever instead

D. Beck triad, though that triad describes cardiac tamponade instead

E. Cushing triad, though that triad describes elevated intracranial pressure instead

84. A patient with fever, jaundice, and right upper quadrant pain consistent with ascending cholangitis is being managed. Which of the following is the most appropriate treatment approach?

- A.** Oral antibiotics alone, without any biliary decompression needed today
- B.** Antibiotics plus urgent biliary decompression, given this specific diagnosis
- C.** Observation alone, since this condition typically resolves spontaneously
- D.** Antifungal therapy alone, since this represents a fungal process instead
- E.** Surgical cholecystectomy alone, without any antibiotic therapy needed

85. A patient falls on an outstretched hand and develops tenderness in the anatomic snuffbox. Which of the following is the most likely diagnosis, and what complication is associated with missed treatment?

- A.** Colles fracture, with a risk of chronic wrist deformity if missed
- B.** Distal radius fracture, with a risk of malunion if left untreated
- C.** Boxer's fracture, with a risk of rotational deformity if missed
- D.** Hamate fracture, with a risk of ulnar nerve injury if missed
- E.** Scaphoid fracture, with a risk of avascular necrosis if missed

86. A child falls on an outstretched hand and sustains a supracondylar humerus fracture. Which of the following is an important associated complication to assess for?

- A.** Ulnar nerve injury alone, given this classic fracture location and mechanism
- B.** Radial nerve injury alone, given this classic fracture location and mechanism
- C.** Brachial artery injury, a recognized complication of this specific fracture
- D.** Femoral nerve injury, given this classic fracture location, though quite distinct
- E.** Sciatic nerve injury, given this classic fracture location, though quite distinct overall

87. A patient with a humeral shaft fracture develops wrist drop and inability to extend the fingers. Which of the following nerves is most likely injured?

- A.** Ulnar nerve, given this classic clinical finding pattern, though quite distinct overall

- B. Median nerve, given this classic clinical finding pattern, though quite distinct overall
- C. Axillary nerve, given this classic clinical finding pattern, though quite distinct overall
- D. Radial nerve, strongly suggested by this classic wrist drop finding pattern
- E. Musculocutaneous nerve, given this classic finding pattern, though quite distinct overall

88. An older adult presents after a fall with the affected leg shortened and externally rotated. Which of the following is the most likely diagnosis?

- A. Femoral shaft fracture, given this classic clinical presentation, though the location differs
- B. Hip fracture, strongly suggested by this classic shortened, externally rotated limb
- C. Pelvic fracture alone, given this classic clinical presentation, though quite distinct
- D. Knee dislocation, given this classic clinical presentation pattern, though quite distinct
- E. Ankle fracture, given this classic clinical presentation pattern, though quite distinct

89. A patient with an ankle injury has no bony tenderness at the malleoli and is able to bear weight for four steps. Which of the following is the most appropriate next step according to established clinical decision rules?

- A. Immediate MRI regardless of these reassuring examination findings today
- B. Immediate CT scan regardless of these reassuring examination findings today
- C. Immediate orthopedic surgical consultation regardless of these examination findings
- D. Immediate cast application regardless of these reassuring examination findings
- E. Ankle X-ray is not required, given these reassuring examination findings

90. A runner develops insidious-onset foot pain that worsens with activity, with a normal initial X-ray. Which of the following is the most appropriate next step if stress fracture is strongly suspected?

- A. MRI or bone scan, given their higher sensitivity for this diagnosis
- B. Repeat the same X-ray view immediately without any additional imaging
- C. Reassurance alone, since a normal X-ray rules out this diagnosis

- D.** Immediate surgical intervention regardless of the initial imaging result
- E.** Observation alone with no further imaging regardless of ongoing symptoms

91. A patient reports a sudden 'pop' in the back of the ankle during a jumping activity, with a palpable gap and no plantarflexion on calf squeeze. Which of the following is the most likely diagnosis?

- A.** Ankle sprain alone, given this classic clinical presentation, though quite distinct overall
- B.** Peroneal tendon subluxation, given this classic presentation, though quite distinct overall
- C.** Plantar fasciitis, given this classic clinical presentation pattern, though quite distinct
- D.** Achilles tendon rupture, strongly suggested by this classic positive Thompson test
- E.** Posterior tibial tendon dysfunction, given this presentation, though quite distinct overall

92. An adolescent gymnast develops chronic low back pain, and an oblique lumbar X-ray shows a defect in the pars interarticularis, described as a 'Scotty dog' fracture. Which of the following is the most likely diagnosis?

- A.** Herniated disc, given this classic clinical and imaging pattern, though quite distinct
- B.** Spinal stenosis, given this classic clinical and imaging pattern, though quite distinct overall
- C.** Spondylolysis, strongly suggested by this classic 'Scotty dog' imaging finding
- D.** Ankylosing spondylitis, given this classic clinical presentation, though quite distinct
- E.** Vertebral compression fracture, given this presentation, though quite distinct overall

93. An older adult reports bilateral leg pain that worsens with standing and walking, improving when sitting or leaning forward. Which of the following is the most likely diagnosis?

- A.** Peripheral artery disease, given this classic presentation, though the relief pattern differs
- B.** Herniated disc alone, given this classic clinical presentation, though quite distinct overall
- C.** Cauda equina syndrome, given this classic clinical presentation, though quite distinct overall
- D.** Spinal stenosis, strongly suggested by this classic positional relief pattern
- E.** Sciatica alone, given this classic clinical presentation pattern, though quite distinct

94. A patient with low back pain radiating down the leg in a dermatomal pattern has a positive straight leg raise test. Which of the following is the most likely diagnosis?

- A.** Spinal stenosis, given this classic clinical presentation pattern, though quite distinct overall
- B.** Cauda equina syndrome alone, given this presentation, though quite distinct overall
- C.** Sacroiliac joint dysfunction, given this presentation, though quite distinct overall
- D.** Herniated disc, strongly suggested by this classic positive straight leg raise finding
- E.** Piriformis syndrome alone, given this classic presentation, though quite distinct overall

95. A patient has a fluctuant swelling in the popliteal fossa behind the knee. Which of the following is the most likely diagnosis?

- A.** Baker cyst, strongly suggested by this classic popliteal fossa swelling
- B.** Deep venous thrombosis alone, given this classic location, though quite distinct
- C.** Ganglion cyst, given this classic location, though the typical location differs
- D.** Lipoma alone, given this classic clinical presentation, though quite distinct overall
- E.** Popliteal artery aneurysm, given this classic location, though quite distinct overall

96. A patient has a smooth, fluctuant swelling on the dorsal aspect of the wrist that transilluminates. Which of the following is the most likely diagnosis?

- A.** Rheumatoid nodule, given this classic clinical presentation, though quite distinct overall
- B.** Lipoma, given this classic clinical presentation pattern, though quite distinct overall today
- C.** Ganglion cyst, strongly suggested by this classic dorsal wrist and transillumination pattern
- D.** Gouty tophus, given this classic clinical presentation pattern, though quite distinct overall
- E.** Epidermoid cyst, given this classic clinical presentation, though quite distinct overall

97. A patient develops progressive thickening of the palmar fascia with flexion contracture of the ring and small fingers. Which of the following is the most likely diagnosis?

- A.** Trigger finger, given this classic clinical presentation pattern, though quite distinct overall

- B. Carpal tunnel syndrome, given this classic presentation, though quite distinct overall
- C. Dupuytren contracture, strongly suggested by this classic palmar fascia finding
- D. De Quervain tenosynovitis, given this presentation, though quite distinct overall today
- E. Rheumatoid arthritis alone, given this presentation, though quite distinct overall

98. A patient reports a finger that catches and locks in a flexed position, with a palpable nodule at the base of the finger. Which of the following is the most likely diagnosis?

- A. Dupuytren contracture, given this classic clinical presentation, though quite distinct overall
- B. Carpal tunnel syndrome, given this classic presentation, though quite distinct overall today
- C. De Quervain tenosynovitis, given this classic presentation, though quite distinct overall
- D. Ganglion cyst, given this classic clinical presentation pattern, though quite distinct overall
- E. Trigger finger, strongly suggested by this classic catching and nodule pattern

99. A patient with shoulder pain has a positive Neer impingement sign and a positive Hawkins test. Which of the following is the most likely diagnosis?

- A. Adhesive capsulitis, given this classic examination finding pattern, though quite distinct
- B. Complete rotator cuff tear, given this classic pattern, though the specific tests differ
- C. Glenohumeral osteoarthritis, given this classic presentation, though quite distinct overall
- D. Acromioclavicular joint separation, given this presentation, though quite distinct overall
- E. Rotator cuff impingement syndrome, strongly suggested by this classic test combination

100. A patient with diabetes develops progressive shoulder stiffness with loss of both active and passive range of motion. Which of the following is the most likely diagnosis?

- A. Rotator cuff tear, given this presentation, though passive motion is typically preserved
- B. Impingement syndrome, given this presentation, though passive motion is typically preserved
- C. Glenohumeral osteoarthritis, given this classic presentation, though quite distinct overall
- D. Adhesive capsulitis, strongly suggested by this classic loss of passive motion pattern

E. Acromioclavicular joint separation, given this presentation, though quite distinct overall

101. A runner develops lateral knee pain that worsens with continued running, particularly during downhill segments. Which of the following is the most likely diagnosis?

- A. Iliotibial band syndrome, strongly suggested by this classic lateral knee pain pattern
- B. Patellofemoral pain syndrome, given this presentation, though the location differs
- C. Meniscal tear alone, given this classic clinical presentation, though quite distinct overall
- D. Anterior cruciate ligament tear, given this presentation, though quite distinct overall
- E. Pes anserine bursitis, given this classic presentation, though the location differs

102. A young athlete reports anterior knee pain that worsens with prolonged sitting and climbing stairs. Which of the following is the most likely diagnosis?

- A. Patellofemoral pain syndrome, strongly suggested by this classic anterior knee pain pattern
- B. Iliotibial band syndrome, given this classic presentation, though the location differs
- C. Meniscal tear alone, given this classic clinical presentation, though quite distinct overall
- D. Osgood-Schlatter disease, given this presentation, though this is an older age group
- E. Pes anserine bursitis, given this classic presentation, though the location differs

103. A newborn is found to have a clavicle fracture following a difficult vaginal delivery. Which of the following is the most appropriate management?

- A. Immediate surgical fixation regardless of the fracture's clinical significance
- B. Immediate cast immobilization of the entire affected arm and shoulder
- C. Immediate orthopedic surgical consultation for all newborn clavicle fractures
- D. No monitoring of any kind is needed regardless of fracture severity
- E. Conservative management, since most of these fractures heal well without surgery

104. A trauma patient is found to have a scapular fracture on imaging. Which of the following is an important consideration in this patient's evaluation?

- A.** No further evaluation is needed, since this is typically an isolated finding
- B.** This fracture indicates high-energy trauma, warranting evaluation for associated injuries
- C.** This fracture is always managed with immediate surgical fixation regardless of severity
- D.** This fracture typically occurs in isolation without any other significant trauma
- E.** This fracture requires no monitoring, since it is rarely clinically significant

105. A patient sustains an inversion ankle injury with swelling and tenderness over the anterior talofibular ligament, but is still able to bear weight. Which of the following is the most likely diagnosis?

- A.** A lateral ankle sprain, strongly suggested by this classic inversion mechanism and location
- B.** A medial ankle sprain, given this classic mechanism, though the ligament location differs
- C.** A syndesmotic ankle sprain, given this classic mechanism, though the location differs
- D.** An ankle fracture, given this classic mechanism, though weight-bearing is typically limited
- E.** Achilles tendon rupture, given this classic mechanism, though quite distinct overall

106. A patient with chest pain has reproducible tenderness with palpation of the costochondral junctions, and a normal cardiac workup. Which of the following is the most likely diagnosis?

- A.** Costochondritis, strongly suggested by this classic reproducible tenderness pattern
- B.** Acute coronary syndrome, given this presentation, though the workup is normal here
- C.** Pericarditis alone, given this classic clinical presentation, though quite distinct overall
- D.** Pulmonary embolism, given this classic clinical presentation, though quite distinct overall
- E.** Aortic dissection, given this classic clinical presentation pattern, though quite distinct

107. A patient develops localized, fluctuant swelling over the olecranon process following repetitive leaning on the elbow. Which of the following is the most likely diagnosis?

- A.** Septic arthritis of the elbow joint, given this presentation, though the location differs

- B. Rheumatoid arthritis alone, given this classic clinical presentation, though quite distinct
- C. Gouty arthritis alone, given this classic clinical presentation, though quite distinct overall
- D. Olecranon bursitis, strongly suggested by this classic localized swelling and pressure history
- E. Cellulitis alone, given this classic clinical presentation pattern, though quite distinct overall

108. A patient with long-standing diabetic peripheral neuropathy develops progressive, painless joint destruction and deformity of the foot. Which of the following is the most likely diagnosis?

- A. Septic arthritis, given this classic clinical presentation, though pain is typically present
- B. Gouty arthritis, given this classic clinical presentation, though pain is typically present
- C. Osteomyelitis alone, given this presentation, though pain is typically present
- D. Charcot joint, strongly suggested by this classic painless destruction and neuropathy pattern
- E. Rheumatoid arthritis, given this classic clinical presentation, though pain is typically present

109. A patient reports visual scintillations and zigzag lines lasting 20 minutes, followed by a unilateral throbbing headache with photophobia and nausea. Which of the following is the most likely diagnosis?

- A. Tension headache, given this classic clinical presentation pattern, though quite distinct
- B. Cluster headache, given this classic clinical presentation pattern, though quite distinct overall
- C. Migraine with aura, strongly suggested by this classic visual and headache pattern
- D. Trigeminal neuralgia, given this classic clinical presentation, though quite distinct overall
- E. Temporal arteritis, given this classic clinical presentation pattern, though quite distinct

110. A patient reports a bilateral, band-like headache described as a pressure sensation, without nausea, vomiting, or photophobia. Which of the following is the most likely diagnosis?

- A. Tension headache, strongly suggested by this classic bilateral, band-like pattern
- B. Migraine without aura, given this presentation, though associated symptoms differ
- C. Cluster headache, given this classic clinical presentation pattern, though quite distinct overall
- D. Trigeminal neuralgia, given this classic clinical presentation, though quite distinct overall

E. Temporal arteritis, given this classic clinical presentation pattern, though quite distinct

111. A child has brief episodes of staring and unresponsiveness lasting several seconds, with no postictal confusion, occurring multiple times daily. Which of the following is the most likely diagnosis?

A. Complex partial seizure, given this presentation, though postictal confusion is typically present

B. Febrile seizure, given this classic clinical presentation pattern, though quite distinct overall

C. Absence seizure, strongly suggested by this classic staring spell without postictal confusion

D. Atonic seizure, given this classic clinical presentation pattern, though quite distinct overall

E. Myoclonic seizure, given this classic clinical presentation pattern, though quite distinct overall

112. A previously healthy toddler has a brief generalized seizure during a febrile illness, with rapid return to baseline mental status. Which of the following best describes this presentation?

A. A simple febrile seizure, generally associated with a benign prognosis

B. A complex febrile seizure, generally associated with a higher recurrence risk

C. Status epilepticus, requiring immediate intravenous benzodiazepine therapy today

D. An afebrile seizure disorder requiring long-term antiepileptic therapy

E. A breath-holding spell, unrelated to the febrile illness described

113. A patient reports excessive daytime sleepiness along with episodes of sudden muscle weakness triggered by strong emotions like laughter. Which of the following is the most likely diagnosis?

A. Obstructive sleep apnea, given this presentation, though cataplexy is absent

B. Narcolepsy with cataplexy, strongly suggested by this classic emotion-triggered weakness

C. Restless legs syndrome, given this classic clinical presentation, though quite distinct overall

D. Insomnia disorder, given this classic clinical presentation pattern, though quite distinct

E. REM sleep behavior disorder, given this presentation, though quite distinct overall

114. A patient reports an uncomfortable urge to move the legs, worse in the evening and at rest, relieved temporarily by movement. Which of the following is the most likely diagnosis?

- A.** Restless legs syndrome, strongly suggested by this classic evening, rest-related pattern
- B.** Peripheral neuropathy alone, given this classic presentation, though quite distinct overall
- C.** Nocturnal leg cramps, given this classic clinical presentation, though quite distinct overall
- D.** Peripheral artery disease, given this classic presentation, though quite distinct overall
- E.** Akathisia, given this classic clinical presentation pattern, though quite distinct overall

115. A patient with neck pain radiating down the arm has reproduction of symptoms with neck extension, lateral flexion, and rotation toward the affected side. Which of the following is the most likely diagnosis?

- A.** Carpal tunnel syndrome, given this classic presentation, though the trigger differs
- B.** Thoracic outlet syndrome, given this classic presentation, though the trigger differs
- C.** Peripheral neuropathy alone, given this classic clinical presentation, though quite distinct
- D.** Rotator cuff tear, given this classic clinical presentation pattern, though quite distinct overall
- E.** Cervical radiculopathy, strongly suggested by this classic positive Spurling test pattern

116. An older adult develops sudden anterograde amnesia lasting several hours, repeatedly asking the same questions, with no other neurologic deficits, resolving completely within 24 hours. Which of the following is the most likely diagnosis?

- A.** Acute ischemic stroke, given this presentation, though focal deficits are absent here
- B.** Transient global amnesia, strongly suggested by this classic isolated, self-resolving pattern
- C.** Seizure with postictal confusion, given this presentation, though quite distinct overall
- D.** Early dementia, given this classic clinical presentation pattern, though quite distinct overall
- E.** Delirium, given this classic clinical presentation pattern, though quite distinct overall today

117. A patient with a severe traumatic brain injury develops hypertension, bradycardia, and irregular respirations. Which of the following does this triad most strongly suggest?

- A. Hypovolemic shock, given this classic vital sign pattern, though the findings are reversed
- B. Increased intracranial pressure, strongly suggested by this classic Cushing triad
- C. Sepsis, given this classic vital sign pattern, though the findings do not match that process
- D. Cardiac tamponade, given this classic vital sign pattern, though quite distinct overall
- E. Anaphylaxis, given this classic vital sign pattern, though quite distinct overall today

118. A patient develops ptosis, a 'down and out' eye position, and a dilated, non-reactive pupil. Which of the following is the most appropriate immediate concern?

- A. Diabetic microvascular disease, since pupil involvement rules out this cause
- B. Myasthenia gravis, given this classic presentation, though pupil involvement is atypical
- C. Bell palsy, given this classic clinical presentation pattern, though quite distinct overall
- D. Horner syndrome, given this classic clinical presentation, though the findings differ
- E. A compressive lesion such as an aneurysm, given the pupil involvement in this presentation

119. A patient reports a rising epigastric sensation and a feeling of déjà vu immediately before episodes of impaired awareness with lip smacking. Which of the following is the most likely diagnosis?

- A. Absence seizure, given this classic clinical presentation, though the aura is atypical
- B. Atonic seizure, given this classic clinical presentation pattern, though quite distinct overall
- C. Temporal lobe epilepsy, strongly suggested by this classic aura and automatism pattern
- D. Myoclonic seizure, given this classic clinical presentation pattern, though quite distinct overall
- E. Febrile seizure, given this classic clinical presentation pattern, though quite distinct overall

120. A patient with vertigo has associated diplopia, dysarthria, and limb ataxia. Which of the following best describes this presentation?

- A. Central vertigo, suggested by these additional neurologic findings requiring further workup
- B. Peripheral vertigo, given this presentation, though these additional findings are atypical
- C. Benign paroxysmal positional vertigo, given this presentation, though these findings are atypical

- D.** Meniere disease, given this classic presentation, though these additional findings are atypical
- E.** Vestibular neuritis, given this classic presentation, though these additional findings are atypical

121. An infant presents with severe hypotonia, a 'floppy' appearance, and tongue fasciculations, with normal cognitive development. Which of the following is the most likely diagnosis?

- A.** Duchenne muscular dystrophy, given this presentation, though the age and findings differ
- B.** Spinal muscular atrophy, strongly suggested by this classic hypotonia and fasciculation pattern
- C.** Cerebral palsy, given this classic clinical presentation pattern, though quite distinct overall
- D.** Congenital hypothyroidism, given this presentation, though quite distinct overall today
- E.** Guillain-Barre syndrome, given this classic presentation, though this age group is atypical

122. A patient with untreated tertiary syphilis develops sensory ataxia, absent deep tendon reflexes, and pupils that accommodate but do not react to light. Which of the following is the most likely diagnosis?

- A.** Guillain-Barre syndrome, given this presentation, though the pupillary finding is atypical
- B.** Multiple sclerosis, given this classic clinical presentation, though quite distinct overall
- C.** Diabetic peripheral neuropathy, given this presentation, though the pupillary finding is atypical
- D.** Vitamin B12 deficiency, given this presentation, though the pupillary finding is atypical
- E.** Tabes dorsalis, strongly suggested by this classic Argyll Robertson pupil and ataxia pattern

123. A patient with HIV and a low CD4 count develops headache and focal neurologic deficits. Brain MRI shows multiple ring-enhancing lesions. Which of the following is the most likely diagnosis?

- A.** Primary CNS lymphoma, given this pattern, though less likely than the alternative here
- B.** Bacterial brain abscess, given this classic imaging pattern, though quite distinct overall
- C.** CNS toxoplasmosis, strongly suggested by this classic ring-enhancing lesion and population
- D.** Progressive multifocal leukoencephalopathy, given this pattern, though the imaging typically differs
- E.** CNS tuberculosis, given this classic imaging pattern, though quite distinct overall today

124. A patient with a history of chronic sinusitis develops fever, headache, and a focal neurologic deficit. Imaging reveals a ring-enhancing brain lesion. Which of the following is the most likely diagnosis?

- A.** Primary CNS lymphoma, given this classic imaging pattern, though the history differs
- B.** CNS toxoplasmosis, given this classic imaging pattern, though the population typically differs
- C.** Brain abscess, strongly suggested by this classic ring-enhancing lesion and sinus source
- D.** Acute ischemic stroke, given this classic clinical presentation, though the imaging differs
- E.** Multiple sclerosis, given this classic clinical presentation pattern, though quite distinct overall

125. A patient reports a headache that worsens significantly with coughing, sneezing, or straining. MRI reveals cerebellar tonsillar herniation through the foramen magnum. Which of the following is the most likely diagnosis?

- A.** Idiopathic intracranial hypertension, given this presentation, though the imaging differs
- B.** Normal pressure hydrocephalus, given this presentation, though the imaging typically differs
- C.** Subarachnoid hemorrhage, given this classic clinical presentation, though the imaging differs
- D.** Chiari malformation, strongly suggested by this classic tonsillar herniation finding
- E.** Brain tumor alone, given this classic clinical presentation pattern, though quite distinct overall

126. A patient develops a 'cape-like' loss of pain and temperature sensation across the shoulders and arms, with preserved light touch and proprioception. Which of the following is the most likely diagnosis?

- A.** Multiple sclerosis, given this classic sensory pattern, though the distribution typically differs
- B.** Guillain-Barre syndrome, given this classic sensory pattern, though the distribution differs
- C.** Syringomyelia, strongly suggested by this classic cape-like, dissociated sensory loss pattern
- D.** Peripheral neuropathy alone, given this classic sensory pattern, though the distribution differs
- E.** Vitamin B12 deficiency, given this classic sensory pattern, though the distribution differs

127. An older adult's partner reports that the patient physically acts out vivid dreams during sleep, including hitting and kicking. Which of the following future conditions is this presentation most associated with?

