

1. A 24-year-old footballer lands awkwardly after a tackle. He has lateral ankle pain but plain films show no fracture. On inversion stress, he has marked tenderness over the anterolateral capsule. Which ligament is most likely injured?  
A. Anterior talofibular (**correct**)  
B. Posterior talofibular  
C. Calcaneofibular  
D. Deltoid  
E. Plantar calcaneonavicular
2. A 38-year-old office worker presents with anal pruritus, painful defecation and spotting of fresh blood. Examination reveals a posterior midline sentinel tag; digital exam is impossible due to pain. The most likely diagnosis is:  
A. Haemorrhoids  
B. Anal fissure (**correct**)  
C. Fistula-in-ano  
D. Anal carcinoma  
E. Crohn's proctitis
3. A 60-year-old hypertensive man has an echocardiogram showing end-diastolic volume 150 mL and end-systolic volume 80 mL. His heart rate is 72 bpm. What is the closest estimate of his cardiac output?  
A. 5.0 L/min (**correct**)  
B. 4.8 L/min  
C. 5.8 L/min  
D. 3.5 L/min  
E. 6.5 L/min
4. An 82-year-old COPD patient complains of progressive hip pain and a limp. Imaging shows femoral head avascular necrosis with acetabular erosion. She has poor cardiopulmonary reserve. The best definitive treatment is:  
A. Girdlestone arthroplasty  
B. Total hip replacement (**correct**)  
C. Core decompression  
D. Bipolar hemiarthroplasty  
E. Conservative management
5. A newborn with gastroschisis is noted to have eviscerated bowel. Embryologically, the midgut normally returns into the abdomen at around:  
A. 8 weeks  
B. 12 weeks (**correct**)  
C. 20 weeks  
D. 16 weeks  
E. 10 weeks
6. A 20-year-old presents after being elbowed in the jaw during rugby. He has jaw pain, swelling, and trismus. Which imaging study is most appropriate to confirm a mandibular fracture?  
A. CT head  
B. Orthopantomogram (**correct**)  
C. Occipitofrontal X-ray at 0°

- D. Submental-vertex (basal) view
  - E. MRI mandible
7. A surgeon plans a pedicled flap. All of the following flap–artery pairings are correct **except**:
- A. Latissimus dorsi – thoracodorsal artery
  - B. Lateral forearm (posterior) – posterior interosseous artery
  - C. Lateral arm – descending branch of radial collateral artery
  - D. Rectus abdominis – superior epigastric artery (**incorrect pairing**)
  - E. Gluteus maximus – inferior gluteal artery
8. A 27-year-old with a complete T8 spinal cord injury develops a distended bladder and loss of reflexes. Above which level does injury predispose to autonomic dysreflexia?
- A. T6 (**correct**)
  - B. T12
  - C. L1
  - D. S1
  - E. C8
9. A 55-year-old woman develops a winged scapula six months after mastectomy and axillary clearance. The long thoracic nerve arises from the:
- A. Roots of the brachial plexus (**correct**)
  - B. Trunks of the brachial plexus
  - C. Divisions of the brachial plexus
  - D. Cords of the brachial plexus
  - E. Posterior cord
10. During subxiphoid pericardiocentesis, the needle passes through skin, subcutaneous tissue, and then:
- A. Fibrous pericardium (**correct**)
  - B. Parietal serous pericardium
  - C. Visceral serous pericardium
  - D. Parietal pleura
  - E. Transversalis fascia
11. In human embryology, the first site of haematopoiesis is the:
- A. Yolk sac (**correct**)
  - B. Liver
  - C. Spleen
  - D. Bone marrow
  - E. Thymus
12. In a “cannot intubate, cannot oxygenate” emergency, a surgical airway is made at:
- A. One finger above sternal notch
  - B. Mid-point between sternal notch and cricoid cartilage (**correct**)
  - C. 1 cm below thyroid cartilage
  - D. Cricothyroid membrane
  - E. 1 cm above sternal notch
13. Preganglionic parasympathetic fibers to the lacrimal gland originate in the:
- A. Superior salivatory nucleus (**correct**)
  - B. Inferior salivatory nucleus
  - C. Nucleus ambiguus