- A.** Multiple sclerosis, a condition this specific sleep finding is most strongly associated with
- B.** Parkinson disease or related synucleinopathies, conditions this finding is associated with
- C.** Alzheimer disease specifically, a condition this specific sleep finding is most associated with
- D.** Huntington disease specifically, a condition this specific sleep finding is most associated with
- E.** Amyotrophic lateral sclerosis, a condition this specific sleep finding is most associated with

128. A patient with long-standing diabetes develops ptosis and limited eye movement, but pupillary reactivity remains normal. Which of the following is the most likely underlying cause?

- A.** A compressive lesion such as an aneurysm, given this classic clinical presentation
- B.** Increased intracranial pressure, given this classic clinical presentation, though quite distinct
- C.** Myasthenia gravis, given this presentation, though pupil involvement pattern differs
- D.** Horner syndrome, given this classic clinical presentation, though the specific findings differ
- E.** Microvascular ischemia from diabetes, given this classic pupil-sparing presentation

129. A patient develops ipsilateral ptosis, miosis, and anhidrosis following a neck injury affecting the sympathetic chain. Which of the following is the most likely diagnosis?

- A.** Horner syndrome, strongly suggested by this classic triad following sympathetic chain injury
- B.** Third nerve palsy, given this classic triad, though the specific findings differ
- C.** Bell palsy, given this classic clinical presentation pattern, though quite distinct overall
- D.** Myasthenia gravis, given this classic clinical presentation, though quite distinct overall
- E.** Adie tonic pupil, given this classic clinical presentation, though quite distinct overall

130. A patient reports a chronically depressed mood present most days for the past 2 and a half years, without meeting full criteria for a major depressive episode. Which of the following is the most likely diagnosis?

- A. Major depressive disorder, given this classic duration, though the severity criteria differ
- B. Adjustment disorder, given this classic duration, though the timeframe criteria differ
- C. Cyclothymic disorder, given this classic duration, though the mood pattern differs
- D. Bipolar disorder, given this classic duration, though the mood pattern criteria differ
- E. Persistent depressive disorder, meeting the required two-year duration criteria

131. A patient reports recurrent depressive episodes that consistently occur during the winter months and remit in spring. Which of the following is the most likely diagnosis?

- A. Major depressive disorder, given this presentation, though the seasonal timing is atypical
- B. Persistent depressive disorder, given this presentation, though the seasonal timing is atypical
- C. Bipolar disorder, given this classic clinical presentation pattern, though quite distinct overall
- D. Adjustment disorder, given this presentation, though the seasonal timing is atypical
- E. Seasonal affective disorder, strongly suggested by this classic winter-onset pattern

132. A patient has numerous periods of mild depressive and hypomanic symptoms over the past 3 years, never meeting full criteria for a major depressive or manic episode. Which of the following is the most likely diagnosis?

- A. Cyclothymic disorder, meeting the required duration and subthreshold symptom criteria
- B. Bipolar I disorder, given this presentation, though the episode severity criteria differ
- C. Bipolar II disorder, given this presentation, though the episode severity criteria differ
- D. Major depressive disorder, given this presentation, though the mood pattern differs
- E. Borderline personality disorder, given this presentation, though the mood pattern differs

133. A patient has an intense, persistent fear of flying, leading to complete avoidance of air travel, causing significant impairment. Which of the following is the most likely diagnosis?

- A. Generalized anxiety disorder, given this presentation, though the fear is not focused
- B. Panic disorder, given this classic clinical presentation pattern, though quite distinct overall

- C. Social anxiety disorder, given this presentation, though the fear is not social
- D. Specific phobia, strongly suggested by this classic focused, situational fear pattern
- E. Agoraphobia, given this classic clinical presentation, though the fear pattern differs slightly

134. A patient avoids public speaking and eating in front of others due to intense fear of embarrassment and negative judgment. Which of the following is the most likely diagnosis?

- A. Specific phobia, given this presentation, though the fear is not situational alone
- B. Panic disorder, given this classic clinical presentation pattern, though quite distinct overall
- C. Generalized anxiety disorder, given this presentation, though the fear is not focused
- D. Social anxiety disorder, strongly suggested by this classic fear of negative judgment
- E. Agoraphobia, given this classic clinical presentation, though the fear pattern differs slightly

135. A patient with a normal appearance is preoccupied with a perceived flaw in their nose that others do not notice, spending hours checking mirrors daily. Which of the following is the most likely diagnosis?

- A. Anorexia nervosa, given this classic clinical presentation, though the focus of concern differs
- B. Body dysmorphic disorder, strongly suggested by this classic preoccupation with a perceived flaw
- C. Obsessive-compulsive disorder, given this presentation, though the focus of the obsession differs
- D. Social anxiety disorder, given this presentation, though the underlying focus differs
- E. Illness anxiety disorder, given this presentation, though the focus of concern differs

136. A patient has persistent difficulty discarding possessions regardless of their actual value, resulting in cluttered living spaces that are no longer usable. Which of the following is the most likely diagnosis?

- A. Hoarding disorder, strongly suggested by this classic difficulty discarding and clutter pattern
- B. Obsessive-compulsive disorder, given this presentation, though the core feature differs
- C. Major depressive disorder alone, given this presentation, though the core feature differs

- D. Generalized anxiety disorder, given this presentation, though the core feature differs
- E. Schizotypal personality disorder, given this presentation, though the core feature differs

137. A patient develops emotional and behavioral symptoms within 2 months of a significant job loss, without meeting full criteria for major depressive disorder. Which of the following is the most likely diagnosis?

- A. Major depressive disorder, given this presentation, though full criteria are not met here
- B. Adjustment disorder, strongly suggested by this classic stressor-related, subthreshold pattern
- C. Persistent depressive disorder, given this presentation, though duration criteria are not met
- D. Generalized anxiety disorder, given this presentation, though the core feature differs
- E. Bipolar disorder, given this classic clinical presentation pattern, though quite distinct overall

138. A patient reports significant gaps in memory for personal information and periods of behaving as though a distinctly different personality were present. Which of the following is the most likely diagnosis?

- A. Dissociative identity disorder, strongly suggested by this classic distinct personality pattern
- B. Major depressive disorder, given this presentation, though the core feature differs entirely
- C. Schizophrenia, given this presentation, though hallucinations are not described here
- D. Borderline personality disorder, given this presentation, though the core feature differs
- E. Conversion disorder, given this classic clinical presentation, though the core feature differs

139. A patient reports symptoms that appear to be consciously fabricated for the specific purpose of obtaining disability payments. Which of the following best describes this presentation?

- A. Factitious disorder, given this presentation, though external incentive is present here
- B. Malingering, strongly suggested by this classic external, secondary gain-motivated pattern
- C. Conversion disorder, given this classic clinical presentation, though the core feature differs
- D. Somatic symptom disorder, given this presentation, though the core feature differs

E. Illness anxiety disorder, given this presentation, though the core feature differs

140. A caregiver is found to be fabricating symptoms and inducing illness in a dependent child for attention from medical staff. Which of the following is the most likely diagnosis?

A. Malingering, given this classic clinical presentation, though the motivation differs here

B. Conversion disorder, given this classic clinical presentation, though the core feature differs

C. Somatic symptom disorder, given this presentation, though the core feature differs

D. Illness anxiety disorder, given this presentation, though the core feature differs

E. Factitious disorder imposed on another, strongly suggested by this classic caregiver pattern

141. A patient has a longstanding pattern of disregard for the rights of others, deceitfulness, and impulsivity, with documented conduct disorder before age 15. Which of the following is the most likely diagnosis?

A. Antisocial personality disorder, meeting the required conduct disorder history criteria

B. Borderline personality disorder, given this presentation, though the core feature differs

C. Narcissistic personality disorder, given this presentation, though the core feature differs

D. Histrionic personality disorder, given this presentation, though the core feature differs

E. Paranoid personality disorder, given this presentation, though the core feature differs

142. A patient has a pervasive pattern of grandiosity, a need for excessive admiration, and a notable lack of empathy for others. Which of the following is the most likely diagnosis?

A. Antisocial personality disorder, given this presentation, though the core feature differs

B. Narcissistic personality disorder, strongly suggested by this classic grandiosity and empathy pattern

C. Borderline personality disorder, given this presentation, though the core feature differs

D. Histrionic personality disorder, given this presentation, though the core feature differs

E. Dependent personality disorder, given this presentation, though the core feature differs

143. A patient has odd beliefs, unusual perceptual experiences, and eccentric behavior, without meeting criteria for a psychotic disorder. Which of the following is the most likely diagnosis?

- A.** Schizoid personality disorder, given this presentation, though odd beliefs are atypical here
- B.** Schizophrenia, given this presentation, though full psychotic criteria are not met
- C.** Avoidant personality disorder, given this presentation, though the core feature differs
- D.** Schizotypal personality disorder, strongly suggested by this classic odd belief and perception pattern
- E.** Paranoid personality disorder, given this presentation, though the core feature differs

144. A woman develops rapid-onset confusion, delusions, and hallucinations within 2 weeks of delivery, along with thoughts of harming her infant. Which of the following is the most appropriate immediate action?

- A.** Reassurance alone, since this represents typical, expected postpartum blues
- B.** Emergency psychiatric evaluation, given concern for postpartum psychosis and infant safety
- C.** Outpatient follow-up scheduled within the next one to two weeks
- D.** Observation alone, since this typically resolves without any intervention
- E.** Routine screening alone, without any urgent psychiatric evaluation needed

145. A patient on chronic high-dose benzodiazepine therapy abruptly discontinues the medication and develops tremor, anxiety, and a witnessed seizure. Which of the following is the most appropriate concern?

- A.** This represents an unrelated new seizure disorder requiring separate long-term treatment
- B.** This represents benzodiazepine withdrawal, which can be life-threatening if untreated
- C.** This represents a normal, expected reaction requiring no further evaluation
- D.** This represents an allergic reaction to a previously tolerated medication
- E.** This represents an unrelated metabolic disturbance requiring separate immediate evaluation

146. A patient on long-term antipsychotic therapy develops involuntary lip smacking, tongue protrusion, and repetitive chewing movements. Which of the following is the most likely diagnosis?

- A.** Acute dystonia, given this classic clinical presentation, though the timing typically differs
- B.** Akathisia, given this classic clinical presentation pattern, though the movement pattern differs
- C.** Parkinsonism, given this classic clinical presentation pattern, though the movement pattern differs
- D.** Neuroleptic malignant syndrome, given this presentation, though additional features are absent here
- E.** Tardive dyskinesia, strongly suggested by this classic long-term, involuntary movement pattern

147. A patient on antipsychotic therapy develops fever, severe muscle rigidity, autonomic instability, and altered mental status. Which of the following is the most appropriate immediate action?

- A.** Reassurance alone, since this typically resolves without any intervention needed
- B.** Immediate discontinuation of the antipsychotic and supportive medical care
- C.** Increase the antipsychotic dose to control the underlying psychiatric symptoms
- D.** Oral antihistamine therapy as the most appropriate immediate treatment here
- E.** Outpatient follow-up scheduled within the next one to two weeks

148. A patient on chronic lithium therapy becomes dehydrated after a gastrointestinal illness and develops confusion, coarse tremor, and ataxia. Which of the following is the most appropriate immediate action?

- A.** Reassurance alone, since dehydration does not affect lithium levels
- B.** Increase the lithium dose to compensate for the gastrointestinal losses
- C.** Add an NSAID for symptomatic relief without any other intervention needed
- D.** Oral fluids alone at home, without any laboratory monitoring needed
- E.** Check a lithium level immediately and hold the medication pending results

149. An adult reports lifelong difficulty with organization, time management, and sustained attention, with symptoms clearly present since childhood. Which of the following is the most likely diagnosis?

- A. Generalized anxiety disorder, given this presentation, though the core feature differs
- B. Major depressive disorder, given this presentation, though the core feature differs entirely
- C. Obsessive-compulsive disorder, given this presentation, though the core feature differs entirely
- D. Adult attention-deficit/hyperactivity disorder, meeting the required childhood-onset criteria
- E. Bipolar disorder, given this classic clinical presentation pattern, though quite distinct overall

150. A child has a pattern of angry, irritable mood, argumentative behavior, and vindictiveness toward authority figures, without violating the basic rights of others. Which of the following is the most likely diagnosis?

- A. Conduct disorder, given this presentation, though rights violations are absent here
- B. Antisocial personality disorder, given this presentation, though this age is too young
- C. Autism spectrum disorder, given this classic clinical presentation, though quite distinct overall
- D. Attention-deficit/hyperactivity disorder, given this presentation, though the core feature differs
- E. Oppositional defiant disorder, strongly suggested by this classic irritability and defiance pattern

151. A 16-year-old has never had a menstrual period but has normal breast development and pubic hair. Which of the following is the most appropriate initial diagnostic step?

- A. Immediate laparoscopic surgery without any prior imaging or laboratory testing
- B. Reassurance alone, since this presentation requires no further evaluation
- C. Immediate hormone replacement therapy without any further diagnostic workup
- D. Karyotype testing alone as the appropriate initial diagnostic step
- E. Pelvic ultrasound to assess for anatomic causes of primary amenorrhea

152. A short-statured adolescent girl with primary amenorrhea has a webbed neck and widely spaced nipples. Which of the following is the most likely diagnosis?

- A. Turner syndrome, strongly suggested by this classic short stature and webbed neck pattern
- B. Polycystic ovary syndrome, given this classic clinical presentation, though quite distinct overall
- C. Androgen insensitivity syndrome, given this classic presentation, though quite distinct overall
- D. Asherman syndrome, given this classic clinical presentation pattern, though quite distinct overall
- E. Premature ovarian insufficiency, given this classic presentation, though quite distinct overall

153. A woman who previously had a dilation and curettage procedure develops secondary amenorrhea. Hysteroscopy reveals intrauterine adhesions. Which of the following is the most likely diagnosis?

- A. Premature ovarian insufficiency, given this classic clinical and procedural pattern overall
- B. Asherman syndrome, strongly suggested by this classic intrauterine adhesion finding
- C. Polycystic ovary syndrome, given this classic clinical and procedural pattern overall
- D. Turner syndrome, given this classic clinical and procedural pattern, though quite distinct
- E. Hypothalamic amenorrhea, given this classic clinical and procedural pattern, though distinct

154. A woman reports severe mood swings, irritability, and depressive symptoms occurring specifically during the week before menses, significantly impairing daily functioning. Which of the following is the most likely diagnosis?

- A. Simple premenstrual syndrome, given this presentation, though the severity and impairment differ
- B. Major depressive disorder, given this presentation, though the timing pattern differs
- C. Generalized anxiety disorder, given this presentation, though the timing pattern differs
- D. Bipolar disorder, given this classic clinical presentation pattern, though the timing pattern differs
- E. Premenstrual dysphoric disorder, strongly suggested by this classic severe, impairing luteal pattern

155. A patient at 20 weeks gestation presents with painless cervical dilation and no contractions. Which of the following is the most likely diagnosis?

- A. Preterm labor, given this classic clinical presentation, though contractions are typically present

- B.** Cervical insufficiency, strongly suggested by this classic painless dilation pattern
- C.** Placental abruption, given this classic clinical presentation pattern, though quite distinct overall
- D.** Placenta previa, given this classic clinical presentation pattern, though quite distinct overall
- E.** Chorioamnionitis, given this classic clinical presentation pattern, though quite distinct overall

156. At what point in pregnancy is universal screening for gestational diabetes typically performed?

- A.** During the first prenatal visit, regardless of gestational age at that time
- B.** In the first trimester, between weeks 6 and 10 of gestation
- C.** Only in the third trimester, between weeks 34 and 36 of gestation
- D.** Only postpartum, after delivery has already occurred in most cases
- E.** Between 24 and 28 weeks of gestation in most pregnancies

157. An Rh-negative pregnant woman at 28 weeks gestation is Rh antibody negative. Which of the following is the most appropriate management?

- A.** No intervention is needed regardless of Rh status or antibody testing
- B.** Administer RhoGAM at this gestational age to prevent isoimmunization
- C.** Repeat antibody testing only, without any prophylactic treatment needed
- D.** Immediate delivery regardless of gestational age or clinical indication now
- E.** Administer RhoGAM only after delivery, regardless of the infant's Rh status

158. Monochorionic twins are found to have significantly discordant growth and amniotic fluid volumes on ultrasound. Which of the following is the most likely diagnosis?

- A.** Twin-twin transfusion syndrome, strongly suggested by this classic discordant finding pattern
- B.** Placental abruption, given this classic clinical and imaging pattern, though quite distinct overall
- C.** Placenta previa, given this classic clinical and imaging pattern, though quite distinct overall
- D.** Gestational diabetes, given this classic clinical and imaging pattern, though quite distinct overall

E. Vasa previa, given this classic clinical and imaging pattern, though quite distinct overall

159. A pregnant patient has painless vaginal bleeding immediately following rupture of membranes, with fetal heart rate abnormalities. Which of the following is the most likely diagnosis?

A. Placental abruption, given this classic clinical presentation, though the trigger timing differs

B. Placenta previa, given this classic clinical presentation, though the trigger timing differs

C. Vasa previa, strongly suggested by this classic bleeding pattern tied to membrane rupture

D. Uterine rupture, given this classic clinical presentation, though the trigger timing differs

E. Cervical insufficiency, given this classic clinical presentation, though the trigger timing differs

160. A patient attempting a vaginal birth after a prior cesarean delivery develops sudden severe abdominal pain and fetal heart rate abnormalities. Which of the following is the most likely diagnosis?

A. Placental abruption alone, given this classic presentation, though the setting is atypical

B. Placenta previa, given this classic clinical presentation, though the setting is atypical

C. Uterine rupture, strongly suggested by this classic sudden pain in this specific setting

D. Normal labor progression, given this classic presentation, though the severity is atypical

E. Cervical insufficiency, given this classic clinical presentation, though the setting is atypical

161. A patient has persistent, heavy vaginal bleeding two weeks after a miscarriage. Ultrasound reveals retained echogenic material within the uterine cavity. Which of the following is the most likely diagnosis?

A. Endometrial cancer, given this classic clinical and imaging pattern, though quite distinct overall

B. Ectopic pregnancy, given this classic clinical and imaging pattern, though quite distinct overall

C. Asherman syndrome, given this classic clinical and imaging pattern, though quite distinct overall

D. Uterine fibroids, given this classic clinical and imaging pattern, though quite distinct overall

E. Retained products of conception, strongly suggested by this classic imaging finding

162. A postmenopausal woman with obesity develops new vaginal bleeding. Which of the following is the most appropriate next step?

- A.** Reassurance alone, since postmenopausal bleeding is typically a benign finding
- B.** Observation alone with repeat evaluation scheduled in six months' time
- C.** Oral hormone therapy alone, without any further diagnostic evaluation needed
- D.** Endometrial biopsy, given the need to evaluate for endometrial cancer
- E.** Antibiotic therapy alone, since this likely represents an infectious process

163. An older woman reports several months of vague bloating, early satiety, and abdominal discomfort. Laboratory testing shows an elevated CA-125 level. Which of the following is the most likely diagnosis?

- A.** Irritable bowel syndrome, given this presentation, though the laboratory finding is atypical
- B.** Ovarian cancer, strongly suggested by this classic vague symptom and laboratory pattern
- C.** Uterine fibroids, given this classic presentation, though the laboratory finding is atypical here
- D.** Endometriosis, given this classic presentation, though the laboratory finding is atypical here
- E.** Gastroparesis, given this classic presentation, though the laboratory finding is atypical here

164. A patient develops a painful, fluctuant, unilateral swelling at the posterior vaginal introitus. Which of the following is the most likely diagnosis?

- A.** Vulvar cancer, given this classic clinical presentation pattern, though quite distinct overall
- B.** Lichen sclerosus, given this classic clinical presentation pattern, though quite distinct overall
- C.** Genital herpes, given this classic clinical presentation pattern, though quite distinct overall
- D.** Condyloma acuminatum, given this classic clinical presentation pattern, though quite distinct overall
- E.** Bartholin gland abscess, strongly suggested by this classic painful, fluctuant swelling location

165. A postmenopausal woman reports chronic vulvar itching, and examination reveals thin, white, atrophic-appearing skin. Which of the following is the most likely diagnosis?

- A. Vulvar cancer, given this classic clinical presentation pattern, though quite distinct overall
- B. Genital herpes, given this classic clinical presentation pattern, though quite distinct overall
- C. Bartholin gland cyst, given this classic clinical presentation, though quite distinct overall
- D. Lichen sclerosus, strongly suggested by this classic white, atrophic skin finding
- E. Contact dermatitis alone, given this classic presentation, though quite distinct overall today

166. A patient has a frothy, malodorous vaginal discharge, and examination reveals a 'strawberry' appearance of the cervix. Which of the following is the most likely diagnosis?

- A. Bacterial vaginosis, given this classic clinical presentation, though the specific findings differ
- B. Trichomoniasis, strongly suggested by this classic frothy discharge and strawberry cervix pattern
- C. Chlamydia infection, given this classic clinical presentation, though the specific findings differ
- D. Gonorrhea infection, given this classic clinical presentation, though the specific findings differ
- E. Candidiasis, given this classic clinical presentation, though the specific findings differ entirely

167. A patient has a thin, gray, malodorous vaginal discharge with a positive whiff test and clue cells on microscopy. Which of the following is the most likely diagnosis?

- A. Trichomoniasis, given this classic clinical presentation, though the specific findings differ
- B. Candidiasis, given this classic clinical presentation, though the specific findings differ entirely
- C. Bacterial vaginosis, strongly suggested by this classic clue cell and whiff test pattern
- D. Chlamydia infection, given this classic clinical presentation, though the specific findings differ
- E. Gonorrhea infection, given this classic clinical presentation, though the specific findings differ

168. A patient has thick, white, cottage cheese-like vaginal discharge with intense pruritus, and a normal vaginal pH. Which of the following is the most likely diagnosis?

- A. Bacterial vaginosis, given this presentation, though the pH is typically elevated
- B. Candidiasis, strongly suggested by this classic cottage cheese discharge and normal pH
- C. Chlamydia infection, given this classic clinical presentation, though the specific findings differ

- D. Gonorrhea infection, given this classic clinical presentation, though the specific findings differ
- E. Trichomoniasis, given this classic clinical presentation, though the pH is typically elevated

169. A perimenopausal woman has irregular, heavy menstrual bleeding, and a thorough workup excludes structural, hormonal, and neoplastic causes. Which of the following is the most likely diagnosis?

- A. Uterine fibroids, given this presentation, though structural causes have been excluded here
- B. Endometrial cancer, given this presentation, though neoplastic causes have been excluded here
- C. Adenomyosis, given this classic clinical presentation, though structural causes have been excluded
- D. Dysfunctional uterine bleeding, a diagnosis appropriate once other causes are excluded
- E. Endometriosis, given this classic clinical presentation, though structural causes have been excluded

170. A woman younger than 40 develops amenorrhea along with hot flashes and an elevated FSH level. Which of the following is the most likely diagnosis?

- A. Premature ovarian insufficiency, strongly suggested by this classic age and laboratory pattern
- B. Asherman syndrome, given this classic clinical and laboratory pattern, though quite distinct overall
- C. Hypothalamic amenorrhea, given this pattern, though the laboratory finding is typically reversed
- D. Polycystic ovary syndrome, given this classic clinical and laboratory pattern, though distinct
- E. Turner syndrome, given this presentation, though this represents a later age of onset

171. Which of the following is a recognized risk factor for placental abruption?

- A. Well-controlled gestational diabetes without any other complicating factors present
- B. A history of a single, uncomplicated prior vaginal delivery
- C. Maternal cocaine use, a recognized risk factor for this condition
- D. Well-controlled asthma without any other complicating pregnancy factors present

E. A history of a single, prior uncomplicated cesarean delivery

172. A patient with a history of intravenous drug use develops fever, severe back pain, and progressive lower extremity weakness. Which of the following is the most appropriate immediate action?