- D. Dorsal motor nucleus of vagus
  - E. Edinger–Westphal nucleus
14. A 25-year-old athlete has a single nondisplaced eighth rib fracture after a fall. He is stable and in mild pain. Management should be:
- A. Admission and IV analgesia
  - B. Analgesia and discharge (**correct**)
  - C. Surgical fixation
  - D. Intercostal nerve block
  - E. Epidural analgesia
15. In acute Stanford type A aortic dissection, the first major branch often compromised is the:
- A. Brachiocephalic artery (**correct**)
  - B. Left common carotid artery
  - C. Left subclavian artery
  - D. Right coronary artery
  - E. Left vertebral artery
16. A 45-year-old with acute pancreatitis develops ARDS and requires prone positioning. Prone ventilation typically results in all the following **except**:
- A. Increased FRC
  - B. Improved V/Q matching
  - C. Reduced shunt fraction
  - D. Increased peak airway pressures (**plausible but incorrect**)
  - E. Enhanced dorsal lung recruitment
17. A thrombus removed from the carotid artery displays alternating light and dark layers (Zahn lines). This finding confirms it as a(n):
- A. Thrombus (**correct**)
  - B. Atheromatous plaque
  - C. Embolus
  - D. Aneurysmal wall fragment
  - E. Cholesterol crystal
18. For a planned splenectomy, appropriate pre-operative vaccination includes:
- A. Pneumococcal, meningococcal, and Haemophilus influenzae type b (**correct**)
  - B. Influenza, varicella, and HPV
  - C. Tetanus, diphtheria, and pertussis
  - D. BCG and measles
  - E. Hepatitis B and Japanese encephalitis
19. A 65-year-old alcoholic with hematemesis is hemodynamically stable. Endoscopy shows non-bleeding mucosal tears in the distal esophagus. The most likely diagnosis is:
- A. Candida esophagitis
  - B. Oesophageal carcinoma
  - C. Mallory-Weiss tear (**correct**)
  - D. Esophageal varices
  - E. Boerhaave syndrome
20. Sensation over the angle of the mandible is supplied by which nerve?
- A. Great auricular nerve (**correct**)
  - B. Lesser occipital nerve

- C. Auriculotemporal branch of V3
  - D. Greater occipital nerve
  - E. Glossopharyngeal nerve
21. • A 45-year-old man treated with T3 replacement following total thyroidectomy for anaplastic thyroid carcinoma returns with rising tumour markers. His labs show normal T3 and T4, but elevated thyroglobulin with normal calcitonin. Which pattern is most consistent with recurrence of differentiated thyroid cancer?
    - A. Normal T3, normal T4, normal thyroglobulin, elevated calcitonin
    - B. Normal T3, normal T4, elevated thyroglobulin, normal calcitonin (**correct**)
    - C. Elevated T3, normal T4, elevated thyroglobulin, elevated calcitonin
    - D. Normal T3, low T4, elevated thyroglobulin, elevated calcitonin
    - E. Low T3, low T4, normal thyroglobulin, normal calcitonin
  22. • In a normally distributed variable with mean 100 and SD 20, approximately what range encompasses 95% of values?
    - A. 80–120
    - B. 60–140 (**correct**)
    - C. 100–120
    - D. 40–160
    - E. 90–110
  23. • A randomized trial comparing a new suture material to standard silk shows a 20% reduction in wound infection,  $p < 0.05$ . Which interpretation is correct?
    - A. The difference is likely due to chance
    - B. The result is statistically significant; the new suture should be used (**correct**)
    - C. The study has no clinical significance
    - D. The null hypothesis is accepted
    - E. The confidence interval includes the null value
  24. • In ARDS patients ventilated prone, which of the following changes is **not** expected?
    - A. Reduction in shunt fraction
    - B. Improved ventilation–perfusion matching
    - C. Redistribution of perfusion to dorsal lung regions
    - D. Increased functional residual capacity
    - E. Development of alveolar hyperventilation (**plausible but incorrect**)
  25. • A surgical specimen from a carotid thrombus demonstrates alternating light and dark layers (Lines of Zahn). This is diagnostic of:
    - A. Atheromatous plaque
    - B. Organized embolus
    - C. Thrombus (**correct**)
    - D. Aneurysm wall fragment
    - E. Cholesterol clefts
  26. • Prior to elective splenectomy, a 30-year-old should receive immunization against:
    - A. Influenza, rotavirus, and HPV
    - B. Pneumococcus, meningococcus, and Haemophilus influenzae type b (**correct**)
    - C. Varicella, hepatitis A, and hepatitis B
    - D. Tetanus, diphtheria, pertussis
    - E. Bacillus Calmette–Guérin

27. • A 68-year-old alcoholic with self-limited hematemesis and no hemodynamic compromise likely has:
- A. Candida esophagitis
  - B. Oesophageal carcinoma
  - C. Mallory–Weiss tear (**correct**)
  - D. Bleeding varices
  - E. Boerhaave syndrome
28. • A stab wound over the angle of the mandible injures the great auricular nerve. Sensation is lost over:
- A. Lower face along the mandible angle (**correct**)
  - B. Posterolateral scalp
  - C. Auricular concha
  - D. Preauricular skin
  - E. Anterior neck
29. • A child weighing 6 kg is kept NPO. According to Holliday–Segar, the maintenance fluid requirement over 24 hours is:
- A. 600 mL (**correct**)
  - B. 500 mL
  - C. 800 mL
  - D. 400 mL
  - E. 1000 mL
30. • A patient on unfractionated heparin is scheduled for surgery. How long before the procedure should the infusion be stopped?
- A. 2 hours
  - B. 6 hours (**correct**)
  - C. 12 hours
  - D. 24 hours
  - E. 1 hour
31. • A 65-year-old man is thirsty, has nocturia, fasting glucose 7.3 mmol/L and a 2-hour post-prandial glucose of 13 mmol/L. His diagnosis is:
- A. Diabetes mellitus (**correct**)
  - B. Diabetes insipidus
  - C. Impaired glucose tolerance
  - D. Stress hyperglycemia
  - E. Secondary diabetes
32. • During laparotomy in a neonate with suspected malrotation, a structure running superolaterally from the umbilicus is seen; this is the:
- A. Urachus
  - B. Vitelline (omphalomesenteric) duct (**correct**)
  - C. Ductus venosus
  - D. Umbilical artery
  - E. Umbilical vein
33. • Five days post–myocardial infarction, a patient remains hypotensive with pulmonary edema despite inotropes. An intra-aortic balloon pump is inserted to:
- A. Treat Dressler’s syndrome
  - B. Support failing right ventricle

- C. Decrease afterload and augment coronary perfusion (**correct**)
  - D. Repair papillary muscle rupture
  - E. Prevent ventricular pseudoaneurysm
34. • Human bite wound infections are most commonly caused by:
- A. *Eikenella corrodens* (**correct**)
  - B. *Streptococcus pyogenes*
  - C. *Staphylococcus aureus*
  - D. *Clostridium perfringens*
  - E. *Pseudomonas aeruginosa*
35. • Which of the following is **not** a branch of the facial nerve?
- A. Temporal
  - B. Buccal
  - C. Zygomatic
  - D. Maxillary (**correct**)
  - E. Cervical
36. • A stroke patient with bulbar palsy cannot swallow saliva for three days. The most appropriate feeding measure is:
- A. Nasogastric tube feeding (**correct**)
  - B. TPN via central line
  - C. Cuffed tracheostomy and PEG
  - D. Early surgical gastrostomy
  - E. Thicken liquids
37. • Base of skull fracture in a Le Fort III injury warrants CT within one hour if there is:
- A. Perioral swelling
  - B. Periorbital ecchymosis
  - C. Face pain
  - D. Battle's sign
  - E. Suggestion of Le Fort III (**correct**)
38. • A chronic surfer presents with bilateral external auditory canal exostoses and recurrent otalgia. The tympanic membrane is obscured. The likely diagnosis is:
- A. Tympanosclerosis
  - B. Glomus tumor
  - C. Middle ear effusion
  - D. Otic exostoses (**correct**)
  - E. Cholesteatoma
39. • During spinal shock recovery, which reflex typically returns first?
- A. Plantar reflex
  - B. Ankle jerk (**correct**)
  - C. Biceps reflex
  - D. Delayed plantar response
  - E. Abdominal reflex
40. • A stab wound to the cheek injures the buccal branch of the facial nerve. Which structure is at greatest risk of simultaneous damage?
- A. Parotid (Stensen's) duct (**correct**)
  - B. Submandibular duct