A. Oral antibiotics alone, without any further imaging or evaluation needed

B. Physical therapy alone, without any further diagnostic workup needed

C. Outpatient MRI scheduled within the next one to two weeks

D. Observation alone, since this typically resolves without any intervention

E. Emergent MRI and surgical evaluation for suspected epidural abscess

173. A patient with septic shock has a markedly elevated serum lactate level. Which of the following does this finding most directly indicate?

A. Adequate tissue perfusion, requiring no further hemodynamic intervention needed

B. A primary respiratory process, unrelated to the septic shock itself

C. A primary renal process, unrelated to the septic shock itself

D. Tissue hypoperfusion, warranting aggressive fluid resuscitation and close reassessment

E. A benign, expected laboratory finding requiring no further action

174. A hospitalized patient with a central venous catheter develops fever, and blood cultures grow *Candida* species. Which of the following is the most appropriate management consideration?

A. Oral antifungal therapy alone, without any catheter removal needed

B. Observation alone, since candidemia typically resolves without any treatment

C. Systemic antifungal therapy and prompt removal of the catheter

D. Antibacterial therapy alone, since this represents a bacterial process

E. Antiviral therapy alone, since this represents a viral process instead

175. An immunocompromised patient develops fever and cough, and chest CT shows a nodular lesion with a surrounding 'halo' of ground-glass opacity. Which of the following is the most likely diagnosis?

- A.** Invasive aspergillosis, strongly suggested by this classic halo sign finding
- B.** Bacterial pneumonia, given this classic clinical and imaging pattern, though quite distinct
- C.** Pulmonary tuberculosis, given this classic clinical and imaging pattern, though quite distinct
- D.** Pneumocystis pneumonia, given this classic clinical and imaging pattern, though quite distinct
- E.** Lung cancer alone, given this classic clinical and imaging pattern, though quite distinct

176. A patient with HIV and a low CD4 count develops headache and altered mental status. Cerebrospinal fluid analysis with India ink staining reveals encapsulated yeast forms. Which of the following is the most likely diagnosis?

- A.** Bacterial meningitis, given this classic clinical and laboratory pattern, though quite distinct
- B.** Viral meningitis, given this classic clinical and laboratory pattern, though quite distinct overall
- C.** CNS toxoplasmosis, given this classic clinical and laboratory pattern, though quite distinct
- D.** Tuberculous meningitis, given this classic clinical and laboratory pattern, though quite distinct
- E.** Cryptococcal meningitis, strongly suggested by this classic India ink stain finding

177. A patient with HIV and a CD4 count below 200 develops progressive dyspnea and a dry cough. Chest imaging shows diffuse bilateral ground-glass infiltrates. Which of the following is the most likely diagnosis?

- A.** Bacterial pneumonia, given this classic clinical and imaging pattern, though quite distinct overall
- B.** Pulmonary tuberculosis, given this classic clinical and imaging pattern, though quite distinct
- C.** Invasive aspergillosis, given this classic clinical and imaging pattern, though quite distinct
- D.** Pneumocystis jirovecii pneumonia, strongly suggested by this classic CD4 and imaging pattern
- E.** Lung cancer alone, given this classic clinical and imaging pattern, though quite distinct

178. A patient with HIV reports new floaters and progressive vision loss. Fundoscopic examination reveals a 'pizza pie' pattern of retinal hemorrhages and exudates. Which of the following is the most likely diagnosis?

- A. Toxoplasmosis chorioretinitis, given this presentation, though the classic finding differs
- B. Herpes simplex retinitis, given this presentation, though the classic finding differs
- C. Bacterial endophthalmitis, given this presentation, though the classic finding differs
- D. Cytomegalovirus retinitis, strongly suggested by this classic 'pizza pie' fundus finding
- E. Diabetic retinopathy, given this presentation, though the classic finding differs entirely

179. A patient develops acute hepatitis after consuming contaminated food during travel. Which of the following viral hepatitis types is most consistent with a fecal-oral transmission route and no chronic carrier state?

- A. Hepatitis B, given this transmission concern, though the transmission route typically differs
- B. Hepatitis C, given this transmission concern, though the transmission route typically differs
- C. Hepatitis A, strongly suggested by this classic fecal-oral transmission and course
- D. Hepatitis D, given this concern, though this requires hepatitis B co-infection
- E. Hepatitis E, given this transmission concern, though this specific scenario is less typical

180. A patient has a positive HBsAg persisting for more than 6 months without clearance. Which of the following best describes this patient's hepatitis B status?

- A. Chronic hepatitis B infection, strongly suggested by this persistent HBsAg finding
- B. Acute hepatitis B infection, given this pattern, though the duration differs
- C. Resolved hepatitis B infection, given this presentation, though the serology typically differs
- D. Immunity from vaccination, given this presentation, though the serology typically differs
- E. A false-positive result requiring immediate repeat testing right away

181. A patient develops fever, altered mental status, and focal seizures. MRI reveals temporal lobe abnormalities, and cerebrospinal fluid PCR is positive for herpes simplex virus. Which of the following is the most appropriate immediate treatment?

- A. Oral antiviral therapy alone, without any intravenous treatment needed
- B. Observation alone, since this typically resolves without any treatment
- C. Antibacterial therapy alone, since this represents a bacterial process instead
- D. Empiric intravenous acyclovir, given this classic presentation and PCR finding
- E. Antifungal therapy alone, since this represents a fungal process instead

182. A patient with diabetes develops severe ear pain and drainage, with granulation tissue visible at the bony-cartilaginous junction of the ear canal. Which of the following is the most appropriate concern?

- A. Simple otitis externa, requiring only routine topical therapy alone
- B. Acute otitis media, requiring only routine oral antibiotic therapy
- C. Cholesteatoma alone, requiring only routine surgical referral for evaluation
- D. Tympanic membrane perforation alone, requiring only routine observation here
- E. Necrotizing otitis externa, given the risk of skull base osteomyelitis

183. A farmer develops fever, headache, and atypical pneumonia after exposure to livestock during birthing season. Which of the following is the most likely causative organism?

- A. *Coxiella burnetii*, strongly suggested by this classic livestock exposure pattern
- B. *Mycoplasma pneumoniae*, given this presentation, though the exposure history differs
- C. *Legionella pneumophila*, given this presentation, though the exposure history differs
- D. *Chlamydia pneumoniae*, given this presentation, though the exposure history differs
- E. *Histoplasma capsulatum*, given this presentation, though the exposure history differs

184. A patient who recently swam in freshwater develops fever, myalgias, and conjunctival suffusion without discharge. Which of the following is the most likely diagnosis?

- A. Leptospirosis, strongly suggested by this classic freshwater exposure and conjunctival finding
- B. Viral conjunctivitis alone, given this presentation, though the systemic findings are atypical
- C. Bacterial conjunctivitis alone, given this presentation, though the systemic findings are atypical
- D. Allergic conjunctivitis alone, given this presentation, though the systemic findings are atypical
- E. Malaria, given this classic clinical presentation, though the exposure history typically differs

185. A child develops fever and tender regional lymphadenopathy several days after being scratched by a kitten. Which of the following is the most likely diagnosis?

- A. Toxoplasmosis, given this classic clinical presentation, though the exposure history differs
- B. Tularemia, given this presentation, though the exposure history typically differs
- C. Sporotrichosis, given this presentation, though the exposure history typically differs
- D. Rabies, given this presentation, though the presentation itself is quite distinct
- E. Cat scratch disease, strongly suggested by this classic scratch and lymphadenopathy pattern

186. A patient with confirmed dengue fever develops persistent vomiting, severe abdominal pain, and mucosal bleeding. Which of the following do these findings represent?

- A. Warning signs of progression to severe dengue, requiring close monitoring
- B. An unrelated, coincidental gastrointestinal illness requiring separate specific treatment
- C. Expected, benign symptoms requiring no further monitoring or concern
- D. Signs of a secondary bacterial superinfection requiring antibiotic therapy
- E. Signs of medication side effects unrelated to the underlying infection

187. A pregnant patient develops a mild febrile illness with rash and joint pain shortly after travel to a Zika-endemic region. Which of the following is the most significant concern regarding this infection?

- A. Risk of maternal liver failure, a well-established complication of this infection
- B. Risk of maternal chronic arthritis, a well-established complication of this infection
- C. Risk of maternal permanent vision loss, a well-established complication of this infection

- D. Risk of maternal chronic kidney disease, a well-established complication of this infection
- E. Risk of fetal microcephaly, a well-established complication of this infection in pregnancy

188. A patient develops a diffuse maculopapular rash involving the palms and soles several weeks after a resolved genital ulcer. Which of the following is the most likely diagnosis?

- A. Primary syphilis, given this classic rash pattern, though the timing typically differs
- B. Secondary syphilis, strongly suggested by this classic palm and sole rash pattern
- C. Tertiary syphilis, given this classic rash pattern, though the timing typically differs
- D. Rocky Mountain spotted fever, given this rash pattern, though the history differs
- E. Measles, given this classic rash pattern, though the distribution and history differ

189. A patient with a history of intravenous drug use develops fever and progressively worsening back pain. MRI reveals a vertebral body infection. Which of the following is the most likely diagnosis?

- A. Epidural abscess alone, given this presentation, though the imaging location differs
- B. Vertebral osteomyelitis, strongly suggested by this classic IV drug use and imaging pattern
- C. Herniated disc alone, given this classic clinical presentation, though quite distinct overall
- D. Spinal stenosis alone, given this classic clinical presentation, though quite distinct overall
- E. Ankylosing spondylitis, given this classic clinical presentation, though quite distinct overall today

190. A patient develops chronic diarrhea, weight loss, joint pain, and cognitive changes. Small bowel biopsy reveals PAS-positive macrophages. Which of the following is the most likely diagnosis?

- A. Celiac disease, given this classic clinical presentation, though the biopsy finding differs
- B. Crohn disease, given this classic clinical presentation, though the biopsy finding differs
- C. Tropical sprue, given this classic clinical presentation, though the biopsy finding differs
- D. Giardiasis, given this classic clinical presentation, though the biopsy finding differs entirely
- E. Whipple disease, strongly suggested by this classic PAS-positive macrophage finding

191. A young adult develops severe pharyngitis followed by fever, neck swelling, and septic pulmonary emboli. Imaging reveals thrombophlebitis of the internal jugular vein. Which of the following is the most likely diagnosis?

- A.** Peritonsillar abscess alone, given this presentation, though the vascular finding differs
- B.** Retropharyngeal abscess alone, given this presentation, though the vascular finding differs
- C.** Infectious mononucleosis alone, given this presentation, though the vascular finding differs
- D.** Lemierre syndrome, strongly suggested by this classic jugular thrombophlebitis and embolism pattern
- E.** Bacterial tracheitis alone, given this classic presentation, though the vascular finding differs

192. A patient develops a chronic, indurated cervicofacial swelling with draining sinus tracts containing yellow 'sulfur granules,' following a recent dental procedure. Which of the following is the most likely diagnosis?

- A.** Bacterial cellulitis alone, given this presentation, though the granule finding differs
- B.** Cat scratch disease, given this presentation, though the granule finding differs
- C.** Actinomycosis, strongly suggested by this classic sulfur granule and dental history pattern
- D.** Tuberculosis, given this classic clinical presentation, though the granule finding differs entirely
- E.** Nocardiosis, given this classic clinical presentation, though the specific finding differs slightly

193. A patient has an elevated TSH with a normal free T4 level and no significant symptoms. Which of the following best describes this laboratory pattern?

- A.** Overt hypothyroidism, given this pattern, though the T4 is typically abnormal
- B.** Overt hyperthyroidism, given this pattern, though these specific values are reversed
- C.** Subclinical hyperthyroidism, given this presentation, though the TSH direction differs
- D.** Subclinical hypothyroidism, strongly suggested by this elevated TSH, normal T4 pattern
- E.** A normal laboratory pattern requiring no further evaluation or monitoring

194. A patient has a low TSH with a normal free T4 level and no significant symptoms. Which of the following best describes this laboratory pattern?

- A.** Subclinical hyperthyroidism, strongly suggested by this low TSH, normal T4 pattern
- B.** Overt hypothyroidism, given this pattern, though these specific values are reversed
- C.** Overt hyperthyroidism, given this pattern, though the T4 is typically abnormal
- D.** Subclinical hypothyroidism, given this presentation, though the TSH direction differs
- E.** A normal laboratory pattern requiring no further evaluation or monitoring

195. A patient develops kidney stones from hyperparathyroidism, along with a pituitary adenoma and a pancreatic neuroendocrine tumor. Which of the following syndromes does this represent?

- A.** MEN2A, given this classic combination, though the specific tumor types differ
- B.** MEN2B, given this classic combination, though the specific tumor types differ
- C.** Von Hippel-Lindau syndrome, given this combination, though the tumor types differ
- D.** Neurofibromatosis, given this classic combination, though the tumor types differ entirely
- E.** MEN1, strongly suggested by this classic parathyroid, pituitary, and pancreatic pattern

196. A patient with medullary thyroid cancer is found to also have a pheochromocytoma and primary hyperparathyroidism. Which of the following syndromes does this represent?

- A.** MEN1, given this classic combination, though the specific tumor types differ
- B.** MEN2B, given this classic combination, though the parathyroid finding is atypical
- C.** Von Hippel-Lindau syndrome, given this combination, though the tumor types differ
- D.** MEN2A, strongly suggested by this classic medullary cancer, pheochromocytoma, and parathyroid pattern
- E.** Neurofibromatosis, given this classic combination, though the tumor types differ entirely

197. A patient experiences symptomatic episodes with a documented low blood glucose that resolve promptly with glucose administration. Which of the following criteria does this presentation fulfill?

- A. Cushing triad, given this presentation, though that triad describes something entirely different
- B. Somogyi effect, given this presentation, though that phenomenon describes something different
- C. Dawn phenomenon, given this presentation, though that phenomenon describes something different
- D. Whipple triad, confirming a true hypoglycemic disorder requiring further workup
- E. Charcot triad, given this presentation, though that triad describes something entirely different

198. A patient has recurrent fasting hypoglycemia with an elevated insulin level and an elevated C-peptide level. Which of the following is the most likely diagnosis?

- A. Exogenous insulin administration, given this presentation, though the C-peptide typically differs
- B. Insulinoma, strongly suggested by this classic elevated insulin and C-peptide pattern
- C. Sepsis-related hypoglycemia, given this presentation, though the insulin level typically differs
- D. Adrenal insufficiency alone, given this classic presentation, though quite distinct overall
- E. Factitious hypoglycemia from sulfonylurea use, though C-peptide patterns can overlap here

199. Which of the following is the recommended screening test for early diabetic nephropathy?

- A. Serum creatinine alone, without any urine-based testing needed here
- B. Urine microalbumin-to-creatinine ratio, the recommended screening test for this condition
- C. Renal ultrasound alone, without any urine-based testing needed here today
- D. Renal biopsy alone, as the recommended initial screening test here
- E. 24-hour urine protein alone, as the recommended initial screening test

200. How often should a patient with diabetes undergo screening for diabetic retinopathy?

- A. Only if visual symptoms develop, with no routine screening otherwise
- B. Every five years, regardless of diabetes duration or glycemic control
- C. Annually, with a dilated eye examination as the standard screening interval

- D.** Only after 20 years of diabetes duration, never earlier than that
- E.** Once at initial diagnosis only, with no further screening needed

201. A pregnant patient with poorly controlled gestational diabetes is at increased risk for delivering a large-for-gestational-age infant. Which of the following delivery complications is most closely associated with this risk?

- A.** Placenta previa, a complication most closely associated with this specific risk
- B.** Shoulder dystocia, a complication most closely associated with fetal macrosomia
- C.** Preterm labor, a complication most closely associated with this specific risk
- D.** Placental abruption, a complication most closely associated with this specific risk
- E.** Umbilical cord prolapse, a complication most closely associated with this risk

202. An adult patient develops diffuse bone pain and muscle weakness, with laboratory testing showing a low vitamin D level, low calcium, and low phosphate. Which of the following is the most likely diagnosis?

- A.** Osteomalacia, strongly suggested by this classic vitamin D deficiency laboratory pattern
- B.** Osteoporosis, given this presentation, though the laboratory pattern typically differs
- C.** Paget disease, given this classic clinical presentation, though the laboratory pattern differs
- D.** Primary hyperparathyroidism, given this presentation, though the laboratory pattern is reversed
- E.** Multiple myeloma, given this classic clinical presentation, though the laboratory pattern differs

203. A child develops bowing of the legs and widening of the growth plates on X-ray, along with a documented vitamin D deficiency. Which of the following is the most likely diagnosis?

- A.** Osteoporosis, though this specific diagnosis is not typically made in children
- B.** Rickets, strongly suggested by this classic bowing and growth plate finding
- C.** Achondroplasia, given this classic clinical presentation, though the laboratory pattern typically differs

D. Legg-Calve-Perthes disease, given this presentation, though the laboratory pattern typically differs

E. Osteogenesis imperfecta, given this presentation, though the laboratory pattern typically differs

204. A woman who experienced severe postpartum hemorrhage fails to lactate and develops fatigue and amenorrhea in the following weeks. Which of the following is the most likely diagnosis?

A. Postpartum thyroiditis, given this presentation, though the hemorrhage history is atypical

B. Postpartum depression, given this presentation, though the hemorrhage history is atypical

C. Sheehan syndrome, strongly suggested by this classic postpartum hemorrhage and pituitary pattern

D. Primary ovarian insufficiency, given this presentation, though the hemorrhage history is atypical

E. Postpartum psychosis, given this presentation, though the hemorrhage history is atypical

205. A young man with delayed puberty and an inability to smell undergoes hormone testing showing low gonadotropins and low testosterone. Which of the following is the most likely diagnosis?

A. Constitutional delay of puberty, given this presentation, though anosmia is atypical

B. Klinefelter syndrome, given this presentation, though the anosmia finding is atypical

C. Primary testicular failure, given this presentation, though the gonadotropin pattern is reversed

D. Kallmann syndrome, strongly suggested by this classic anosmia and hypogonadism pattern

E. Androgen insensitivity syndrome, given this presentation, though the findings typically differ

206. A tall man with gynecomastia and infertility undergoes karyotype testing showing an extra X chromosome. Which of the following is the most likely diagnosis?

A. Kallmann syndrome, given this presentation, though the karyotype finding is atypical

B. Klinefelter syndrome, strongly suggested by this classic karyotype and clinical pattern

C. Turner syndrome, given this presentation, though this karyotype applies to a different sex

D. Androgen insensitivity syndrome, given this presentation, though the karyotype typically differs

E. Marfan syndrome, given this classic clinical presentation, though the karyotype typically differs

207. A patient with Graves disease develops proptosis and periorbital edema. Which of the following best describes the underlying mechanism of this eye finding?

- A. Direct bacterial infection of the orbital tissue causing this finding
- B. Autoimmune inflammation of the retro-orbital tissue, mediated by TSH receptor antibodies
- C. Direct compression from an unrelated pituitary tumor causing this finding
- D. A separate, unrelated allergic reaction affecting the orbital tissue
- E. Direct viral infection of the orbital tissue causing this finding

208. A patient with hyperthyroidism has a thyroid scan showing a single 'hot' nodule with suppressed uptake in the rest of the gland, and negative thyroid autoantibodies. Which of the following is the most likely diagnosis?

- A. Toxic adenoma, strongly suggested by this classic hot nodule and antibody pattern
- B. Hashimoto thyroiditis, given this presentation, though this typically causes hypothyroidism instead
- C. Subacute thyroiditis, given this presentation, though the scan finding typically differs
- D. Riedel thyroiditis, given this classic presentation, though the scan finding typically differs
- E. Graves disease, given this classic scan finding, though autoantibodies are typically positive

209. A patient develops a painful, tender thyroid gland along with transient hyperthyroid symptoms following a recent viral upper respiratory infection. Which of the following is the most likely diagnosis?

- A. Graves disease, given this classic clinical presentation, though pain is atypical here
- B. Hashimoto thyroiditis, given this presentation, though pain is atypical in that condition
- C. Toxic multinodular goiter, given this presentation, though pain is atypical in that condition
- D. Subacute thyroiditis, strongly suggested by this classic painful, post-viral presentation
- E. Riedel thyroiditis, given this classic presentation, though the classic texture finding differs

210. A patient develops a hard, fixed, painless thyroid mass with fibrous tissue extending into surrounding neck structures, initially concerning for malignancy, but biopsy reveals dense fibrosis without malignant cells. Which of the following is the most likely diagnosis?

- A.** Subacute thyroiditis, given this presentation, though the texture finding typically differs
- B.** Papillary thyroid cancer, given this presentation, though biopsy findings rule this out
- C.** Riedel thyroiditis, strongly suggested by this classic fibrous, invasive-appearing pattern
- D.** Hashimoto thyroiditis, given this presentation, though the texture finding typically differs
- E.** Graves disease, given this classic clinical presentation, though the texture finding typically differs

211. A patient sustains blunt eye trauma and develops visible blood layering in the anterior chamber. Which of the following is the most likely diagnosis, and what complication should be monitored for?

- A.** Vitreous hemorrhage, with a risk of retinal detachment as the complication
- B.** Hyphema, with a risk of elevated intraocular pressure as the complication
- C.** Subconjunctival hemorrhage, with a risk of corneal scarring as the complication
- D.** Retinal hemorrhage, with a risk of permanent vision loss as the complication
- E.** Corneal abrasion, with a risk of infection as the primary complication

212. A patient has a painless, non-tender nodule on the eyelid that has persisted for several weeks without signs of acute inflammation. Which of the following is the most likely diagnosis?

- A.** Hordeolum, given this presentation, though acute inflammation is typically present
- B.** Chalazion, strongly suggested by this classic painless, chronic nodule pattern
- C.** Blepharitis, given this classic clinical presentation pattern, though quite distinct overall
- D.** Dacryocystitis, given this classic clinical presentation, though the location typically differs
- E.** Orbital cellulitis, given this classic presentation, though quite distinct overall today

213. A patient reports chronic eyelid irritation with crusting along the eyelash margins upon waking. Which of the following is the most likely diagnosis?

- A. Hordeolum, given this classic clinical presentation pattern, though quite distinct overall
- B. Chalazion, given this classic clinical presentation pattern, though quite distinct overall today
- C. Blepharitis, strongly suggested by this classic chronic eyelid margin crusting pattern
- D. Dacryocystitis, given this classic clinical presentation, though the location typically differs
- E. Orbital cellulitis, given this classic presentation, though quite distinct overall today

214. A patient develops swelling, redness, and tenderness over the medial aspect of the lower eyelid near the nose, with purulent discharge expressible from the puncta. Which of the following is the most likely diagnosis?

- A. Hordeolum, given this classic clinical presentation, though the location typically differs
- B. Dacryocystitis, strongly suggested by this classic medial canthus swelling and discharge
- C. Chalazion, given this classic clinical presentation pattern, though quite distinct overall today
- D. Blepharitis, given this classic clinical presentation, though the location typically differs
- E. Orbital cellulitis, given this classic presentation, though the location typically differs

215. A patient reports eye pain, photophobia, and blurred vision, with a layering of white blood cells visible in the anterior chamber on slit-lamp examination. Which of the following is the most likely diagnosis?

- A. Conjunctivitis, given this classic clinical and examination pattern, though quite distinct overall
- B. Corneal abrasion, given this classic clinical and examination pattern, though quite distinct
- C. Acute angle-closure glaucoma, given this presentation, though the examination finding differs
- D. Episcleritis, given this classic clinical and examination pattern, though quite distinct overall
- E. Anterior uveitis, strongly suggested by this classic hypopyon and photophobia pattern

216. A patient develops sudden, painless, complete vision loss in one eye. Fundoscopic examination reveals retinal pallor with a 'cherry red spot' at the macula. Which of the following is the most likely diagnosis?

- A. Central retinal artery occlusion, strongly suggested by this classic cherry red spot

- B.** Central retinal vein occlusion, given this presentation, though the fundus finding differs
- C.** Retinal detachment, given this classic clinical presentation, though the fundus finding differs
- D.** Optic neuritis, given this classic clinical presentation, though pain is typically present
- E.** Vitreous hemorrhage, given this classic clinical presentation, though the fundus finding differs

217. A patient develops sudden, painless vision loss in one eye. Fundoscopic examination reveals diffuse retinal hemorrhages described as a 'blood and thunder' appearance. Which of the following is the most likely diagnosis?

- A.** Central retinal vein occlusion, strongly suggested by this classic fundus appearance
- B.** Central retinal artery occlusion, given this presentation, though the fundus finding differs
- C.** Retinal detachment, given this classic clinical presentation, though the fundus finding differs
- D.** Optic neuritis, given this classic clinical presentation, though pain is typically present
- E.** Vitreous hemorrhage, given this classic clinical presentation, though the fundus finding differs

218. A young woman develops painful vision loss in one eye that worsens with eye movement. Which of the following is the most likely diagnosis, and what condition is it associated with?

- A.** Central retinal artery occlusion, associated with an increased risk of stroke
- B.** Optic neuritis, often an early presenting sign of multiple sclerosis
- C.** Central retinal vein occlusion, associated with an increased risk of glaucoma
- D.** Retinal detachment, associated with an increased risk of high myopia
- E.** Anterior uveitis, associated with an increased risk of autoimmune arthritis

219. A patient with a known brain tumor is found to have bilateral optic disc swelling on fundoscopic examination, without associated vision loss. Which of the following is the most likely diagnosis?

- A.** Papilledema, strongly suggested by this classic bilateral disc swelling from elevated pressure
- B.** Optic neuritis, given this classic clinical presentation, though this is typically unilateral
- C.** Central retinal vein occlusion, given this presentation, though this is typically unilateral

- D. Anterior uveitis, given this classic clinical presentation, though quite distinct overall today
- E. Retinal detachment, given this classic clinical presentation, though quite distinct overall

220. An older adult reports gradual, bilateral hearing loss, particularly affecting the ability to understand speech in noisy environments. Audiometry shows bilateral high-frequency sensorineural hearing loss. Which of the following is the most likely diagnosis?

- A. Presbycusis, strongly suggested by this classic bilateral, high-frequency, age-related pattern
- B. Otosclerosis, given this classic clinical and audiometric presentation, though quite distinct overall
- C. Meniere disease, given this classic clinical presentation, though quite distinct overall today
- D. Acoustic neuroma, given this presentation, though this is typically unilateral, not bilateral
- E. Noise-induced hearing loss alone, given this presentation, though the age pattern differs

221. A young adult with a family history of early hearing loss develops progressive conductive hearing loss. Which of the following is the most likely diagnosis?

- A. Presbycusis, given this classic clinical presentation, though the age group is atypical
- B. Meniere disease, given this classic clinical presentation, though quite distinct overall today
- C. Otosclerosis, strongly suggested by this classic family history and conductive pattern
- D. Acoustic neuroma, given this presentation, though the hearing loss type typically differs
- E. Cholesteatoma alone, given this classic clinical presentation, though quite distinct overall

222. A child with recently treated acute otitis media develops fever, postauricular swelling, and a protruding ear. Which of the following is the most likely diagnosis?

- A. Simple otitis externa, given this classic clinical presentation, though quite distinct overall
- B. Mastoiditis, strongly suggested by this classic postauricular swelling and protruding ear pattern
- C. Cholesteatoma alone, given this classic clinical presentation, though quite distinct overall today
- D. Otosclerosis, given this classic clinical presentation pattern, though quite distinct overall

E. Meniere disease, given this classic clinical presentation pattern, though quite distinct overall

223. A patient develops rapidly progressive swelling of the floor of the mouth and submandibular region following a dental infection, along with difficulty swallowing and early airway compromise. Which of the following is the most likely diagnosis?

- A. Peritonsillar abscess, given this presentation, though the location typically differs
- B. Retropharyngeal abscess, given this classic presentation, though the location typically differs
- C. Epiglottitis, given this classic clinical presentation pattern, though the location typically differs
- D. Simple dental abscess alone, given this presentation, though airway risk is atypical
- E. Ludwig angina, strongly suggested by this classic floor-of-mouth and airway risk pattern

224. A patient with chronic rhinosinusitis and nasal polyps develops severe bronchospasm after taking aspirin for a headache. Which of the following triads does this presentation represent?

- A. Samter triad, consisting of nasal polyps, asthma, and aspirin sensitivity
- B. Charcot triad, consisting of fever, jaundice, and abdominal pain instead
- C. Virchow triad, consisting of stasis, endothelial injury, and hypercoagulability instead
- D. Beck triad, consisting of hypotension, jugular distension, and muffled heart sounds
- E. Cushing triad, consisting of hypertension, bradycardia, and irregular respirations instead

225. A young child develops fever, neck stiffness, drooling, and refusal to move the neck. Lateral neck X-ray shows a widened prevertebral space. Which of the following is the most likely diagnosis?

- A. Retropharyngeal abscess, strongly suggested by this classic widened prevertebral space finding
- B. Peritonsillar abscess, given this presentation, though the imaging finding typically differs
- C. Epiglottitis, given this classic clinical presentation, though the imaging finding typically differs
- D. Bacterial tracheitis, given this classic presentation, though the imaging finding typically differs
- E. Ludwig angina, given this classic clinical presentation, though the imaging finding typically differs

226. An infant has inspiratory stridor that worsens when supine and improves when prone. Which of the following is the most likely diagnosis?

- A.** Croup, given this classic clinical presentation pattern, though the positional pattern differs
- B.** Laryngomalacia, strongly suggested by this classic positional stridor pattern in an infant
- C.** Epiglottitis, given this classic clinical presentation, though the positional pattern typically differs
- D.** Foreign body aspiration, given this presentation, though the positional pattern typically differs
- E.** Vascular ring alone, given this classic clinical presentation, though quite distinct overall

227. A newborn develops cyanosis and respiratory distress that improves with crying but worsens at rest and during feeding. Which of the following is the most likely diagnosis?

- A.** Choanal atresia, strongly suggested by this classic crying-relieved cyanosis pattern
- B.** Laryngomalacia, given this classic clinical presentation, though the trigger pattern typically differs
- C.** Congenital heart disease alone, given this presentation, though the trigger pattern differs
- D.** Tracheoesophageal fistula alone, given this presentation, though the trigger pattern differs
- E.** Vocal cord paralysis alone, given this presentation, though the trigger pattern differs

228. A patient reports chronic, one-sided nasal obstruction without other significant symptoms. Nasal examination reveals a visibly deviated nasal septum. Which of the following is the most likely diagnosis?

- A.** Nasal polyps, given this presentation, though the examination finding typically differs
- B.** Allergic rhinitis, given this presentation, though the distribution is typically bilateral
- C.** Deviated septum, strongly suggested by this classic unilateral obstruction and examination finding
- D.** Rhinitis medicamentosa, given this presentation, though a medication history is typically present
- E.** Acute bacterial sinusitis, given this presentation, though fever is typically present

229. A young child develops significant proteinuria and edema. Renal biopsy shows normal-appearing glomeruli on light microscopy, with foot process effacement on electron microscopy. Which of the following is the most likely diagnosis?

- A.** Focal segmental glomerulosclerosis, given this presentation, though the biopsy finding differs
- B.** Membranous nephropathy, given this classic clinical presentation, though the biopsy finding differs
- C.** Minimal change disease, strongly suggested by this classic normal-appearing glomeruli finding
- D.** Post-streptococcal glomerulonephritis, given this presentation, though the biopsy finding differs
- E.** Lupus nephritis, given this classic clinical presentation, though the biopsy finding differs

230. A Black patient with HIV develops nephrotic-range proteinuria. Renal biopsy shows focal areas of glomerular scarring. Which of the following is the most likely diagnosis?

- A.** Focal segmental glomerulosclerosis, strongly suggested by this classic biopsy and population pattern
- B.** Minimal change disease, given this presentation, though the biopsy finding typically differs
- C.** Membranous nephropathy, given this classic clinical presentation, though the biopsy finding differs
- D.** Post-streptococcal glomerulonephritis, given this presentation, though the biopsy finding differs
- E.** Diabetic nephropathy, given this classic clinical presentation, though the population typically differs

231. An adult develops nephrotic syndrome, and renal biopsy shows a 'spike and dome' pattern on electron microscopy. Which of the following is the most likely diagnosis?

- A.** Membranous nephropathy, strongly suggested by this classic 'spike and dome' finding
- B.** Minimal change disease, given this presentation, though the biopsy finding typically differs
- C.** Focal segmental glomerulosclerosis, given this presentation, though the biopsy finding differs
- D.** Post-streptococcal glomerulonephritis, given this presentation, though the biopsy finding differs
- E.** Diabetic nephropathy, given this classic clinical presentation, though the biopsy finding differs

232. A patient with long-standing diabetes undergoes a renal biopsy showing nodular glomerulosclerosis. Which of the following classic pathologic findings does this represent?

- A.** Membranous spike and dome pattern, a finding characteristic of a different condition
- B.** Crescentic glomerulonephritis, a finding characteristic of a different condition entirely
- C.** Kimmelstiel-Wilson nodules, the classic pathologic finding of diabetic nephropathy
- D.** Wire-loop lesions, a finding characteristic of a different condition entirely
- E.** Tram-track appearance, a finding characteristic of a different condition entirely

233. A patient with systemic lupus erythematosus develops proteinuria and hematuria. Which of the following is the most appropriate next step to guide treatment?

- A.** Observation alone, without any further renal-specific evaluation needed here
- B.** Empiric antibiotic therapy, without any further renal-specific evaluation needed here
- C.** Renal ultrasound alone, without any biopsy or further evaluation needed
- D.** Immediate dialysis, without any further diagnostic evaluation needed first here
- E.** Renal biopsy to classify the specific type of lupus nephritis present

234. A patient has a non-anion gap metabolic acidosis with an inability to acidify the urine below pH 5.5 despite systemic acidosis, along with hypokalemia and recurrent kidney stones. Which of the following is the most likely diagnosis?

- A.** Type 2 proximal RTA, given this pattern, though the specific findings differ
- B.** Type 4 hyperkalemic RTA, given this pattern, though the potassium finding differs
- C.** Chronic kidney disease alone, given this presentation, though quite distinct overall
- D.** Diabetic ketoacidosis, given this presentation, though the anion gap typically differs
- E.** Type 1 distal RTA, strongly suggested by this classic urine pH and stone pattern

235. A patient with diabetes and mild chronic kidney disease develops hyperkalemia along with a mild non-anion gap metabolic acidosis. Aldosterone levels are found to be low. Which of the following is the most likely diagnosis?

- A.** Type 1 distal renal tubular acidosis, given this presentation, though potassium typically differs
- B.** Type 4 hyperkalemic renal tubular acidosis, strongly suggested by this classic pattern
- C.** Type 2 proximal renal tubular acidosis, given this presentation, though potassium typically differs
- D.** Primary hyperaldosteronism, given this presentation, though the aldosterone level is reversed here
- E.** Adrenal insufficiency alone, given this classic presentation, though quite distinct overall

236. A patient with a long history of chronic NSAID use develops renal impairment. Imaging reveals sloughing of the renal papillae. Which of the following is the most likely diagnosis?

- A.** Acute tubular necrosis, given this presentation, though the classic imaging finding differs
- B.** Analgesic nephropathy with papillary necrosis, strongly suggested by this classic history
- C.** Acute interstitial nephritis, given this presentation, though the classic imaging finding differs
- D.** Contrast-induced nephropathy, given this presentation, though the exposure history typically differs
- E.** Nephrolithiasis alone, given this classic clinical presentation, though quite distinct overall

237. A patient found down for an extended period develops dark, tea-colored urine and a markedly elevated creatine kinase level. Which of the following is the most likely diagnosis?

- A.** Acute glomerulonephritis, given this classic clinical and laboratory pattern, though quite distinct
- B.** Urinary tract infection alone, given this presentation, though the laboratory finding differs
- C.** Nephrolithiasis alone, given this classic clinical presentation, though the laboratory finding differs
- D.** Rhabdomyolysis, strongly suggested by this classic tea-colored urine and elevated CK pattern
- E.** Hemolytic anemia alone, given this classic clinical presentation, though the laboratory finding differs

238. An older man with known benign prostatic hyperplasia develops acute urinary retention, and laboratory testing reveals an elevated creatinine. Which of the following is the most appropriate immediate action?

- A.** Emergent dialysis, without attempting any other intervention first here today
- B.** Oral antibiotics alone, without any bladder decompression needed here
- C.** Bladder catheterization to relieve the obstruction and reassess renal function
- D.** Observation alone, since this typically resolves without any intervention
- E.** Immediate surgical intervention regardless of catheterization feasibility or response today

239. An older patient with a significant smoking history develops painless gross hematuria. Which of the following is the most important diagnosis to exclude?

- A.** Nephrolithiasis, the most important diagnosis to exclude in this presentation
- B.** Simple cystitis, the most important diagnosis to exclude in this presentation
- C.** Benign prostatic hyperplasia, the most important diagnosis to exclude in this presentation
- D.** Glomerulonephritis, the most important diagnosis to exclude in this presentation here
- E.** Bladder cancer, the most important diagnosis to exclude given this smoking history

240. A renal ultrasound incidentally identifies a cyst with a thin wall, no septations, and no solid components. Which of the following best describes the appropriate management of this finding?

- A.** Immediate surgical resection regardless of these reassuring imaging characteristics
- B.** Immediate biopsy regardless of these reassuring imaging characteristics described here
- C.** Immediate nephrectomy regardless of these reassuring imaging characteristics described here
- D.** Chemotherapy referral regardless of these reassuring imaging characteristics described here
- E.** No further intervention needed, given these classic simple cyst characteristics

241. An incidental finding on abdominal imaging shows the lower poles of both kidneys fused across the midline. Which of the following is the most likely diagnosis?

- A. Polycystic kidney disease, given this classic imaging finding, though the pattern typically differs
- B. Horseshoe kidney, strongly suggested by this classic lower pole fusion finding
- C. Renal cell carcinoma, given this classic imaging finding, though the pattern typically differs
- D. Medullary sponge kidney, given this presentation, though the imaging finding typically differs
- E. Simple renal cysts, given this classic imaging finding, though the pattern typically differs

242. A patient with recurrent kidney stones undergoes imaging showing cystic dilation of the renal collecting ducts. Which of the following is the most likely diagnosis?

- A. Horseshoe kidney, given this classic clinical presentation, though the imaging finding differs
- B. Polycystic kidney disease, given this presentation, though the imaging pattern typically differs
- C. Medullary sponge kidney, strongly suggested by this classic collecting duct dilation finding
- D. Renal cell carcinoma, given this classic clinical presentation, though the imaging finding differs
- E. Simple renal cyst alone, given this presentation, though the imaging pattern typically differs

243. A patient with sickle cell disease develops gross hematuria and flank pain, with imaging showing sloughed renal papillae in the urine. Which of the following is the most likely diagnosis?

- A. Renal papillary necrosis, strongly suggested by this classic sloughed papillae finding
- B. Nephrolithiasis alone, given this classic clinical presentation, though the imaging finding differs
- C. Pyelonephritis alone, given this classic clinical presentation, though the imaging finding differs
- D. Renal cell carcinoma, given this classic clinical presentation, though the imaging finding differs
- E. Glomerulonephritis alone, given this classic clinical presentation, though the imaging finding differs

244. A patient with chronic alcohol use and poor dietary intake develops macrocytic anemia without any neurologic symptoms. Which of the following is the most likely diagnosis?

- A. Vitamin B12 deficiency, given this presentation, though neurologic symptoms are usually present

- B.** Iron deficiency anemia, given this presentation, though the cell size differs here
- C.** Folate deficiency, strongly suggested by this classic macrocytic, neurologically silent pattern
- D.** Thalassemia, given this classic clinical presentation, though the cell size differs here
- E.** Anemia of chronic disease, given this presentation, though the cell size differs here

245. A patient with hemolytic anemia and splenomegaly has spherocytes on peripheral smear and increased osmotic fragility on testing. Which of the following is the most likely diagnosis?

- A.** G6PD deficiency, given this classic laboratory pattern, though the smear finding differs
- B.** Sickle cell disease, given this classic laboratory pattern, though the smear finding differs
- C.** Thalassemia, given this classic clinical and laboratory pattern, though the smear finding differs
- D.** Autoimmune hemolytic anemia alone, given this presentation, though the specific test differs
- E.** Hereditary spherocytosis, strongly suggested by this classic spherocyte and fragility pattern

246. A patient develops pancytopenia, and bone marrow biopsy reveals a hypocellular marrow with fatty replacement. Which of the following is the most likely diagnosis?

- A.** Acute lymphoblastic leukemia, given this presentation, though the marrow finding typically differs
- B.** Myelodysplastic syndrome, given this presentation, though the marrow finding typically differs
- C.** Multiple myeloma, given this classic clinical and laboratory pattern, though quite distinct overall
- D.** Chronic myeloid leukemia, given this presentation, though the marrow finding typically differs
- E.** Aplastic anemia, strongly suggested by this classic hypocellular marrow finding

247. A patient has an elevated hematocrit, pruritus after warm showers, and a positive JAK2 mutation test. Which of the following is the most likely diagnosis?

- A.** Essential thrombocythemia, given this presentation, though the primary lab finding differs
- B.** Chronic myeloid leukemia, given this presentation, though the primary lab finding differs
- C.** Secondary polycythemia, given this presentation, though the JAK2 finding is atypical there

- D.** Polycythemia vera, strongly suggested by this classic JAK2 mutation and hematocrit pattern
- E.** Myelodysplastic syndrome, given this presentation, though the primary lab finding differs

248. A patient has a markedly elevated platelet count found incidentally, along with a history of both easy bruising and a prior clotting event. Which of the following is the most likely diagnosis?

- A.** Reactive thrombocytosis, given this presentation, though the clinical implications typically differ
- B.** Essential thrombocythemia, strongly suggested by this classic marked elevation with dual risk
- C.** Iron deficiency anemia, given this classic clinical presentation, though quite distinct overall
- D.** Immune thrombocytopenic purpura, given this presentation, though the platelet count is opposite
- E.** Thrombotic thrombocytopenic purpura, given this presentation, though the platelet count is opposite

249. A patient has a markedly elevated white blood cell count with a left shift, splenomegaly, and a positive test for the Philadelphia chromosome. Which of the following is the most likely diagnosis?

- A.** Acute lymphoblastic leukemia, given this presentation, though the chromosomal finding typically differs
- B.** Chronic lymphocytic leukemia, given this presentation, though the chromosomal finding typically differs
- C.** Polycythemia vera, given this classic clinical presentation, though quite distinct overall today
- D.** Hodgkin lymphoma, given this classic clinical and laboratory pattern, though quite distinct overall
- E.** Chronic myeloid leukemia, strongly suggested by this classic Philadelphia chromosome finding

250. An older adult has an elevated lymphocyte count with numerous smudge cells noted on peripheral smear. Which of the following is the most likely diagnosis?

- A.** Acute lymphoblastic leukemia, given this presentation, though the age and smear finding differ
- B.** Chronic myeloid leukemia, given this presentation, though the cell line involved differs
- C.** Hodgkin lymphoma, given this classic clinical and laboratory pattern, though quite distinct overall

- D.** Chronic lymphocytic leukemia, strongly suggested by this classic smudge cell finding
- E.** Multiple myeloma, given this classic clinical and laboratory pattern, though quite distinct overall

251. A patient has painless lymphadenopathy, and lymph node biopsy shows malignant lymphocytes without Reed-Sternberg cells. Which of the following is the most likely diagnosis?

- A.** Hodgkin lymphoma, given this presentation, though the defining biopsy finding is absent here
- B.** Chronic lymphocytic leukemia, given this presentation, though the primary finding location differs
- C.** Infectious mononucleosis, given this classic clinical presentation, though quite distinct overall today
- D.** Multiple myeloma, given this classic clinical and laboratory pattern, though quite distinct overall
- E.** Non-Hodgkin lymphoma, strongly suggested by this classic absence of Reed-Sternberg cells

252. A male patient with recurrent joint bleeding has a prolonged PTT and a normal PT, and specific factor testing reveals a factor IX deficiency. Which of the following is the most likely diagnosis?

- A.** Hemophilia A, given this presentation, though the specific deficient factor differs here
- B.** Von Willebrand disease, given this presentation, though the specific deficient factor differs
- C.** Hemophilia B, strongly suggested by this classic factor IX deficiency finding
- D.** Vitamin K deficiency, given this classic clinical presentation, though quite distinct overall
- E.** Disseminated intravascular coagulation, given this presentation, though quite distinct overall today

253. A patient started on warfarin without adequate bridging anticoagulation develops painful, hemorrhagic skin necrosis. Genetic testing later reveals a deficiency in a specific natural anticoagulant. Which of the following is most likely deficient?

- A.** Factor VIII, a deficiency associated with a bleeding disorder, not this presentation
- B.** Protein C, a natural anticoagulant whose deficiency predisposes to this specific complication
- C.** Von Willebrand factor, a deficiency associated with a bleeding disorder, not this

- D.** Factor IX, a deficiency associated with a bleeding disorder, not this presentation
- E.** Platelet count alone, a finding not specifically linked to this presentation

254. A patient with recurrent venous thromboembolism is found to have activated protein C resistance on laboratory testing. Which of the following is the most likely underlying diagnosis?

- A.** Protein C deficiency, given this presentation, though the specific test finding differs
- B.** Factor V Leiden mutation, strongly suggested by this classic resistance pattern
- C.** Antithrombin III deficiency, given this presentation, though the specific test finding differs
- D.** Antiphospholipid syndrome, given this presentation, though the specific test finding differs
- E.** Protein S deficiency, given this presentation, though the specific test finding differs

255. A patient with recurrent pregnancy loss and a history of venous thrombosis has a positive lupus anticoagulant test. Which of the following is the most likely diagnosis?

- A.** Factor V Leiden mutation, given this presentation, though the specific antibody finding differs
- B.** Protein C deficiency, given this presentation, though the specific antibody finding differs
- C.** Antiphospholipid syndrome, strongly suggested by this classic lupus anticoagulant and history pattern
- D.** Von Willebrand disease, given this classic clinical presentation, though quite distinct overall
- E.** Disseminated intravascular coagulation, given this presentation, though quite distinct overall today

256. A patient develops fever, hypotension, and dark urine within minutes of starting a blood transfusion. Which of the following is the most likely diagnosis?

- A.** Febrile non-hemolytic transfusion reaction, given this presentation, though the severity typically differs
- B.** Acute hemolytic transfusion reaction, strongly suggested by this classic rapid, severe pattern
- C.** Transfusion-related lung injury, given this classic presentation, though quite distinct overall today

- D.** Allergic transfusion reaction alone, given this presentation, though the severity typically differs
- E.** Delayed hemolytic transfusion reaction, given this presentation, though the timing typically differs

257. A patient develops fever and chills during a blood transfusion, without any evidence of hemolysis on subsequent laboratory testing. Which of the following is the most likely diagnosis?