- C. Lingual nerve
  - D. Inferior alveolar artery
41. • A 3-year-old girl presents with fever and scotch-tape test positive for eggs around the anus. The causative organism is:
- A. Enterobius vermicularis (**correct**)
  - B. Entamoeba histolytica
  - C. Ascaris lumbricoides
  - D. Giardia lamblia
  - E. Strongyloides stercoralis
42. • A patient with achalasia has smooth narrowing of the lower esophagus on contrast study, with intermittent regurgitation and halitosis unresponsive to acid suppression. The diagnosis is:
- A. Achalasia (**correct**)
  - B. Peptic stricture
  - C. Carcinoma of the esophagus
  - D. Schatzki ring
  - E. Zenker's diverticulum
43. • Hydrocortisone is preferred over dexamethasone in acute adrenal insufficiency primarily because it has:
- A. Greater mineralocorticoid activity (**correct**)
  - B. Longer duration of action
  - C. Higher glucocorticoid potency
  - D. Cheaper cost
  - E. Lower half-life
44. • A 65-kg burn patient with 20% total body surface area burns requires fluid according to the Parkland formula. The total 24-hour fluid volume is approximately:
- A. 1.3 L (**correct**)
  - B. 2.6 L
  - C. 4.0 L
  - D. 6.5 L
  - E. 260 mL
45. • A mediastinal mass biopsy reveals mature teratoma. The most common primary site for teratomas in adults is:
- A. Ovaries
  - B. Testes (**correct**)
  - C. Mediastinum
  - D. Retroperitoneum
  - E. Sacrococcygeal region
46. • A 1-year-old with brown umbilical discharge most likely has a patent:
- A. Urachus (**correct**)
  - B. Vitelline duct
  - C. Processus vaginalis
  - D. Ductus arteriosus
  - E. Foramen ovale
47. • A 34-year-old athlete in the ED has hypertension and acute aortic dissection. The most likely underlying cause in this young patient is:

- A. Atherosclerosis
  - B. Cystic medial degeneration (**correct**)
  - C. Marfan syndrome
  - D. Hypertrophic cardiomyopathy
  - E. Bicuspid aortic valve
48. • For DVT prophylaxis in a patient with needle phobia, the best oral choice is:
- A. Rivaroxaban (**correct**)
  - B. Warfarin
  - C. Clopidogrel
  - D. LMWH
  - E. Aspirin
49. • During repair of a femoral hernia, bleeding from the lateral wall likely involves the:
- A. Femoral vein
  - B. Femoral artery (**correct**)
  - C. Lacunar ligament
  - D. Inferior epigastric vessels
  - E. Great saphenous vein
50. • Lymph from the uterine fundus primarily drains to the:
- A. External iliac nodes
  - B. Internal iliac nodes
  - C. Lumbar (para-aortic) nodes (**correct**)
  - D. Inguinal nodes
  - E. Sacral nodes
51. • A horseshoe kidney hilum is located at which vertebral level?
- A. L3–L5 (**correct**)
  - B. T12–L1
  - C. L1–L2
  - D. L5–S1
  - E. T10–T12
52. • A patient has capillary hydrostatic pressure 35 mmHg, oncotic capillary pressure 27 mmHg, and oncotic Bowman's space pressure 0 mmHg. Net filtration pressure is:
- A. +8 mmHg (**correct**)
  - B. –8 mmHg
  - C. +18 mmHg
  - D. +80 mmHg
  - E. +800 mmHg
53. • Positive predictive value (PPV) is a measure of a test's:
- A. Sensitivity
  - B. Specificity
  - C. Positive predictive value (**correct**)
  - D. Negative predictive value
  - E. Prevalence
54. • Sarcoidosis is characterised by what type of granulomas?
- A. Caseating
  - B. Non-caseating (**correct**)
  - C. Foreign-body



- D. Lupus
  - E. Tuberculoid
55. • The afferent limb of the gag reflex is mediated by the:
- A. Glossopharyngeal nerve (**correct**)
  - B. Vagus nerve
  - C. Facial nerve
  - D. Hypoglossal nerve
  - E. Trigeminal nerve
56. • A 70-year-old woman with continuous urinary dribbling 10 years post difficult labor likely has:
- A. Stress incontinence
  - B. Urge incontinence
  - C. Vesicovaginal fistula (**correct**)
  - D. Mixed incontinence
  - E. Overflow incontinence
57. • Loss of high-pitched voice after thyroidectomy indicates injury to the:
- A. Superior laryngeal (external branch) nerve (**correct**)
  - B. Recurrent laryngeal nerve
  - C. Cricothyroid muscle
  - D. Glossopharyngeal nerve
  - E. Vagus nerve
58. • In necrotizing pancreatitis with high NG output (>8 L/day), the preferred feeding route is:
- A. Total parenteral nutrition
  - B. Nasojejunal feeding (**correct**)
  - C. Nasogastric feeding
  - D. Gastrostomy
  - E. Jejunostomy
59. • The roof of the maxillary sinus is formed by the:
- A. Floor of the orbit (**correct**)
  - B. Body of sphenoid
  - C. Zygomatic bone
  - D. Frontal bone
  - E. Palatine bone
60. • Following resection of >250 cm of small bowel, the optimal nutritional strategy is:
- A. Oral (enteral) feeding (**correct**)
  - B. Total parenteral nutrition
  - C. Nasogastric feeding
  - D. Jejunostomy feeding
  - E. Intravenous fluids only
61. • In a hypothermic patient, which is **least** reliable for perfusion assessment?
- A. Pulse oximeter readings
  - B. Arterial blood gas analysis
  - C. Swan–Ganz catheter measurements
  - D. Pulmonary artery catheter readings
  - E. Capillary refill time (**correct**)