- A.** Febrile non-hemolytic transfusion reaction, strongly suggested by this classic isolated fever pattern
- B.** Acute hemolytic transfusion reaction, given this presentation, though hemolysis is absent here
- C.** Transfusion-related lung injury, given this classic clinical presentation, though quite distinct overall
- D.** Anaphylactic transfusion reaction, given this presentation, though the severity typically differs
- E.** Delayed hemolytic transfusion reaction, given this presentation, though the timing typically differs

258. An older adult develops persistent cytopenias, and bone marrow biopsy reveals dysplastic changes without meeting criteria for acute leukemia. Which of the following is the most likely diagnosis, and what future risk does it carry?

- A.** Myelodysplastic syndrome, carrying a recognized risk of transformation to acute myeloid leukemia
- B.** Aplastic anemia, carrying a different transformation risk, though the marrow finding differs
- C.** Chronic myeloid leukemia, carrying a risk, though the marrow finding differs here
- D.** Multiple myeloma, carrying a risk, though the marrow finding differs in this case
- E.** Chronic lymphocytic leukemia, carrying a risk, though the marrow finding differs here

259. An older adult with significant sun exposure history has a rough, scaly, erythematous patch on the face. Which of the following is the most likely diagnosis, and what is its clinical significance?

- A.** Seborrheic keratosis, a benign lesion with no significant malignant potential
- B.** Actinic keratosis, a precancerous lesion with potential to progress to squamous cell carcinoma

- C. Molluscum contagiosum, a benign viral lesion with no significant malignant potential
- D. Vitiligo, a depigmenting condition with no significant malignant potential at all
- E. Café-au-lait spot, a benign pigmented lesion with no significant malignant potential

260. An older adult has a waxy, 'stuck-on' appearing pigmented lesion on the trunk. Which of the following is the most likely diagnosis?

- A. Actinic keratosis, given this presentation, though the described appearance differs
- B. Melanoma, given this classic presentation, though the described appearance differs greatly
- C. Seborrheic keratosis, strongly suggested by this classic waxy, 'stuck-on' appearance
- D. Basal cell carcinoma, given this presentation, though the described appearance differs greatly
- E. Squamous cell carcinoma, given this presentation, though the described appearance differs greatly

261. A child has multiple small, dome-shaped papules with central umbilication on the trunk. Which of the following is the most likely diagnosis?

- A. Verruca vulgaris, given this classic clinical presentation, though the described appearance differs
- B. Varicella, given this classic clinical presentation pattern, though the described appearance differs
- C. Impetigo, given this classic clinical presentation pattern, though the described appearance differs
- D. Molluscum contagiosum, strongly suggested by this classic umbilicated papule appearance
- E. Herpes simplex virus infection, given this presentation, though the appearance differs

262. A patient develops well-demarcated, depigmented patches of skin, and biopsy confirms an absence of melanocytes in the affected areas. Which of the following is the most likely diagnosis?

- A. Vitiligo, strongly suggested by this classic depigmentation and melanocyte absence pattern
- B. Tinea versicolor, given this classic presentation, though the underlying mechanism differs
- C. Post-inflammatory hypopigmentation, given this presentation, though melanocytes are typically present

- D. Albinism, given this classic clinical presentation, though the distribution pattern typically differs
- E. Pityriasis alba, given this classic clinical presentation, though melanocytes are typically present

263. A patient recently treated for a herpes simplex virus outbreak develops target-shaped lesions with a dusky center and pale, edematous ring. Which of the following is the most likely diagnosis?

- A. Urticaria, given this classic clinical presentation, though the lesion morphology typically differs
- B. Pemphigus vulgaris, given this presentation, though the lesion morphology typically differs
- C. Erythema multiforme, strongly suggested by this classic target lesion and HSV trigger
- D. Stevens-Johnson syndrome, given this presentation, though mucosal involvement is absent here
- E. Pityriasis rosea, given this classic clinical presentation, though the lesion morphology differs

264. A patient on a new medication develops widespread skin sloughing along with significant oral and ocular mucosal involvement. Which of the following is the most appropriate immediate action?

- A. Continue the medication, since this typically resolves without any intervention
- B. Oral antihistamine therapy alone as the most appropriate immediate treatment
- C. Topical corticosteroid therapy alone as the most appropriate immediate treatment
- D. Immediate discontinuation of the medication and urgent specialized burn-unit-level care
- E. Outpatient follow-up scheduled within the next one to two weeks

265. A patient develops a single oval, scaly 'herald patch' followed one to two weeks later by smaller lesions distributed along skin cleavage lines in a 'Christmas tree' pattern. Which of the following is the most likely diagnosis?

- A. Tinea corporis, given this classic clinical presentation, though the distribution pattern differs
- B. Psoriasis, given this classic clinical presentation pattern, though the distribution pattern differs
- C. Pityriasis rosea, strongly suggested by this classic herald patch and distribution pattern
- D. Secondary syphilis, given this presentation, though the herald patch is atypical
- E. Guttate psoriasis, given this presentation, though the herald patch is atypical

266. A patient with HIV and a low CD4 count develops multiple violaceous plaques and nodules on the skin. Which of the following is the most likely diagnosis?

- A.** Kaposi sarcoma, strongly suggested by this classic violaceous lesion pattern in this population
- B.** Bacillary angiomatosis, given this presentation, though the population association typically differs
- C.** Melanoma, given this classic presentation, though the population association typically differs
- D.** Pyogenic granuloma, given this classic clinical presentation, though the population association differs
- E.** Cherry angioma, given this presentation, though the population association typically differs

267. A patient with sarcoidosis develops tender, erythematous nodules on the anterior shins. Which of the following is the most likely diagnosis?

- A.** Cellulitis alone, given this classic clinical presentation, though the distribution pattern differs
- B.** Erysipelas alone, given this classic clinical presentation, though the distribution pattern differs
- C.** Pyoderma gangrenosum, given this presentation, though the lesion morphology typically differs
- D.** Erythema nodosum, strongly suggested by this classic tender shin nodule and systemic association
- E.** Vasculitis alone, given this presentation, though the lesion morphology typically differs

268. A patient with obesity and insulin resistance has velvety, hyperpigmented skin in the axillae and posterior neck. Which of the following is the most likely diagnosis?

- A.** Acanthosis nigricans, strongly suggested by this classic velvety hyperpigmentation and insulin resistance pattern
- B.** Tinea versicolor, given this presentation, though the underlying mechanism typically differs
- C.** Erythrasma, given this classic presentation, though the underlying mechanism typically differs
- D.** Contact dermatitis, given this classic clinical presentation, though the underlying mechanism differs
- E.** Intertrigo alone, given this classic clinical presentation, though the underlying mechanism differs

269. A child has multiple café-au-lait spots along with axillary freckling. Which of the following underlying conditions should be considered?

- A.** Tuberous sclerosis, given this presentation, though the described skin findings typically differ
- B.** McCune-Albright syndrome, given this presentation, though additional findings typically differ
- C.** Sturge-Weber syndrome, given this presentation, though the described skin findings typically differ
- D.** Von Hippel-Lindau syndrome, given this presentation, though the described skin findings differ
- E.** Neurofibromatosis, strongly suggested by this classic combination of skin findings

270. A patient reports facial flushing, persistent erythema, and visible telangiectasias, worsened by sun exposure, alcohol, and spicy food. Which of the following is the most likely diagnosis?

- A.** Rosacea, strongly suggested by this classic facial erythema and trigger pattern
- B.** Systemic lupus erythematosus, given this presentation, though the trigger pattern typically differs
- C.** Seborrheic dermatitis, given this presentation, though the trigger pattern typically differs
- D.** Contact dermatitis, given this classic clinical presentation, though the trigger pattern typically differs
- E.** Perioral dermatitis, given this classic clinical presentation, though the distribution typically differs

271. A sexually active male presents with dysuria and a purulent urethral discharge. Gram stain reveals intracellular gram-negative diplococci. Which of the following is the most likely diagnosis?

- A.** Gonococcal urethritis, strongly suggested by this classic purulent discharge and Gram stain finding
- B.** Non-gonococcal urethritis, given this presentation, though the specific Gram stain finding differs
- C.** Chlamydial urethritis alone, given this presentation, though the specific finding typically differs
- D.** Trichomonal urethritis, given this classic presentation, though the specific finding typically differs
- E.** Interstitial cystitis, given this classic clinical presentation, though quite distinct overall

272. A patient reports chronic pelvic pain and urinary frequency for over 6 months, with repeatedly negative urine cultures. Which of the following is the most likely diagnosis?

- A.** Recurrent urinary tract infection, given this presentation, though cultures are negative here
- B.** Interstitial cystitis, strongly suggested by this classic chronic, culture-negative pain pattern
- C.** Acute pyelonephritis, given this classic clinical presentation, though quite distinct overall today
- D.** Bladder cancer alone, given this classic clinical presentation, though quite distinct overall
- E.** Nephrolithiasis alone, given this classic clinical presentation pattern, though quite distinct overall

273. A patient reports a sudden, intense urge to urinate immediately followed by involuntary leakage, without any specific triggering activity. Which of the following is the most likely diagnosis?

- A.** Stress urinary incontinence, given this presentation, though the triggering pattern typically differs
- B.** Urge urinary incontinence, strongly suggested by this classic sudden urgency pattern
- C.** Overflow incontinence, given this classic clinical presentation, though the pattern typically differs
- D.** Functional incontinence, given this classic clinical presentation, though the pattern typically differs
- E.** Mixed incontinence alone, given this classic clinical presentation, though the pattern typically differs

274. A patient with a complete spinal cord injury above the sacral level develops urinary retention with overflow incontinence. Which of the following is the most likely diagnosis?

- A.** Stress urinary incontinence, given this presentation, though the underlying mechanism typically differs
- B.** Urge urinary incontinence, given this presentation, though the underlying mechanism typically differs
- C.** Neurogenic bladder, strongly suggested by this classic spinal cord injury and retention pattern
- D.** Interstitial cystitis, given this classic clinical presentation, though the mechanism typically differs

E. Overactive bladder alone, given this classic clinical presentation, though the mechanism differs

275. An uncircumcised patient with diabetes develops erythema, swelling, and discomfort of the glans penis. Which of the following is the most likely diagnosis?

- A. Balanitis, strongly suggested by this classic glans inflammation and diabetes risk factor
- B. Paraphimosis, given this classic clinical presentation, though the specific finding typically differs
- C. Phimosis alone, given this classic clinical presentation, though the specific finding typically differs
- D. Peyronie disease, given this classic clinical presentation, though the specific finding differs
- E. Priapism, given this classic clinical presentation pattern, though the specific finding typically differs

276. An uncircumcised patient has a retracted foreskin that cannot be returned to its normal position, with associated swelling and pain of the glans. Which of the following is the most appropriate immediate action?

- A. Reassurance alone, since this typically resolves without any intervention
- B. Oral antibiotics alone, without any manual or surgical intervention needed
- C. Urgent reduction of the foreskin, given the risk of vascular compromise
- D. Outpatient follow-up scheduled within the next one to two weeks
- E. Topical corticosteroid therapy alone as the most appropriate immediate treatment

277. A newborn male is found to have the urethral opening located on the ventral surface of the penis rather than at the tip. Which of the following is the most likely diagnosis?

- A. Epispadias, given this classic clinical presentation, though the specific location typically differs
- B. Phimosis, given this classic clinical presentation pattern, though quite distinct overall today
- C. Cryptorchidism, given this classic clinical presentation pattern, though quite distinct overall
- D. Paraphimosis, given this classic clinical presentation, though quite distinct overall today
- E. Hypospadias, strongly suggested by this classic ventral urethral opening finding

278. A male infant is found to have an undescended testicle on examination at a routine well-child visit. Which of the following is an important consideration regarding this finding?

- A.** No further evaluation is needed, since this always resolves spontaneously
- B.** Immediate orchiectomy is required regardless of the child's current age
- C.** This finding has no association with any future malignancy risk
- D.** This finding requires no follow-up if it resolves by six months
- E.** Surgical correction is recommended, given an increased malignancy risk if left uncorrected

279. A patient with a history of urethral instrumentation and recurrent urethritis develops a progressively weakening urinary stream and incomplete bladder emptying. Which of the following is the most likely diagnosis?

- A.** Benign prostatic hyperplasia alone, given this presentation, though the history typically differs
- B.** Overactive bladder alone, given this classic clinical presentation, though quite distinct overall
- C.** Neurogenic bladder alone, given this classic clinical presentation, though quite distinct overall
- D.** Urethral stricture, strongly suggested by this classic instrumentation history and stream pattern
- E.** Interstitial cystitis alone, given this classic clinical presentation, though quite distinct overall

280. A patient with diabetes develops rapidly progressive, severe pain and necrosis of the perineal and genital skin, along with systemic signs of sepsis. Which of the following is the most appropriate management?

- A.** Oral antibiotics alone, without any surgical intervention needed here
- B.** Observation alone, since this condition typically resolves without treatment
- C.** Topical wound care alone, without any surgical intervention needed here
- D.** Outpatient follow-up scheduled within the next one to two weeks
- E.** Emergent surgical debridement combined with broad-spectrum intravenous antibiotic therapy

281. A patient has a painless, smooth, mobile cystic mass palpated separately from the testicle within the scrotum, which transilluminates on examination. Which of the following is the most likely diagnosis?

- A. Varicocele, given this presentation, though the described findings typically differ here
- B. Spermatocele, strongly suggested by this classic separate, transilluminating cystic mass
- C. Testicular tumor, given this presentation, though transillumination is not expected here
- D. Hydrocele, given this presentation, though the location relative to the testicle differs
- E. Epididymitis, given this presentation, though pain is typically a prominent feature there

282. A patient develops a painful, persistent erection unrelated to sexual stimulation, and cavernosal blood gas analysis reveals a low oxygen and high carbon dioxide content. Which of the following types of priapism does this represent?

- A. Ischemic priapism, a urologic emergency requiring prompt intervention today
- B. Non-ischemic priapism, generally a less urgent condition than the alternative
- C. A normal, physiologic erection requiring no further evaluation or treatment
- D. Peyronie disease, given this classic clinical presentation, though quite distinct overall
- E. Balanitis, given this classic clinical presentation pattern, though quite distinct overall today

283. Which of the following best describes the purpose of a living will?

- A. Specifies a patient's own treatment preferences in advance for specific situations
- B. Designates a specific person to make medical decisions on the patient's behalf
- C. Is legally identical to a healthcare power of attorney in every respect
- D. Only becomes legally relevant after the patient has already died
- E. Requires court approval before it can ever take legal effect

284. Which of the following best describes the scope of a do-not-resuscitate order?

- A. Limits all medical treatments the patient may receive going forward
- B. Requires withholding all nutrition and hydration from the patient entirely
- C. Automatically applies to all future hospital admissions without any renewal

- D.** Specifically addresses resuscitation preferences without limiting any other treatments
- E.** Requires the patient's family to independently confirm the order regularly

285. Which of the following best describes the HIPAA minimum necessary standard?

- A.** Sharing only the information needed for a specific permitted purpose
- B.** Sharing a patient's entire medical record for any requested purpose
- C.** Requiring written patient consent before any information can ever be shared
- D.** Prohibiting any sharing of patient information under any circumstances at all
- E.** Applying only to electronic records, not paper-based patient information

286. Which of the following best describes a key difference between positive predictive value and sensitivity?

- A.** Positive predictive value depends on disease prevalence, while sensitivity does not
- B.** Sensitivity depends on disease prevalence, while positive predictive value does not
- C.** The two terms are entirely interchangeable regardless of clinical context
- D.** Positive predictive value applies only to screening tests, never diagnostic tests
- E.** Sensitivity applies only to screening tests, never to diagnostic tests

287. Which of the following study designs provides the strongest evidence for establishing a causal relationship between an intervention and an outcome?

- A.** A retrospective case series without any comparison group included
- B.** A cross-sectional study measuring exposure and outcome at one time point
- C.** A case-control study identifying cases and matched controls retrospectively
- D.** An observational cohort study following exposed and unexposed groups
- E.** A randomized controlled trial, given its ability to minimize confounding

288. A study concludes that a new treatment is effective, but in reality, the treatment has no true effect. Which of the following statistical errors does this represent?

- A.** A Type II error, failing to detect a real effect that exists
- B.** A confounding variable, given this specific study design and conclusion
- C.** A selection bias, given this specific study design and conclusion
- D.** A Type I error, falsely rejecting a true null hypothesis
- E.** A recall bias, given this specific study design and conclusion

289. A 16-year-old requests confidential treatment for a sexually transmitted infection without parental notification. Which of the following best describes the general approach to this request?

- A.** Parental notification is always legally required regardless of the specific service
- B.** Confidentiality can never be maintained for any minor under any circumstances
- C.** Certain services, including this one, may be provided confidentially depending on jurisdiction
- D.** This request should be denied entirely without any further discussion
- E.** Only a court order can authorize this specific confidential request

290. A clinician suspects child abuse based on a concerning injury pattern. Which of the following best describes the appropriate action?

- A.** Mandatory reporting to the appropriate authorities, regardless of parental objection
- B.** Reporting only if the parents provide explicit consent to do so
- C.** No reporting is required unless the child confirms abuse directly
- D.** Reporting only after obtaining a court order permitting the disclosure
- E.** Reporting is optional and left entirely to clinical judgment alone

291. Which of the following best describes the concept of cultural humility, as distinguished from cultural competency?

- A.** A fixed set of facts to memorize about specific cultural groups

- B.** A one-time training requirement completed early in a clinical career
- C.** An assumption that all patients within a group share identical beliefs
- D.** An ongoing process of self-reflection and lifelong learning about difference
- E.** A checklist-based approach applied identically to every patient encounter

292. Which of the following best describes implicit bias in a clinical setting?

- A.** A consciously and openly stated preference for one group over another
- B.** A bias that has no influence on clinical decision-making whatsoever
- C.** A bias that only affects providers who explicitly endorse discriminatory views
- D.** A formal, written institutional policy favoring one patient group directly
- E.** An unconscious attitude that can influence decisions without conscious awareness

293. Which of the following is an important additional element of informed consent specific to a telehealth encounter?

- A.** No additional elements are needed beyond standard in-person consent
- B.** Discussion of the technology's limitations and privacy risks specific to this format
- C.** A requirement that all telehealth visits be recorded for legal purposes
- D.** A requirement that a family member be present for every visit
- E.** A waiver of the patient's right to an in-person visit later

294. Which of the following best describes the purpose of a root cause analysis following a medical error?

- A.** To identify a single individual to hold solely responsible
- B.** To determine the financial cost of the error to the institution
- C.** To avoid any further discussion of the error going forward
- D.** To determine appropriate legal liability rather than focusing on prevention

E. To systematically identify underlying systemic factors that contributed to the error

295. Which of the following best describes a 'just culture' approach to patient safety?

- A. A purely punitive approach that disciplines any individual involved in an error
- B. A completely blame-free approach that never holds any individual accountable
- C. A balanced approach holding individuals accountable while still focusing on systemic learning
- D. An approach that avoids formally investigating errors to protect staff morale
- E. An approach that focuses exclusively on financial consequences of errors

296. Which of the following represents one of the four core principles of medical ethics?

- A. Confidentiality, though this is a related but distinct professional obligation
- B. Informed consent, though this is a related but distinct professional obligation
- C. Competency, though this is a related but distinct legal concept
- D. Autonomy, one of the four foundational principles of medical ethics
- E. Malpractice, though this is a related but distinct legal concept

297. A competent patient declines a recommended treatment after being fully informed of the risks and benefits. Which of the following is the most appropriate response?

- A. Override the patient's decision, since the clinician believes it is medically unwise
- B. Refuse to continue caring for the patient until they accept the treatment
- C. Respect the patient's autonomous decision, while ensuring they remain fully informed
- D. Contact the patient's family to make the decision on their behalf
- E. Document the refusal and take no further action of any kind

298. A clinician has a personal moral objection to performing a legally permitted procedure requested by a patient. Which of the following is the most appropriate action?

- A. Decline to perform the procedure while ensuring the patient can access care elsewhere
- B. Perform the procedure regardless of personal moral objections held by the clinician
- C. Refuse to see the patient again for any future medical concerns
- D. Delay the patient's care indefinitely without providing any alternative options
- E. Provide the patient with inaccurate information to discourage the request

299. A clinician wants to assess a patient's health literacy using a brief, validated tool. Which of the following best describes this approach compared to the teach-back method?

- A. Health literacy screening tools and the teach-back method are identical in purpose
- B. Health literacy screening tools assess baseline literacy, while teach-back confirms specific understanding
- C. The teach-back method is used only for pediatric patients specifically
- D. Health literacy screening tools require no patient participation whatsoever
- E. The teach-back method is a formal, validated screening instrument itself

300. Which of the following sits at the top of the traditional hierarchy of evidence in evidence-based medicine?

- A. Expert opinion alone, without any supporting research evidence cited
- B. A single case report describing an unusual clinical presentation
- C. A systematic review and meta-analysis of randomized controlled trials
- D. An individual randomized controlled trial, considered alone in isolation
- E. A retrospective case series without any randomization or control group

Answers

1. E. Correct: an elevated B-type natriuretic peptide level is consistent with heart failure, supporting this patient's reduced ejection fraction presentation. A, B, C, and D each describe a finding that would argue against, rather than support, this diagnosis.

- 2. C.** Correct: severely elevated blood pressure with evidence of end-organ damage, such as confusion and papilledema, defines hypertensive emergency, requiring immediate intravenous therapy. A is wrong because urgency lacks end-organ damage, unlike this presentation. B, D, and E each understate the severity of this presentation.
- 3. A.** Correct: exertional syncope, angina, and dyspnea together form the classic symptom triad of aortic stenosis. B, C, D, and E describe other valvular conditions with different classic symptom patterns, not this specific triad.
- 4. D.** Correct: a diastolic rumble with an opening snap, particularly with a rheumatic fever history, is classic for mitral stenosis. A, B, C, and E describe other valvular conditions with different classic auscultatory findings, not this specific opening snap.
- 5. E.** Correct: a regular atrial rate near 300 beats per minute with a sawtooth pattern is the classic ECG finding of atrial flutter. A, B, C, and D describe other arrhythmias with different classic ECG patterns, not this specific sawtooth appearance.
- 6. E.** Correct: a short PR interval with a delta wave is the classic ECG finding of Wolff-Parkinson-White syndrome, reflecting an accessory conduction pathway. A, B, C, and D describe other ECG abnormalities with different classic findings, not this specific delta wave.
- 7. B.** Correct: a QTc of 510 milliseconds is significantly prolonged and increases the risk of torsades de pointes, a life-threatening arrhythmia. A understates this abnormal finding. C, D, and E each misattribute this finding to an unrelated cause.
- 8. C.** Correct: nausea, visual disturbances with yellow-green halos, and new arrhythmias in a patient on chronic digoxin are classic for digoxin toxicity, given its narrow therapeutic index. A, B, D, and E each misattribute this recognized, drug-specific toxicity pattern to an unrelated cause.
- 9. B.** Correct: right heart catheterization is the gold standard test for definitively diagnosing pulmonary hypertension, providing direct pressure measurements. A, C, D, and E describe useful screening or supportive tests, but none serve as the definitive diagnostic standard.
- 10. C.** Correct: jugular venous pressure rising with inspiration, known as Kussmaul sign, along with a pericardial knock, is classic for constrictive pericarditis, particularly with a tuberculosis history. A, B, D, and E describe other cardiac conditions with different classic findings, not this specific knock and Kussmaul sign combination.
- 11. B.** Correct: the Jones criteria is the diagnostic framework specifically used to confirm acute rheumatic fever following a preceding streptococcal infection. A, C, D, and E describe diagnostic frameworks used for entirely different conditions, not rheumatic fever.

- 12. B.** Correct: a prosthetic heart valve is a recognized high-risk cardiac condition warranting antibiotic prophylaxis before certain dental procedures. A, C, D, and E describe cardiac conditions not classified as high-risk indications for this specific prophylaxis.
- 13. C.** Correct: bilateral edema with a preserved ejection fraction and elevated filling pressures is classic for heart failure with preserved ejection fraction. A, B, D, and E describe other causes of edema with different classic underlying findings, not this specific cardiac pattern.
- 14. B.** Correct: syncope specifically triggered by exertion, combined with a family history of sudden cardiac death, raises significant concern for an underlying cardiac cause requiring further evaluation. A, C, D, and E each inappropriately dismiss red flag features that warrant cardiac workup.
- 15. A.** Correct: functional capacity, measured in metabolic equivalents, is an important factor in pre-operative cardiac risk assessment before non-cardiac surgery. B, C, D, and E describe factors not relevant to this specific clinical risk assessment.
- 16. D.** Correct: discontinuing the statin and reevaluating symptoms and CK level is the appropriate approach for suspected statin-induced myopathy. A and B are wrong because continuing or increasing the statin would likely worsen symptoms. C is wrong because adding another statin does not address the underlying concern. E underestimates a clinically significant laboratory finding.
- 17. E.** Correct: the pooled cohort ASCVD risk calculator estimates 10-year cardiovascular risk to guide statin therapy decisions in primary prevention. A, B, C, and D describe purposes not characteristic of this specific risk assessment tool.
- 18. D.** Correct: unstable angina with ongoing chest pain is a recognized contraindication to exercise stress testing, given the risk of provoking a serious cardiac event. A, B, C, and E describe findings that do not represent contraindications to this testing.
- 19. D.** Correct: ongoing chest pain with a positive stress test suggesting ischemia is an appropriate indication for cardiac catheterization to further evaluate and potentially intervene on coronary artery disease. A, B, C, and E describe scenarios that do not warrant this invasive diagnostic procedure.
- 20. B.** Correct: elevated troponin without ST-segment elevation is the defining laboratory and ECG pattern of non-ST-elevation myocardial infarction. A is wrong because STEMI requires ST-segment elevation, absent here. C, D, and E describe other conditions with different classic laboratory and ECG patterns.
- 21. B.** Correct: new chest pain at rest with a normal troponin and no ECG changes is classic for unstable angina, distinguishing it from myocardial infarction by the absence of troponin elevation. A, C, D, and E describe other conditions with different classic laboratory or timing patterns.

- 22. A.** Correct: a dilated left ventricle with globally reduced systolic function is the classic echocardiographic finding of dilated cardiomyopathy. B, C, D, and E describe other cardiac conditions with different classic echocardiographic patterns, not this specific dilated, hypocontractile appearance.
- 23. D.** Correct: transthoracic echocardiography is the appropriate initial screening test for hypertrophic cardiomyopathy in an athlete with this family history. A, B, C, and E describe tests that are either more invasive or less appropriate as an initial screening step.
- 24. E.** Correct: a normal ejection fraction with a restrictive diastolic filling pattern in a patient with amyloidosis is classic for restrictive cardiomyopathy. A, B, C, and D describe other cardiac conditions with different classic echocardiographic patterns, not this specific infiltrative, restrictive pattern.
- 25. D.** Correct: a 68-year-old man with a significant smoking history meets standard criteria for one-time abdominal aortic aneurysm screening with ultrasound. A, B, C, and E describe patients who do not meet the standard age, sex, and smoking history criteria for this screening.
- 26. B.** Correct: an ankle-brachial index below 0.9 is consistent with peripheral artery disease, and this patient's markedly reduced value strongly supports this diagnosis. A, C, D, and E each mischaracterize this abnormal, diagnostically significant laboratory value.
- 27. E.** Correct: a pale, pulseless, painful limb with new sensory loss is classic for acute limb ischemia, a surgical emergency requiring immediate vascular evaluation. A, B, C, and D each inappropriately delay time-critical evaluation for a limb-threatening condition.
- 28. C.** Correct: episodic white-to-blue-to-red color changes triggered by cold exposure are the classic tricolor pattern of Raynaud phenomenon. A, B, D, and E describe other vascular conditions with different classic presentations, not this specific tricolor change pattern.
- 29. E.** Correct: acute heart failure symptoms following emotional stress, with normal coronary arteries and apical ballooning on echocardiogram, is classic for Takotsubo cardiomyopathy. A, B, C, and D describe other cardiac conditions that would typically show abnormal coronary findings, unlike this presentation.
- 30. A.** Correct: chest pain at rest, often nocturnal, with transient ST-segment elevation that resolves spontaneously is classic for Prinzmetal angina, caused by coronary vasospasm. B, C, D, and E describe other anginal or ischemic conditions with different classic timing and resolution patterns.
- 31. A.** Correct: tobacco use is a well-recognized modifiable cardiovascular risk factor that can be addressed through lifestyle intervention and cessation counseling. B, C, D, and E describe non-modifiable risk factors that cannot be changed through lifestyle modification.
- 32. E.** Correct: blood pressure and heart rate control is the standard initial medical management approach for a descending, Stanford Type B aortic dissection. A, B, and D describe more invasive

interventions typically reserved for ascending, Type A dissections. C underestimates the seriousness of this condition.

33. A. Correct: a tall, thin body habitus with a family history of aortic dissection and aortic root dilation is classic for Marfan syndrome, a connective tissue disorder. B, C, D, and E describe other genetic syndromes with different classic body habitus and cardiovascular associations, not this specific combination.

34. E. Correct: eggshell calcification of hilar lymph nodes with sandblasting exposure is classic for silicosis. A, B, C, and D describe other pneumoconioses or lung conditions with different classic occupational exposures and imaging findings.

35. E. Correct: bilateral pleural plaques with a shipyard occupational history are classic for asbestosis. A, B, C, and D describe other pneumoconioses with different classic occupational exposures and imaging findings, not this specific pleural plaque pattern.

36. A. Correct: a small, 4mm nodule in a low-risk patient warrants routine follow-up imaging rather than immediate invasive intervention. B, C, and E are unnecessarily aggressive for this low-risk finding. D underestimates the need for any follow-up at all.

37. C. Correct: rupture of a subpleural bleb is the classic underlying cause of primary spontaneous pneumothorax in a tall, thin young man without underlying lung disease. A, B, D, and E describe other causes or demographics not matching this classic presentation.

38. C. Correct: chest tube removal is appropriate once the air leak has resolved and the lung has fully re-expanded. A, B, D, and E each describe an unnecessary or inappropriate continuation of intervention despite these reassuring findings.

39. E. Correct: PEEP titration in ARDS aims to balance adequate oxygenation against the risks of barotrauma and hemodynamic compromise. A, B, C, and D each describe an approach that ignores this necessary clinical balance.

40. B. Correct: the presence of all three cardinal features, increased dyspnea, sputum volume, and sputum purulence, supports combined bronchodilator, corticosteroid, and antibiotic therapy for a COPD exacerbation. A, C, D, and E each omit a necessary component or inappropriately escalate care.

41. A. Correct: reduced FVC and TLC with a normal or increased FEV1/FVC ratio is the classic restrictive pattern seen in conditions like pulmonary fibrosis. B is wrong because obstructive disease shows a reduced, not normal or increased, FEV1/FVC ratio. C, D, and E describe patterns inconsistent with these specific findings.

42. A. Correct: a cavitory lesion with an air-fluid level, foul-smelling sputum, and aspiration risk factors is classic for lung abscess. B, C, D, and E describe other pulmonary conditions with different classic clinical and imaging patterns, not this specific cavitory, foul-smelling presentation.

- 43. B.** Correct: a paroxysmal cough with an inspiratory whoop and posttussive vomiting lasting weeks is classic for pertussis. A, C, D, and E describe other respiratory conditions with different classic presentations and durations, not this specific whooping cough pattern.
- 44. C.** Correct: sudden-onset unilateral wheezing immediately following a choking episode is classic for foreign body aspiration in a toddler. A, B, D, and E describe other respiratory conditions that typically present bilaterally or without this specific choking-associated onset.
- 45. A.** Correct: an apnea-hypopnea index of 15 to 29 events per hour is classified as moderate obstructive sleep apnea, consistent with this patient's value of 22. B, C, D, and E each describe a severity classification that does not match this specific AHI range.
- 46. A.** Correct: immediate descent and supplemental oxygen are the standard, most effective treatments for high-altitude pulmonary edema. B, C, D, and E each describe an approach that fails to address the underlying altitude-related pathophysiology.
- 47. E.** Correct: recent surgery within four weeks is a recognized risk factor incorporated into the Wells score for pulmonary embolism risk stratification. A, B, C, and D describe findings not included as risk factors in this specific clinical scoring system.
- 48. B.** Correct: an FEV1 of 30-49% predicted corresponds to GOLD stage 3, severe airflow limitation, consistent with this patient's value of 45%. A, C, D, and E each describe a stage that does not match this specific FEV1 percentage range.
- 49. E.** Correct: thymoma is one of the classic causes of an anterior mediastinal mass. B and D describe causes classically found in the posterior mediastinum instead. C describes a cause classically found in the middle mediastinum. A describes a finding in a different anatomic compartment altogether.
- 50. C.** Correct: milky white pleural fluid with markedly elevated triglycerides is the classic presentation and laboratory finding of chylothorax, typically from thoracic duct injury. A, B, D, and E describe other pleural fluid conditions with different classic appearances and laboratory patterns.
- 51. B.** Correct: multiple adjacent rib fractures with paradoxical chest wall movement during inspiration is the classic presentation of flail chest. A, C, D, and E describe other traumatic or cardiac conditions with different classic presentations, not this specific paradoxical movement.
- 52. C.** Correct: prone positioning is a recognized intervention that can improve oxygenation in patients with severe ARDS refractory to standard ventilator optimization. A, B, D, and E each describe an inappropriate intervention that would likely worsen, rather than improve, this patient's oxygenation.
- 53. E.** Correct: squamous cell lung cancer is classically associated with ectopic parathyroid hormone-related peptide secretion, causing hypercalcemia of malignancy. B and C describe paraneoplastic mechanisms more classically associated with small cell lung cancer instead. A and D describe mechanisms not characteristic of this specific paraneoplastic presentation.

- 54. A.** Correct: an apical lung tumor with ipsilateral ptosis, miosis, and anhidrosis, the components of Horner syndrome, is classic for Pancoast tumor. B, C, D, and E describe other lung tumors with different classic clinical presentations, not this specific Horner syndrome combination.
- 55. A.** Correct: episodic flushing, diarrhea, and wheezing from a bronchial tumor are classic for carcinoid syndrome, caused by serotonin secretion. B, C, D, and E describe other lung tumors with different classic clinical presentations, not this specific flushing and diarrhea combination.
- 56. E.** Correct: progressive, irreversible airflow obstruction developing months after lung transplantation is classic for bronchiolitis obliterans, a form of chronic rejection. A, B, C, and D describe other post-transplant or respiratory conditions with different classic timing and presentations.
- 57. C.** Correct: hemoptysis, acute kidney injury with red blood cell casts, and anti-glomerular basement membrane antibodies together are classic for Goodpasture syndrome. A, B, D, and E describe other pulmonary-renal syndromes with different classic antibody patterns, not this specific anti-GBM finding.
- 58. D.** Correct: sinusitis, hemoptysis, acute kidney injury, and a positive c-ANCA are classic for granulomatosis with polyangiitis. A, B, C, and E describe other vasculitides or renal conditions with different classic antibody patterns, not this specific c-ANCA finding.
- 59. A.** Correct: a low PaO₂ with a normal PaCO₂ is the defining pattern of Type 1, hypoxemic respiratory failure. B is wrong because Type 2 failure requires an elevated, not normal, PaCO₂. C, D, and E each mischaracterize this specific, clinically significant ABG pattern.
- 60. E.** Correct: an elevated PaCO₂ with compensatory bicarbonate elevation is the defining pattern of Type 2, hypercapnic respiratory failure, common in COPD. A is wrong because Type 1 failure does not involve CO₂ elevation. B, C, and D each mischaracterize this specific, clinically significant ABG pattern.
- 61. D.** Correct: pancreatic calcifications with steatorrhea and an alcohol history are classic for chronic pancreatitis. A, B, C, and E describe other conditions with different classic imaging findings, not this specific calcification pattern.
- 62. E.** Correct: painless jaundice with a palpable, non-tender gallbladder, Courvoisier sign, is classic for pancreatic cancer causing biliary obstruction. A, B, C, and D describe other conditions with different classic presentations, not this specific painless, Courvoisier-positive pattern.
- 63. B.** Correct: an elevated AFP with a new liver mass in a cirrhotic patient is classic for hepatocellular carcinoma. A, C, D, and E describe other hepatic lesions with different classic laboratory associations, not this specific AFP elevation pattern in a cirrhotic patient.
- 64. B.** Correct: elevated transaminases with a positive anti-smooth muscle antibody and elevated IgG in a young woman is classic for autoimmune hepatitis. A, C, D, and E describe other liver conditions with different classic antibody and laboratory patterns.

- 65. E.** Correct: pruritus with an elevated alkaline phosphatase and a positive anti-mitochondrial antibody in a middle-aged woman is classic for primary biliary cholangitis. A, B, C, and D describe other liver conditions with different classic antibody patterns, not this specific anti-mitochondrial finding.
- 66. A.** Correct: liver disease with neuropsychiatric symptoms and Kayser-Fleischer rings in a young patient is classic for Wilson disease. B, C, D, and E describe other liver conditions with different classic clinical findings, not this specific ring finding.
- 67. C.** Correct: bronze skin, diabetes, and liver disease with markedly elevated ferritin and transferrin saturation are classic for hereditary hemochromatosis. A, B, D, and E describe other liver conditions with different classic clinical and laboratory patterns, not this specific bronze diabetes triad.
- 68. B.** Correct: an AST to ALT ratio greater than 2 to 1 with recent heavy alcohol use is classic for alcoholic hepatitis. A, C, D, and E describe other liver conditions with different classic transaminase ratio patterns, not this specific elevated AST:ALT ratio.
- 69. B.** Correct: stool testing for *Clostridioides difficile* toxin is the appropriate initial diagnostic test for a hospitalized patient on recent antibiotics with this classic presentation. A, C, D, and E describe tests that are not the appropriate initial diagnostic step for this specific clinical scenario.
- 70. A.** Correct: marked colonic dilation with systemic toxicity in a patient with severe colitis is classic for toxic megacolon, a life-threatening complication. B, C, D, and E describe other conditions with different classic presentations, not this specific dilation and toxicity combination.
- 71. B.** Correct: painful bowel movements with bright red blood and a posterior midline tear is classic for anal fissure. A, C, D, and E describe other anorectal conditions with different classic examination findings, not this specific posterior midline tear.
- 72. C.** Correct: protrusion of rectal tissue with chronic straining is classic for rectal prolapse. A, B, D, and E describe other anorectal conditions with different classic presentations, not this specific protrusion finding.
- 73. B.** Correct: intestinal metaplasia of the distal esophagus in a patient with chronic GERD is the definition of Barrett esophagus, carrying an increased esophageal adenocarcinoma risk. A, C, D, and E describe other esophageal conditions with different classic findings and future risks.
- 74. D.** Correct: progressive dysphagia from solids to liquids with weight loss in a patient with Barrett esophagus is classic for esophageal adenocarcinoma. A, B, C, and E describe other esophageal conditions with different classic progression patterns, not this specific solid-to-liquid dysphagia progression.
- 75. A.** Correct: a submucosal gastric mass that is KIT-positive on biopsy is the defining finding of a gastrointestinal stromal tumor. B, C, D, and E describe other gastric lesions with different classic biopsy findings, not this specific KIT-positive marker.

- 76. D.** Correct: an incidental appendiceal carcinoid tumor found during appendectomy is often indolent, particularly when small, and frequently requires no additional intervention beyond the appendectomy itself. A, B, C, and E each mischaracterize the typically favorable behavior of this specific incidental finding.
- 77. E.** Correct: chronic diarrhea and malabsorption following extensive small bowel resection is classic for short bowel syndrome. A, B, C, and D describe other malabsorptive or inflammatory conditions with different classic causes, not this specific post-resection pattern.
- 78. B.** Correct: hypoalbuminemia with chronic diarrhea and edema, despite normal liver and kidney function, is classic for protein-losing enteropathy. A, C, D, and E describe other causes of hypoalbuminemia or edema that would show abnormal liver or kidney findings, unlike this presentation.
- 79. A.** Correct: painless rectal bleeding in a young child is the classic presentation of Meckel diverticulum, from ectopic gastric tissue. B, C, D, and E describe other pediatric GI conditions with different classic presentations, not this specific painless bleeding pattern.
- 80. E.** Correct: intermittent abdominal pain, currant jelly stool, and a sausage-shaped abdominal mass are the classic triad of intussusception. A, B, C, and D describe other pediatric GI conditions with different classic presentations, not this specific currant jelly and mass combination.
- 81. E.** Correct: sudden bilious vomiting in a newborn is highly concerning for malrotation with midgut volvulus, a surgical emergency. A, B, C, and D describe other neonatal conditions with different classic presentations, none as immediately concerning as bilious vomiting for this specific diagnosis.
- 82. A.** Correct: transient right upper quadrant pain after fatty meals that resolves without fever or leukocytosis is classic for biliary colic. B, C, and D are wrong because they typically present with fever, leukocytosis, or more persistent symptoms. E describes a different condition with a different classic pain pattern.
- 83. A.** Correct: fever, jaundice, and right upper quadrant pain together form Charcot triad, classically suggesting ascending cholangitis. B, C, D, and E describe other clinical frameworks used for entirely different conditions, not biliary tract infection.
- 84. B.** Correct: antibiotics combined with urgent biliary decompression is the standard treatment for ascending cholangitis, a condition that can rapidly progress to sepsis. A, C, D, and E each omit a necessary component of treatment or inappropriately delay definitive source control.
- 85. E.** Correct: anatomic snuffbox tenderness following a fall on an outstretched hand is classic for scaphoid fracture, which carries a risk of avascular necrosis if missed due to its tenuous blood supply. A, B, C, and D describe other wrist or hand fractures with different classic examination findings and complications.

- 86. C.** Correct: brachial artery injury is a recognized, important complication to assess for with a supracondylar humerus fracture in a child. A, B, D, and E describe other nerve injuries not classically the primary concern with this specific fracture location.
- 87. D.** Correct: wrist drop and inability to extend the fingers following a humeral shaft fracture is classic for radial nerve injury, given the nerve's close anatomic relationship to the humeral shaft. A, B, C, and E describe other nerves with different classic injury patterns, not this specific wrist drop finding.
- 88. B.** Correct: a shortened, externally rotated leg following a fall in an older adult is the classic presentation of hip fracture. A, C, D, and E describe other fractures or injuries with different classic clinical presentations, not this specific limb positioning.
- 89. E.** Correct: the absence of bony tenderness at the malleoli combined with the ability to bear weight meets the Ottawa ankle rules criteria indicating X-ray is not required. A, B, C, and D each describe an unnecessarily aggressive approach given these reassuring examination findings.
- 90. A.** Correct: MRI or bone scan offers higher sensitivity than plain X-ray for detecting a stress fracture, particularly early in its course. B is wrong because repeating the same X-ray view offers no additional sensitivity. C underestimates a normal X-ray's real limitations for this diagnosis. D and E each describe an inappropriate response to ongoing, concerning symptoms.
- 91. D.** Correct: a sudden 'pop,' palpable gap, and absent plantarflexion on calf squeeze, a positive Thompson test, are classic for Achilles tendon rupture. A, B, C, and E describe other ankle or foot conditions with different classic examination findings, not this specific Thompson test result.
- 92. C.** Correct: a pars interarticularis defect described as a 'Scotty dog' fracture on oblique X-ray is the classic imaging finding of spondylolysis, particularly in adolescent athletes performing repetitive hyperextension; this is distinct from spondylolisthesis, the resulting anterior vertebral slippage that is graded on a lateral view rather than diagnosed by this specific oblique-view sign. A, B, D, and E describe other spinal conditions with different classic imaging findings, not this specific 'Scotty dog' appearance.
- 93. D.** Correct: bilateral leg pain worsening with standing and walking, improving with sitting or forward flexion, is the classic neurogenic claudication pattern of spinal stenosis. A is wrong because peripheral artery disease pain typically does not improve with positional changes like flexion. B, C, and E describe other conditions with different classic presentations.
- 94. D.** Correct: dermatomal leg pain with a positive straight leg raise test is the classic presentation and examination finding of a herniated disc causing nerve root compression. A, B, C, and E describe other conditions with different classic presentations, not this specific positive straight leg raise finding.
- 95. A.** Correct: a fluctuant swelling specifically in the popliteal fossa is the classic location and presentation of a Baker cyst. B, C, D, and E describe other conditions with different classic locations or presentations, not this specific popliteal fossa swelling.

- 96. C.** Correct: a smooth, fluctuant, transilluminating swelling on the dorsal wrist is the classic presentation of a ganglion cyst. A, B, D, and E describe other soft tissue findings with different classic characteristics, not this specific transilluminating quality at this specific location.
- 97. C.** Correct: progressive palmar fascia thickening with flexion contracture of the ring and small fingers is the classic presentation of Dupuytren contracture. A, B, D, and E describe other hand conditions with different classic presentations, not this specific palmar fascia and finger involvement pattern.
- 98. E.** Correct: a finger that catches and locks in flexion with a palpable nodule at the base is the classic presentation of trigger finger, from thickening at the A1 pulley. A, B, C, and D describe other hand conditions with different classic presentations, not this specific catching and locking pattern.
- 99. E.** Correct: a positive Neer sign combined with a positive Hawkins test is the classic examination combination confirming rotator cuff impingement syndrome. A, B, C, and D describe other shoulder conditions with different classic examination findings, not this specific impingement test combination.
- 100. D.** Correct: loss of both active AND passive range of motion, particularly in a patient with diabetes, is the classic distinguishing feature of adhesive capsulitis. A and B are wrong because rotator cuff pathology typically preserves passive range of motion, unlike this presentation. C and E describe other conditions with different classic examination findings.
- 101. A.** Correct: lateral knee pain in a runner, worsened by downhill running, is the classic presentation of iliotibial band syndrome. B, C, D, and E describe other knee conditions with different classic pain locations or triggers, not this specific lateral, downhill-aggravated pattern.
- 102. A.** Correct: anterior knee pain worsened by prolonged sitting and stair climbing is the classic presentation of patellofemoral pain syndrome in a young athlete. B, C, D, and E describe other knee conditions with different classic pain patterns or age groups, not this specific anterior, activity-related presentation.
- 103. E.** Correct: conservative management is appropriate for a newborn clavicle fracture, since these fractures generally heal well without surgical intervention. A, B, and C describe unnecessarily aggressive interventions for this typically benign, self-healing injury. D underestimates the value of appropriate monitoring.
- 104. B.** Correct: a scapular fracture indicates significant force was involved, warranting careful evaluation for other associated injuries like pulmonary contusion. A, C, D, and E each mischaracterize the clinical significance of this specific fracture as a marker of high-energy trauma.
- 105. A.** Correct: an inversion mechanism with tenderness over the anterior talofibular ligament is the classic presentation of a lateral ankle sprain, the most common type. B, C, D, and E describe other ankle injuries with different classic mechanisms or examination findings, not this specific inversion and ligament location.

- 106. A.** Correct: reproducible tenderness with palpation of the costochondral junctions, combined with a normal cardiac workup, is classic for costochondritis. B, C, D, and E describe other, more serious causes of chest pain that would not typically present with this specific reproducible, palpation-triggered tenderness pattern.
- 107. D.** Correct: localized, fluctuant swelling over the olecranon following repetitive pressure is the classic presentation of olecranon bursitis. A, B, C, and E describe other conditions with different classic presentations, not this specific localized swelling tied to repetitive pressure history.
- 108. D.** Correct: progressive, painless joint destruction in a patient with long-standing peripheral neuropathy is the classic presentation of a Charcot joint. A, B, C, and E describe other joint conditions that typically present with significant pain, unlike this classic painless destruction pattern.
- 109. C.** Correct: visual scintillations preceding a unilateral throbbing headache with photophobia and nausea is the classic presentation of migraine with aura. A, B, D, and E describe other headache conditions with different classic presentations, not this specific visual aura and headache combination.
- 110. A.** Correct: a bilateral, band-like headache without nausea, vomiting, or photophobia is the classic presentation of tension headache. B, C, D, and E describe other headache conditions with different classic presentations, not this specific pressure-quality, symptom-free pattern.
- 111. C.** Correct: brief staring spells without postictal confusion, occurring multiple times daily, is classic for absence seizures. A is wrong because complex partial seizures typically involve postictal confusion, unlike this presentation. B, D, and E describe other seizure types with different classic presentations.
- 112. A.** Correct: a brief generalized seizure during fever with rapid return to baseline is classic for a simple febrile seizure, which carries a generally benign prognosis. B, C, D, and E describe other seizure presentations with different classic features and prognoses, not matching this specific simple pattern.
- 113. B.** Correct: excessive daytime sleepiness with emotion-triggered muscle weakness is the classic presentation of narcolepsy with cataplexy. A, C, D, and E describe other sleep disorders without this specific, diagnostic cataplexy feature.
- 114. A.** Correct: an uncomfortable urge to move the legs, worse in the evening and at rest, relieved by movement, is the classic presentation of restless legs syndrome. B, C, D, and E describe other conditions with different classic triggering and relieving patterns.
- 115. E.** Correct: reproduction of arm pain with neck extension, lateral flexion, and rotation toward the affected side is the positive Spurling test, classic for cervical radiculopathy. A, B, C, and D describe other conditions with different classic examination findings, not this specific neck-movement-triggered pattern.

- 116. B.** Correct: sudden, isolated anterograde amnesia resolving completely within 24 hours, without other neurologic deficits, is classic for transient global amnesia. A, C, D, and E describe other conditions with different classic durations or associated findings, not this specific isolated, self-resolving pattern.
- 117. B.** Correct: hypertension, bradycardia, and irregular respirations together form Cushing triad, classically indicating increased intracranial pressure. A, C, D, and E describe other conditions with different classic vital sign patterns, not this specific combination.
- 118. E.** Correct: pupil involvement with third nerve palsy findings raises significant concern for a compressive lesion, such as an aneurysm, requiring urgent evaluation. A is wrong because pupil involvement, not sparing, is the concerning feature here. B, C, and D describe other conditions with different classic presentations.
- 119. C.** Correct: a rising epigastric sensation and déjà vu preceding impaired awareness with automatisms like lip smacking is classic for temporal lobe epilepsy. A, B, D, and E describe other seizure types with different classic auras and presentations, not this specific combination.
- 120. A.** Correct: vertigo accompanied by diplopia, dysarthria, and limb ataxia suggests a central cause requiring further neurologic workup, given these additional concerning findings. B, C, D, and E describe peripheral vertigo conditions that would not typically present with these additional neurologic findings.
- 121. B.** Correct: severe hypotonia with tongue fasciculations and preserved cognition in an infant is classic for spinal muscular atrophy. A, C, D, and E describe other conditions with different classic presentations, not this specific combination of findings at this age.
- 122. E.** Correct: sensory ataxia, absent reflexes, and Argyll Robertson pupils in a patient with untreated tertiary syphilis are classic for tabes dorsalis. A, B, C, and D describe other neurologic conditions with different classic presentations, not this specific pupillary finding.
- 123. C.** Correct: multiple ring-enhancing brain lesions in an HIV patient with a low CD4 count is classic for CNS toxoplasmosis, the more common diagnosis in this specific population and presentation. A, B, D, and E describe other CNS conditions with different classic imaging patterns or associated populations.
- 124. C.** Correct: a ring-enhancing brain lesion with fever and focal deficits in a patient with chronic sinusitis is classic for brain abscess, given the sinus as a likely source. A, B, D, and E describe other CNS conditions with different classic associated histories, not this specific sinus-source pattern.
- 125. D.** Correct: a headache worsened by Valsalva maneuvers with cerebellar tonsillar herniation on MRI is classic for Chiari malformation. A, B, C, and E describe other conditions with different classic imaging findings, not this specific tonsillar herniation.

- 126. C.** Correct: a 'cape-like' dissociated sensory loss, pain and temperature affected while light touch and proprioception are preserved, is the classic presentation of syringomyelia. A, B, D, and E describe other conditions with different classic sensory distribution patterns.
- 127. B.** Correct: REM sleep behavior disorder, acting out dreams during sleep, is strongly associated with future development of Parkinson disease and related synucleinopathies. A, C, D, and E describe other neurodegenerative conditions not as strongly linked to this specific sleep finding.
- 128. E.** Correct: ptosis and limited eye movement with preserved pupillary reactivity in a patient with diabetes is classic for microvascular ischemic third nerve palsy, which characteristically spares the pupil. A, B, C, and D describe other conditions or mechanisms not matching this specific pupil-sparing presentation.
- 129. A.** Correct: ipsilateral ptosis, miosis, and anhidrosis following sympathetic chain injury together form the classic triad of Horner syndrome. B, C, D, and E describe other conditions with different classic clinical triads, not this specific combination.
- 130. E.** Correct: a chronically depressed mood present for at least 2 years without meeting full major depressive episode criteria is classic for persistent depressive disorder. A, B, C, and D describe other mood conditions with different classic duration or severity criteria, not this specific chronic, subthreshold pattern.
- 131. E.** Correct: recurrent depressive episodes with a consistent winter onset and spring remission is classic for seasonal affective disorder. A, B, C, and D describe other mood conditions without this specific, defining seasonal pattern.
- 132. A.** Correct: numerous periods of subthreshold depressive and hypomanic symptoms over at least 2 years is classic for cyclothymic disorder. B, C, D, and E describe other mood or personality conditions with different classic severity or duration criteria, not this specific subthreshold, chronic pattern.
- 133. D.** Correct: an intense, focused fear of a specific situation like flying, with complete avoidance, is classic for specific phobia. A, B, C, and E describe other anxiety conditions with different classic, broader, or differently-focused fear patterns.
- 134. D.** Correct: fear of public speaking and eating in front of others due to fear of negative judgment is classic for social anxiety disorder. A, B, C, and E describe other anxiety conditions with different classic core fears, not this specific fear of social judgment.
- 135. B.** Correct: preoccupation with a perceived, non-observable physical flaw with excessive checking behavior is classic for body dysmorphic disorder. A, C, D, and E describe other conditions with different classic core preoccupations, not this specific perceived physical defect.

136. A. Correct: persistent difficulty discarding possessions resulting in unusable, cluttered living spaces is classic for hoarding disorder. B, C, D, and E describe other conditions with different classic core features, not this specific difficulty discarding possessions.

137. B. Correct: emotional and behavioral symptoms developing within 3 months of an identifiable stressor, without meeting full criteria for another disorder, is classic for adjustment disorder. A, C, D, and E describe other conditions with different classic duration or severity criteria, not this specific stressor-related, subthreshold pattern.

138. A. Correct: significant memory gaps with periods of behaving as a distinctly different personality is the classic, defining presentation of dissociative identity disorder. B, C, D, and E describe other conditions with different classic core features, not this specific distinct personality state pattern.

139. B. Correct: consciously fabricated symptoms for an external, secondary gain like disability payments is the definition of malingering. A, C, D, and E describe other conditions without this specific, defining external incentive.

140. E. Correct: a caregiver fabricating or inducing illness in a dependent for attention from medical staff is the classic presentation of factitious disorder imposed on another. A, B, C, and D describe other conditions with different classic patterns, not this specific caregiver-perpetrated pattern.

141. A. Correct: disregard for others' rights, deceitfulness, and impulsivity with a documented conduct disorder history before age 15 meets the required diagnostic criteria for antisocial personality disorder. B, C, D, and E describe other personality disorders with different classic core features and diagnostic requirements.

142. B. Correct: grandiosity, a need for excessive admiration, and a lack of empathy together form the classic core features of narcissistic personality disorder. A, C, D, and E describe other personality disorders with different classic core features, not this specific combination.

143. D. Correct: odd beliefs, unusual perceptual experiences, and eccentric behavior without meeting full psychotic disorder criteria is classic for schizotypal personality disorder. A, B, C, and E describe other conditions with different classic core features, not this specific odd belief and perception pattern.

144. B. Correct: rapid-onset confusion, delusions, and hallucinations shortly after delivery, along with thoughts of harming the infant, represents a psychiatric emergency requiring immediate evaluation for postpartum psychosis. A, C, D, and E each inappropriately delay or dismiss this serious, time-critical presentation.

145. B. Correct: benzodiazepine withdrawal, particularly following abrupt discontinuation after chronic high-dose use, can be life-threatening, including seizure risk. A, C, D, and E each mischaracterize this recognized, serious withdrawal syndrome as an unrelated or benign process.

146. E. Correct: involuntary lip smacking, tongue protrusion, and chewing movements following long-term antipsychotic use are classic for tardive dyskinesia. A, B, C, and D describe other antipsychotic-related movement disorders with different classic timing and movement patterns, not this specific long-term, involuntary pattern.

147. B. Correct: immediate discontinuation of the antipsychotic combined with supportive medical care is the appropriate treatment for neuroleptic malignant syndrome, a life-threatening emergency. A, D, and E each inappropriately delay necessary treatment. C is wrong because continuing or increasing the causative medication would worsen this condition.

148. E. Correct: checking a lithium level immediately and holding the medication is the appropriate response to signs suggestive of lithium toxicity, particularly following dehydration. A and B are wrong because they dismiss or worsen a genuine toxicity risk. C is wrong because NSAIDs can further increase lithium levels. D underestimates the need for laboratory confirmation.

149. D. Correct: lifelong difficulty with organization and attention, with symptoms present since childhood, meets the required childhood-onset criteria for adult attention-deficit/hyperactivity disorder. A, B, C, and E describe other conditions without this specific, required childhood-onset feature.

150. E. Correct: a pattern of irritable mood, argumentative behavior, and vindictiveness without violating others' basic rights is classic for oppositional defiant disorder. A is wrong because conduct disorder specifically involves rights violations, absent here. B is wrong because this diagnosis is not made in children. C and D describe other conditions with different classic core features.

151. E. Correct: pelvic ultrasound is the appropriate initial step to assess for anatomic causes of primary amenorrhea in a patient with normal secondary sexual development. A, B, C, and D each describe an inappropriate or premature step before basic anatomic evaluation.

152. A. Correct: short stature, primary amenorrhea, a webbed neck, and widely spaced nipples are the classic features of Turner syndrome. B, C, D, and E describe other conditions with different classic clinical presentations, not this specific combination of physical findings.

153. B. Correct: secondary amenorrhea following uterine instrumentation with intrauterine adhesions on hysteroscopy is classic for Asherman syndrome. A, C, D, and E describe other causes of amenorrhea with different classic histories and findings, not this specific post-procedural adhesion pattern.

154. E. Correct: severe, impairing mood symptoms specifically confined to the luteal phase before menses is classic for premenstrual dysphoric disorder. A underestimates the severity and impairment present in this specific presentation. B, C, and D describe mood disorders without this specific cyclic, luteal-phase timing pattern.

155. B. Correct: painless cervical dilation without contractions at 20 weeks is classic for cervical insufficiency. A is wrong because preterm labor typically involves contractions, absent here. C, D, and E

describe other obstetric conditions with different classic presentations, not this specific painless dilation pattern.

156. E. Correct: universal gestational diabetes screening is performed between 24 and 28 weeks gestation in most pregnancies. A, B, C, and D each describe a timing that does not reflect the current, standard screening window.

157. B. Correct: RhoGAM is administered around 28 weeks gestation to an Rh-negative, antibody-negative pregnant patient to prevent isoimmunization. A and C underestimate the importance of this prophylactic step at this gestational age. D is an inappropriate response unrelated to Rh status. E is wrong because prophylaxis is also needed antenatally, not only after delivery.

158. A. Correct: discordant growth and amniotic fluid volumes between monochorionic twins, from unequal shared placental blood flow, is the classic presentation of twin-twin transfusion syndrome. B, C, D, and E describe other conditions or pregnancy types with different classic findings, not this specific discordant pattern between monochorionic twins.

159. C. Correct: painless bleeding immediately following membrane rupture with fetal heart rate abnormalities is classic for vasa previa, involving fetal vessel rupture. A, B, D, and E describe other causes of bleeding with different classic triggers, not this specific membrane-rupture-triggered pattern.

160. C. Correct: sudden severe abdominal pain in a patient attempting vaginal birth after a prior cesarean is classic for uterine rupture at the prior scar site. A, B, D, and E describe other conditions with different classic presentations, not this specific prior-cesarean-associated pattern.

161. E. Correct: persistent heavy bleeding after a miscarriage with retained tissue on ultrasound is classic for retained products of conception. A, B, C, and D describe other gynecologic conditions with different classic clinical and imaging patterns, not this specific post-miscarriage retained tissue finding.

162. D. Correct: endometrial biopsy is the appropriate next step to evaluate for endometrial cancer in a postmenopausal patient with new vaginal bleeding, particularly given the added risk factor of obesity. A, B, C, and E each inappropriately delay or omit necessary evaluation for this potentially serious finding.

163. B. Correct: vague bloating, early satiety, and abdominal discomfort in an older woman, together with the described laboratory finding, raise concern for ovarian cancer, given its classically subtle, nonspecific presentation. A, C, D, and E describe other conditions that do not typically produce this same laboratory pattern.

164. E. Correct: a painful, fluctuant, unilateral swelling at the posterior vaginal introitus is the classic location and presentation of Bartholin gland abscess. A, B, C, and D describe other vulvar conditions with different classic presentations, not this specific location and quality.

165. D. Correct: thin, white, atrophic vulvar patches with itching in a postmenopausal woman are classic for lichen sclerosus. A, B, C, and E describe other vulvar conditions with different classic appearances, not this specific white, atrophic skin finding.

166. B. Correct: a frothy discharge with a strawberry-appearing cervix is classic for *Trichomonas vaginalis* infection. A, C, D, and E describe other vaginal conditions with different classic discharge characteristics and examination findings, not this specific strawberry cervix appearance.

167. C. Correct: a thin, gray, malodorous discharge with a positive whiff test and clue cells is the classic presentation and diagnostic finding of bacterial vaginosis. A, B, D, and E describe other vaginal infections with different classic discharge characteristics, not this specific clue cell finding.

168. B. Correct: a cottage cheese-like discharge with intense pruritus and a normal vaginal pH is classic for candidal vaginitis. A and E are wrong because both bacterial vaginosis and trichomoniasis classically present with an elevated, not normal, pH. C and D describe other infections with different classic discharge characteristics.

169. D. Correct: dysfunctional uterine bleeding is an appropriate diagnosis once structural, hormonal, and neoplastic causes have been excluded through thorough workup. A, B, C, and E describe conditions that have already been ruled out by the workup described in this presentation.

170. A. Correct: amenorrhea before age 40 with hot flashes and an elevated FSH level is classic for premature ovarian insufficiency. B, C, and D describe other causes of amenorrhea with different classic hormone patterns. E is wrong because Turner syndrome is typically identified earlier in life, not at this age of onset.

171. C. Correct: maternal cocaine use is a well-recognized risk factor for placental abruption, given its vasoconstrictive effects. A, B, D, and E each describe a well-controlled or uncomplicated history that does not represent an increased risk for this condition.

172. E. Correct: emergent MRI and surgical evaluation is indicated for suspected epidural abscess in a patient with IV drug use, fever, back pain, and progressive neurologic deficit. A, B, C, and D each inappropriately delay time-critical evaluation for this neurologic emergency.

173. D. Correct: an elevated lactate in septic shock indicates tissue hypoperfusion, warranting aggressive fluid resuscitation and close reassessment. A, B, C, and E each mischaracterize this important marker of inadequate tissue oxygen delivery.

174. C. Correct: systemic antifungal therapy combined with prompt catheter removal is the standard management for catheter-associated candidemia. A, D, and E each omit a necessary component of appropriate source control and antifungal treatment. B underestimates the seriousness of bloodstream candidal infection.

175. A. Correct: a nodular lesion with a surrounding halo of ground-glass opacity on CT is the classic imaging finding of invasive aspergillosis in an immunocompromised patient. B, C, D, and E describe other pulmonary conditions with different classic imaging findings, not this specific halo sign.

176. E. Correct: India ink staining revealing encapsulated yeast forms in CSF is the classic diagnostic finding of cryptococcal meningitis in an HIV patient. A, B, C, and D describe other CNS infections with different classic diagnostic findings, not this specific India ink stain result.

177. D. Correct: diffuse bilateral ground-glass infiltrates in an HIV patient with a CD4 count below 200 is classic for *Pneumocystis jirovecii* pneumonia. A, B, C, and E describe other pulmonary conditions with different classic imaging patterns, not this specific diffuse, bilateral appearance in this population.

178. D. Correct: a 'pizza pie' fundus appearance in an HIV patient with new floaters and vision loss is the classic finding of cytomegalovirus retinitis. A, B, C, and E describe other retinal conditions with different classic fundoscopic findings, not this specific 'pizza pie' pattern.

179. C. Correct: fecal-oral transmission following contaminated food with a self-limited course and no chronic carrier state is classic for hepatitis A. B, D, and E describe other hepatitis types with different classic transmission routes or requirements. A is wrong because hepatitis B is not classically fecal-oral transmitted.

180. A. Correct: HBsAg positivity persisting beyond 6 months defines chronic hepatitis B infection. B is wrong because acute infection would show a shorter duration of HBsAg positivity. C, D, and E each mischaracterize this specific, persistent laboratory finding.

181. D. Correct: empiric intravenous acyclovir should be started promptly for suspected herpes simplex encephalitis, given this classic temporal lobe and PCR finding. A, B, C, and E each inappropriately delay or omit necessary antiviral treatment for this life-threatening CNS infection.

182. E. Correct: granulation tissue at the bony-cartilaginous junction in a diabetic patient raises significant concern for necrotizing otitis externa, given the risk of progression to skull base osteomyelitis. A, B, C, and D each underestimate the seriousness of this specific presentation in this high-risk population.

183. A. Correct: *Coxiella burnetii*, causing Q fever, is classically associated with livestock exposure, particularly during birthing season. B, C, D, and E describe other atypical pneumonia pathogens with different classic exposure histories, not this specific livestock association.

184. A. Correct: fever, myalgias, and conjunctival suffusion following freshwater exposure is classic for leptospirosis. B, C, D, and E describe other conditions with different classic exposure histories or presentations, not this specific freshwater-associated systemic illness.

- 185. E.** Correct: fever and tender regional lymphadenopathy following a cat scratch is the classic presentation of cat scratch disease, caused by *Bartonella henselae*. A, B, C, and D describe other conditions with different classic exposure histories, not this specific cat-associated pattern.
- 186. A.** Correct: persistent vomiting, severe abdominal pain, and mucosal bleeding in a patient with dengue fever are recognized warning signs of progression to severe dengue, requiring close monitoring. B, C, D, and E each mischaracterize these specific, clinically significant warning signs.
- 187. E.** Correct: fetal microcephaly is the most significant, well-established concern associated with Zika virus infection during pregnancy. A, B, C, and D describe complications not characteristic of this specific viral infection's recognized risks.
- 188. B.** Correct: a diffuse rash involving the palms and soles following a resolved genital ulcer is classic for secondary syphilis. A is wrong because primary syphilis presents with the chancre itself, not this later rash. C, D, and E describe other conditions with different classic timing or rash distributions.
- 189. B.** Correct: a vertebral body infection in a patient with IV drug use and fever is classic for vertebral osteomyelitis. A is wrong because epidural abscess involves a different anatomic location than the vertebral body itself. C, D, and E describe other spinal conditions with different classic imaging findings.
- 190. E.** Correct: chronic diarrhea, weight loss, joint pain, and cognitive changes with PAS-positive macrophages on biopsy is the classic, defining presentation of Whipple disease. A, B, C, and D describe other malabsorptive conditions with different classic biopsy findings, not this specific PAS-positive result.
- 191. D.** Correct: severe pharyngitis followed by neck swelling, septic emboli, and jugular vein thrombophlebitis is the classic presentation of Lemierre syndrome. A, B, C, and E describe other pharyngeal or neck conditions with different classic presentations, not this specific vascular thrombophlebitis and embolic pattern.
- 192. C.** Correct: chronic cervicofacial swelling with draining sinus tracts containing sulfur granules following a dental procedure is the classic presentation of actinomycosis. A, B, D, and E describe other conditions with different classic findings, not this specific sulfur granule and dental-procedure association.
- 193. D.** Correct: an elevated TSH with a normal free T4 is the defining laboratory pattern of subclinical hypothyroidism. A is wrong because overt hypothyroidism would show a low, not normal, T4. B, C, and E each mischaracterize this specific, recognized laboratory pattern.
- 194. A.** Correct: a low TSH with a normal free T4 and no significant symptoms is classic for subclinical hyperthyroidism. B, C, and D describe other thyroid states with different classic laboratory patterns, not this specific low TSH, normal T4 combination. E is wrong because this laboratory pattern is abnormal, not normal.

195. E. Correct: parathyroid, pituitary, and pancreatic tumors together form the classic 'three P's' of MEN1 syndrome. A, B, C, and D describe other genetic syndromes with different classic tumor combinations, not this specific triad.

196. D. Correct: medullary thyroid cancer, pheochromocytoma, and primary hyperparathyroidism together are the classic tumor triad of MEN2A. A, C, and E describe other syndromes with different classic tumor combinations, not this specific triad. B is wrong because MEN2B does not classically include this parathyroid finding.

197. D. Correct: symptomatic hypoglycemia, a documented low glucose value, and symptom resolution with glucose correction together form Whipple triad, confirming a true hypoglycemic disorder. A, B, C, and E describe other clinical patterns or triads used for entirely different conditions, not this specific hypoglycemia-confirming framework.

198. B. Correct: elevated insulin with an elevated C-peptide level in the setting of recurrent fasting hypoglycemia is classic for insulinoma, reflecting endogenous insulin overproduction. A is wrong because exogenous insulin administration would suppress, not elevate, C-peptide. C, D, and E describe other conditions with different classic laboratory patterns.

199. B. Correct: the urine microalbumin-to-creatinine ratio is the recommended screening test for early diabetic nephropathy, detecting albuminuria before overt proteinuria develops. A, C, D, and E describe tests not used as the standard initial screening approach for this condition.

200. C. Correct: annual screening with a dilated eye examination is the standard recommended interval for diabetic retinopathy screening. A, B, D, and E each describe an insufficiently frequent or delayed screening approach compared with this established annual standard.

201. B. Correct: shoulder dystocia is most closely associated with fetal macrosomia, a recognized complication of poorly controlled gestational diabetes. A, C, D, and E describe other obstetric complications not primarily linked to this specific fetal growth-related risk.

202. A. Correct: bone pain and muscle weakness with low vitamin D, calcium, and phosphate is classic for osteomalacia in an adult. B, C, D, and E describe other bone conditions with different classic laboratory patterns, not this specific combination of deficiencies.

203. B. Correct: bowing of the legs with widened growth plates on X-ray is classic for rickets, particularly with a supportive laboratory finding. A is wrong because osteoporosis is not typically diagnosed in children. C, D, and E describe other skeletal conditions with different classic laboratory patterns, not this specific growth plate finding.

204. C. Correct: failure to lactate with fatigue and amenorrhea following severe postpartum hemorrhage is classic for Sheehan syndrome, from pituitary ischemia during the hemorrhagic event. A, B, D, and E describe other postpartum conditions without this specific hemorrhage-related pituitary mechanism.

205. D. Correct: delayed puberty with anosmia and low gonadotropins is the classic, defining combination confirming Kallmann syndrome. A, B, C, and E describe other causes of delayed puberty or hypogonadism with different classic findings, not this specific anosmia and hypogonadism pairing.

206. B. Correct: a tall stature, gynecomastia, infertility, and an extra X chromosome on karyotype together are classic for Klinefelter syndrome. A, D, and E describe other conditions with different classic karyotypes. C is wrong because this karyotype pattern applies to a different sex than described here.

207. B. Correct: Graves ophthalmopathy results from autoimmune inflammation of the retro-orbital tissue, mediated by TSH receptor antibodies. A, C, D, and E describe mechanisms not characteristic of this specific, well-established autoimmune process.

208. A. Correct: a single 'hot' nodule with suppressed uptake elsewhere on thyroid scan is classic for a toxic adenoma. B, C, and D describe other thyroid conditions with different classic scan findings, not this specific single hot nodule pattern. E is wrong because Graves disease classically shows diffuse, not focal, uptake.

209. D. Correct: a painful, tender thyroid with transient hyperthyroid symptoms following a viral illness is classic for subacute thyroiditis. A, B, and C describe other thyroid conditions that are typically painless, unlike this presentation. E describes a condition with a different classic gland texture.

210. C. Correct: a hard, fixed, painless thyroid mass with fibrous tissue extending into surrounding structures is classic for Riedel thyroiditis. A, D, and E describe other thyroid conditions with different classic gland textures, not this specific fibrous, invasive-appearing pattern. B is a diagnosis this presentation's biopsy findings would argue against.

211. B. Correct: blood layering in the anterior chamber following trauma is the definition of hyphema, which carries a risk of elevated intraocular pressure requiring monitoring. A, C, D, and E describe other ocular findings with different classic locations and complications, not this specific anterior chamber blood layering.

212. B. Correct: a painless, chronic eyelid nodule without acute inflammation is classic for a chalazion, a blocked meibomian gland. A is wrong because a hordeolum is typically acutely painful and inflamed, unlike this presentation. C, D, and E describe other eyelid or periorbital conditions with different classic presentations.

213. C. Correct: chronic eyelid margin crusting is the classic presentation of blepharitis. A, B, D, and E describe other eyelid or periorbital conditions with different classic presentations, not this specific chronic margin crusting pattern.

214. B. Correct: swelling and discharge specifically at the medial canthus near the lacrimal sac is classic for dacryocystitis. A, C, D, and E describe other periorbital conditions with different classic locations, not this specific medial canthus and puncta discharge finding.

- 215. E.** Correct: photophobia with a hypopyon, layered white blood cells in the anterior chamber, is classic for anterior uveitis. A, B, C, and D describe other eye conditions with different classic examination findings, not this specific hypopyon finding.
- 216. A.** Correct: sudden painless vision loss with a cherry red spot at the macula is the classic presentation of central retinal artery occlusion. B, C, D, and E describe other eye conditions with different classic fundoscopic findings, not this specific cherry red spot.
- 217. A.** Correct: sudden painless vision loss with diffuse hemorrhages described as a 'blood and thunder' fundus is the classic presentation of central retinal vein occlusion. B, C, D, and E describe other eye conditions with different classic fundoscopic findings, not this specific hemorrhagic pattern.
- 218. B.** Correct: painful vision loss worsened by eye movement is the classic presentation of optic neuritis, often an early sign of multiple sclerosis. A, C, D, and E describe other eye conditions with different classic pain characteristics and associated conditions, not this specific movement-related pain.
- 219. A.** Correct: bilateral optic disc swelling without initial vision loss in a patient with elevated intracranial pressure is the classic presentation of papilledema. B, C, D, and E describe other eye conditions that are typically unilateral or present with different classic findings, not this specific bilateral pattern.
- 220. A.** Correct: gradual, bilateral, high-frequency sensorineural hearing loss in an older adult is the classic presentation of presbycusis. B, C, D, and E describe other hearing conditions with different classic patterns or age associations, not this specific age-related, symmetric pattern.
- 221. C.** Correct: progressive conductive hearing loss with a family history in a young adult is classic for otosclerosis. A, B, D, and E describe other hearing conditions with different classic ages, hearing loss types, or family history associations, not this specific inherited conductive pattern.
- 222. B.** Correct: fever, postauricular swelling, and a protruding ear following acute otitis media is the classic presentation of mastoiditis, a recognized complication. A, C, D, and E describe other ear conditions with different classic presentations, not this specific postauricular, protruding-ear pattern.
- 223. E.** Correct: rapidly progressive floor-of-mouth and submandibular swelling with airway compromise following a dental infection is the classic presentation of Ludwig angina. A, B, C, and D describe other deep space infections with different classic locations, not this specific floor-of-mouth involvement.
- 224. A.** Correct: nasal polyps, asthma, and aspirin sensitivity together form Samter triad. B, C, D, and E describe other clinical triads used for entirely different conditions, not this specific respiratory and sensitivity combination.

- 225. A.** Correct: fever, neck stiffness, drooling, and a widened prevertebral space on lateral neck X-ray are classic for retropharyngeal abscess. B, C, D, and E describe other deep neck space infections with different classic imaging findings, not this specific widened prevertebral space.
- 226. B.** Correct: inspiratory stridor that worsens supine and improves prone is the classic positional pattern of laryngomalacia, the most common cause of infant stridor. A, C, D, and E describe other causes of stridor with different classic positional patterns, not this specific prone-improving finding.
- 227. A.** Correct: cyanosis relieved by crying but worsened at rest and with feeding is the classic presentation of choanal atresia, given the neonate's obligate nasal breathing pattern. B, C, D, and E describe other neonatal conditions with different classic triggering and relieving patterns.
- 228. C.** Correct: chronic unilateral nasal obstruction with a visibly deviated septum on examination is the classic presentation of a deviated nasal septum. A, B, D, and E describe other nasal conditions with different classic distributions or associated findings, not this specific unilateral, structural pattern.
- 229. C.** Correct: normal-appearing glomeruli on light microscopy with foot process effacement on electron microscopy is classic for minimal change disease, particularly in children. A, B, D, and E describe other glomerular conditions with different classic biopsy findings, not this specific normal-appearing light microscopy result.
- 230. A.** Correct: focal glomerular scarring in a Black patient with HIV is classic for focal segmental glomerulosclerosis, given its recognized association with this population and condition. B, C, D, and E describe other glomerular conditions with different classic biopsy findings or population associations.
- 231. A.** Correct: a 'spike and dome' pattern on electron microscopy is the classic, defining finding of membranous nephropathy in an adult with nephrotic syndrome. B, C, D, and E describe other glomerular conditions with different classic biopsy findings, not this specific pattern.
- 232. C.** Correct: Kimmelstiel-Wilson nodules are the classic pathologic finding of diabetic nephropathy on renal biopsy. A, B, D, and E describe other glomerular pathology findings associated with different conditions, not diabetic nephropathy.
- 233. E.** Correct: renal biopsy is the appropriate next step to classify the specific type of lupus nephritis, which guides treatment decisions. A, B, C, and D each describe an inadequate or premature approach that bypasses this necessary classification step.
- 234. E.** Correct: an inability to acidify urine below pH 5.5 despite systemic acidosis, with hypokalemia and stones, is classic for Type 1 distal renal tubular acidosis. A, B, C, and D describe other acid-base or renal conditions with different classic laboratory patterns, not this specific urine pH finding.
- 235. B.** Correct: hyperkalemia with a mild acidosis and low aldosterone in a diabetic patient with mild CKD is classic for Type 4 hyperkalemic renal tubular acidosis, from hyporeninemic hypoaldosteronism.

A, C, D, and E describe other conditions with different classic potassium and aldosterone patterns, not this specific combination.

236. B. Correct: chronic NSAID use with sloughing of the renal papillae on imaging is classic for analgesic nephropathy with papillary necrosis. A, C, D, and E describe other renal conditions with different classic exposure histories and imaging findings, not this specific NSAID-associated papillary necrosis.

237. D. Correct: tea-colored urine with a markedly elevated CK following a prolonged down time is classic for rhabdomyolysis. A, B, C, and E describe other conditions with different classic laboratory patterns, not this specific elevated CK and myoglobinuria combination.

238. C. Correct: bladder catheterization to relieve the obstruction is the appropriate immediate action for postrenal AKI from BPH-related urinary retention. A, B, D, and E each describe an inappropriate approach that bypasses this necessary, straightforward decompression step.

239. E. Correct: bladder cancer is the most important diagnosis to exclude in an older patient with a significant smoking history and painless gross hematuria, given this well-established risk factor. A, B, C, and D describe other conditions that are less strongly associated with this specific smoking history and presentation.

240. E. Correct: a thin-walled cyst without septations or solid components meets criteria for a simple, benign renal cyst requiring no further intervention. A, B, C, and D each describe an unnecessarily aggressive approach given these reassuring, classic simple cyst imaging characteristics.

241. B. Correct: fusion of the lower poles of both kidneys across the midline is the classic imaging finding of horseshoe kidney, a congenital anomaly. A, C, D, and E describe other renal conditions with different classic imaging findings, not this specific lower pole fusion.

242. C. Correct: cystic dilation of the renal collecting ducts in a patient with recurrent stones is classic for medullary sponge kidney. A, B, D, and E describe other renal conditions with different classic imaging findings, not this specific collecting duct dilation pattern.

243. A. Correct: sloughed renal papillae with hematuria and flank pain in a patient with sickle cell disease is classic for renal papillary necrosis. B, C, D, and E describe other renal conditions with different classic imaging findings, not this specific sloughed papillae finding.

244. C. Correct: macrocytic anemia without neurologic symptoms in a patient with chronic alcohol use and poor diet is classic for folate deficiency. A is wrong because B12 deficiency classically includes neurologic findings, absent here. B, D, and E describe other anemias with different classic cell sizes or laboratory patterns.

- 245. E.** Correct: hemolytic anemia with splenomegaly, spherocytes on smear, and increased osmotic fragility is classic for hereditary spherocytosis. A, B, C, and D describe other hemolytic conditions with different classic peripheral smear findings, not this specific spherocyte and fragility combination.
- 246. E.** Correct: pancytopenia with a hypocellular, fatty marrow on biopsy is the classic, defining presentation of aplastic anemia. A, B, C, and D describe other hematologic conditions typically associated with a hypercellular, not hypocellular, marrow.
- 247. D.** Correct: an elevated hematocrit with pruritus after warm showers and a positive JAK2 mutation is classic for polycythemia vera. A, B, C, and E describe other myeloproliferative or reactive conditions with different classic primary laboratory findings, not this specific hematocrit and JAK2 combination.
- 248. B.** Correct: a markedly elevated platelet count with both bleeding and thrombotic risk is classic for essential thrombocythemia. A, C, D, and E describe other conditions with different classic platelet counts or clinical implications, not this specific dual-risk, markedly elevated pattern.
- 249. E.** Correct: a markedly elevated white blood cell count with a left shift and a positive Philadelphia chromosome is the classic, defining presentation of chronic myeloid leukemia. A, B, C, and D describe other hematologic malignancies with different classic chromosomal findings, not this specific Philadelphia chromosome.
- 250. D.** Correct: an elevated lymphocyte count with smudge cells on peripheral smear in an older adult is classic for chronic lymphocytic leukemia. A, B, C, and E describe other hematologic malignancies with different classic peripheral smear findings, not this specific smudge cell appearance.
- 251. E.** Correct: painless lymphadenopathy with malignant lymphocytes but without Reed-Sternberg cells on biopsy is classic for non-Hodgkin lymphoma. A is wrong because Hodgkin lymphoma is specifically defined by the presence of Reed-Sternberg cells, absent here. B, C, and D describe other conditions with different classic biopsy findings.
- 252. C.** Correct: recurrent joint bleeding with a prolonged PTT and a confirmed factor IX deficiency is the classic, defining presentation of hemophilia B. A, B, D, and E describe other bleeding disorders with different classic deficient factors, not this specific factor IX finding.
- 253. B.** Correct: warfarin-induced skin necrosis without adequate bridging is classically associated with underlying protein C deficiency, since protein C falls before the therapeutic factors do. A, C, D, and E describe deficiencies associated with bleeding disorders, not this specific warfarin-associated complication.
- 254. B.** Correct: activated protein C resistance on laboratory testing is the classic finding confirming Factor V Leiden mutation, the most common inherited thrombophilia. A, C, D, and E describe other hypercoagulable conditions with different classic confirmatory laboratory findings, not this specific resistance pattern.

255. C. Correct: recurrent pregnancy loss and venous thrombosis with a positive lupus anticoagulant together are classic for antiphospholipid syndrome. A, B, D, and E describe other hypercoagulable or bleeding conditions with different classic confirmatory findings, not this specific antibody and clinical history combination.

256. B. Correct: fever, hypotension, and dark urine occurring rapidly during transfusion are classic for an acute hemolytic transfusion reaction, typically from ABO incompatibility. A, C, D, and E describe other transfusion reactions with different classic timing and severity, not this specific rapid, severe hemolytic pattern.

257. A. Correct: isolated fever and chills during transfusion without laboratory evidence of hemolysis is classic for a febrile non-hemolytic transfusion reaction, the most common type. B, C, D, and E describe other transfusion reactions with different classic findings, not this specific isolated, non-hemolytic fever pattern.

258. A. Correct: persistent cytopenias with dysplastic marrow changes not meeting acute leukemia criteria is classic for myelodysplastic syndrome, which carries a recognized risk of transformation to acute myeloid leukemia. B, C, D, and E describe other hematologic conditions with different classic marrow findings and transformation risks.

259. B. Correct: a rough, scaly patch on chronically sun-exposed skin is classic for actinic keratosis, a recognized precancerous lesion that can progress to squamous cell carcinoma if untreated. A, C, D, and E describe other skin lesions without this specific precancerous significance.

260. C. Correct: a waxy, 'stuck-on' appearing pigmented lesion is the classic, defining description of seborrheic keratosis, a common benign lesion in older adults. A, B, D, and E describe other skin lesions with different classic appearances, not this specific waxy, stuck-on quality.

261. D. Correct: small, dome-shaped papules with central umbilication are the classic, defining presentation of molluscum contagiosum, a common viral skin infection in children. A, B, C, and E describe other skin conditions with different classic lesion appearances, not this specific umbilicated finding.

262. A. Correct: well-demarcated depigmented patches with confirmed absence of melanocytes on biopsy is the classic, defining presentation of vitiligo. B, C, D, and E describe other pigmentary conditions where melanocytes are typically still present, unlike this specific finding.

263. C. Correct: target-shaped lesions following a herpes simplex virus outbreak are the classic presentation and trigger of erythema multiforme. A, B, D, and E describe other skin conditions with different classic lesion morphologies or triggers, not this specific target lesion and HSV association.

264. D. Correct: widespread skin sloughing with significant mucosal involvement following a new medication requires immediate discontinuation and urgent, specialized care for suspected Stevens-

Johnson syndrome or toxic epidermal necrolysis. A, B, C, and E each inappropriately delay necessary, time-critical intervention for this life-threatening emergency.

265. C. Correct: a herald patch followed by lesions in a 'Christmas tree' distribution along cleavage lines is the classic, defining presentation of pityriasis rosea. A, B, D, and E describe other skin conditions with different classic distributions, not this specific herald patch and cleavage line pattern.

266. A. Correct: violaceous plaques and nodules in a patient with HIV and a low CD4 count are classic for Kaposi sarcoma, an AIDS-defining illness. B, C, D, and E describe other skin lesions with different classic population associations, not this specific HIV-related presentation.

267. D. Correct: tender, erythematous nodules on the anterior shins in a patient with sarcoidosis is the classic presentation of erythema nodosum, a recognized systemic association. A, B, C, and E describe other skin conditions with different classic lesion morphologies, not this specific tender nodule and systemic disease association.

268. A. Correct: velvety, hyperpigmented skin in the axillae and posterior neck in a patient with obesity is the classic presentation of acanthosis nigricans, a recognized marker of insulin resistance. B, C, D, and E describe other skin conditions with different classic underlying mechanisms, not this specific insulin resistance association.

269. E. Correct: multiple café-au-lait spots with axillary freckling together are classic diagnostic features suggesting neurofibromatosis. A, B, C, and D describe other genetic syndromes with different classic skin findings, not this specific combination.

270. A. Correct: facial erythema, telangiectasias, and flushing triggered by sun, alcohol, and spicy food are classic for rosacea. B, C, D, and E describe other facial skin conditions with different classic trigger patterns, not this specific combination of triggers and findings.

271. A. Correct: purulent discharge with intracellular gram-negative diplococci on Gram stain is the classic, defining finding of gonococcal urethritis. B, C, and D describe other causes of urethritis with different classic laboratory findings, not this specific diplococci appearance. E describes an unrelated bladder condition.

272. B. Correct: chronic pelvic pain and urinary frequency lasting more than 6 months with repeatedly negative cultures is classic for interstitial cystitis. A, C, D, and E describe other urologic conditions that would typically show positive cultures or different classic presentations.

273. B. Correct: a sudden, intense urge to urinate immediately followed by leakage, without a specific physical trigger, is the classic presentation of urge urinary incontinence. A is wrong because stress incontinence is triggered by physical activity like coughing, not described here. C, D, and E describe other types of incontinence with different classic presentations.

274. C. Correct: urinary retention with overflow incontinence following a spinal cord injury above the sacral level is classic for neurogenic bladder. A, B, D, and E describe other urinary conditions with different classic underlying mechanisms, not this specific spinal cord injury association.

275. A. Correct: erythema and swelling of the glans in an uncircumcised patient with diabetes is classic for balanitis, given diabetes as a recognized risk factor. B, C, D, and E describe other penile conditions with different classic examination findings, not this specific glans inflammation.

276. C. Correct: urgent manual reduction is required for paraphimosis, given the risk of vascular compromise to the glans if left untreated. A, B, D, and E each inappropriately delay necessary, time-critical intervention for this urologic emergency.

277. E. Correct: a ventrally located urethral opening in a newborn male is the classic, defining presentation of hypospadias. A is wrong because epispadias involves a dorsal, not ventral, opening location. B, C, and D describe other congenital or acquired conditions with different classic presentations.

278. E. Correct: surgical correction is generally recommended for an undescended testicle, given the increased risk of future testicular malignancy if left uncorrected. A, C, and D each underestimate this genuine, recognized risk. B is wrong because immediate orchiectomy is not the standard approach; surgical repositioning is generally preferred.

279. D. Correct: a progressively weakening stream and incomplete emptying in a patient with a history of urethral instrumentation or recurrent urethritis is classic for urethral stricture, from scar tissue narrowing the urethral lumen. A, B, C, and E describe other urologic conditions with different classic histories or presentations, not this specific instrumentation-associated, progressive stream change.

280. E. Correct: emergent surgical debridement combined with broad-spectrum intravenous antibiotics is the definitive treatment for Fournier gangrene, a rapidly progressive, life-threatening necrotizing infection. A, B, C, and D each omit the necessary surgical component, which antibiotics or observation alone cannot substitute for in this surgical emergency.

281. B. Correct: a painless, smooth, mobile cystic mass distinct from the testicle itself, which transilluminates, is the classic presentation of a spermatocele, a cyst arising from the epididymis. A, C, D, and E describe other scrotal conditions with different classic examination findings, particularly regarding location relative to the testicle and transillumination, not this specific separate, transilluminating cyst.

282. A. Correct: low oxygen and high carbon dioxide on cavernosal blood gas analysis is the classic laboratory finding confirming ischemic priapism, a urologic emergency requiring prompt intervention. B describes the opposite laboratory pattern, seen in non-ischemic priapism. C, D, and E describe other conditions with different classic presentations.

- 283. A.** Correct: a living will specifies a patient's own treatment preferences in advance for specific future situations. B describes a healthcare power of attorney instead. C, D, and E each misstate this document's actual legal purpose and timing.
- 284. D.** Correct: a do-not-resuscitate order specifically addresses resuscitation preferences without limiting other treatments the patient may still receive. A, B, C, and E each overstate or mischaracterize this order's actual, limited scope.
- 285. A.** Correct: the HIPAA minimum necessary standard requires sharing only the information needed for a specific permitted purpose. B, C, D, and E each misstate this well-established privacy principle.
- 286. A.** Correct: positive predictive value varies with disease prevalence, while sensitivity is an inherent property of the test itself, independent of prevalence. B reverses this relationship incorrectly. C, D, and E each misstate this important statistical distinction.
- 287. E.** Correct: a randomized controlled trial provides the strongest evidence for causation, given randomization's ability to minimize confounding variables. A, B, C, and D describe observational or descriptive study designs that cannot control for confounding as effectively.
- 288. D.** Correct: falsely concluding an effective treatment when none truly exists is the definition of a Type I error, incorrectly rejecting a true null hypothesis. A describes the opposite error. B, C, and E describe specific types of bias, not this particular statistical error.
- 289. C.** Correct: certain services, including reproductive health care, may be provided confidentially to minors depending on jurisdiction-specific laws. A, B, D, and E each overstate the restrictions on confidentiality for this type of request.
- 290. A.** Correct: mandatory reporting to appropriate authorities is required when child abuse is suspected, regardless of parental objection. B, C, D, and E each inappropriately condition or delay this legally required, time-sensitive reporting obligation.
- 291. D.** Correct: cultural humility involves an ongoing process of self-reflection and lifelong learning about difference, distinguishing it from a fixed, checklist-based cultural competency approach. A, B, C, and E each describe a static, one-time, or assumption-based approach inconsistent with this concept.
- 292. E.** Correct: implicit bias refers to an unconscious attitude that can influence decisions without the individual's conscious awareness. A describes explicit, not implicit, bias. B, C, and D each understate or mischaracterize this well-documented phenomenon.
- 293. B.** Correct: discussing the technology's limitations and privacy risks specific to telehealth is an important additional element of informed consent for this format. A understates a genuine, additional consideration. C, D, and E each describe requirements not standard or appropriate for telehealth informed consent.

294. E. Correct: a root cause analysis systematically identifies underlying systemic factors that contributed to a medical error, supporting prevention rather than individual blame. A, B, C, and D each describe an approach inconsistent with this systematic, prevention-focused methodology.

295. C. Correct: a just culture balances individual accountability with a systems-focused approach to learning from errors. A and B each describe an extreme, unbalanced approach. D and E describe approaches that avoid genuine learning or accountability entirely.

296. D. Correct: autonomy is one of the four foundational principles of medical ethics, alongside beneficence, non-maleficence, and justice. A, B, C, and E describe related but distinct professional, legal, or ethical concepts, not one of these four core principles.

297. C. Correct: respecting a competent patient's autonomous decision, while ensuring they remain fully informed, is the appropriate response to a treatment refusal. A, B, D, and E each inappropriately override, abandon, or fail to adequately engage with the patient's autonomous decision.

298. A. Correct: a clinician may decline to perform a procedure based on personal moral objection, but must ensure the patient can access care elsewhere. B disregards the clinician's legitimate right to conscientious objection. C, D, and E each describe an inappropriate response that abandons or harms the patient.

299. B. Correct: health literacy screening tools assess a patient's baseline literacy level, while the teach-back method confirms understanding of specific information just provided, serving distinct but complementary purposes. A, C, D, and E each mischaracterize the distinct roles of these two approaches.

300. C. Correct: a systematic review and meta-analysis of randomized controlled trials sits at the top of the traditional evidence hierarchy, synthesizing the strongest available study designs. A, B, D, and E each describe a lower tier of evidence within this established hierarchy.