62. • Inulin is used to measure GFR because it is:
- A. Filtered and neither reabsorbed nor secreted (**correct**)
  - B. Filtered and reabsorbed
  - C. Filtered and secreted
  - D. Not filtered but secreted
  - E. Neither filtered nor secreted
63. • Eight days post–dynamic hip screw fixation for fragility fracture neck of femur, a patient becomes tachypneic with SpO<sub>2</sub> 93% and hypotension. The most likely cause is:
- A. Pulmonary embolism (**correct**)
  - B. Fat embolism
  - C. Myocardial infarction
  - D. Pneumonia
  - E. Heart failure
64. • A patient with autoimmune gastritis, pernicious anemia and thyroiditis will have peripheral blood smear showing:
- A. Macro-ovalocytes (**correct**)
  - B. Microcytic hypochromic cells
  - C. Schistocytes
  - D. Target cells
  - E. Burr cells
65. • A trauma patient has Foley output drop to 10 mL/h after massive infusion. The most likely cause is:
- A. Hypovolemic shock (**correct**)
  - B. Neurogenic shock
  - C. Cardiogenic shock
  - D. Obstructive shock
  - E. Septic shock
66. • In a burn patient with 60% total body surface area burns and bilateral leg edema on day 3, the commonest cause is:
- A. Hypoalbuminemia (**correct**)
  - B. Sepsis
  - C. Heart failure
  - D. DVT
  - E. Fluid overload
67. • Which coagulation factor is **not** synthesized in the liver?
- A. Factor II
  - B. Factor IX
  - C. Factor X
  - D. Factor VIII (**correct**)
  - E. Factor V
68. • A trauma patient with distended neck veins, muffled heart sounds and equal breath sounds bilaterally is in what type of shock?
- A. Obstructive shock (**correct**)
  - B. Hypovolemic shock
  - C. Cardiogenic shock

- D. Distributive shock
  - E. Neurogenic shock
69. • Perineural invasion in a parotid tumor indicates:
- A. Excellent prognosis
  - B. Low-grade malignancy
  - C. Aggressive behavior (**correct**)
  - D. Benign tumor
  - E. Viral etiology
70. • A 12-year-old with acute scrotal pain and high-riding testis on exam is presumed to have torsion. The correct management is:
- A. Immediate unilateral exploration and fixation (**correct**)
  - B. Bilateral exploration and fixation
  - C. Ultrasound Doppler
  - D. Analgesia and observation
  - E. Antibiotics and ice packs
71. • The conus medullaris in adults typically lies at:
- A. L1–L2 (**correct**)
  - B. L2–L3
  - C. L3–L4
  - D. T12–L1
  - E. S1–S2
72. • Numbness over the lateral distal forearm and thumb with weak wrist extension suggests a lesion at:
- A. C5 root
  - B. C6 root (**correct**)
  - C. C7 root
  - D. C8 root
  - E. T1 root
73. • Histology of a Meckel's diverticulum containing ectopic pancreatic tissue would show:
- A. Acinar cells and islets of Langerhans (**correct**)
  - B. Gastric fundic glands
  - C. Intestinal villi
  - D. Urothelium
  - E. Squamous epithelium
74. • In carcinoid syndrome with liver metastases, the best diagnostic test is:
- A. Plasma chromogranin A
  - B. Urinary 5-HIAA (**correct**)
  - C. Plasma catecholamines
  - D. Serum serotonin
  - E. Fecal fat
75. • Furosemide and thiazide diuretics act:
- A. Synergistically (**correct**)
  - B. Antagonistically
  - C. Independently
  - D. Additively
  - E. Subtractively

76. • The most common organism in post-appendectomy surgical site infection is:  
A. Escherichia coli  
B. Staphylococcus aureus (**correct**)  
C. Pseudomonas aeruginosa  
D. Bacteroides fragilis  
E. Streptococcus pyogenes
77. • Carpal tunnel syndrome is best confirmed by:  
A. Nerve conduction studies (**correct**)  
B. MRI of the wrist  
C. Plain X-ray  
D. Ultrasound  
E. EMG alone
78. • To confirm an esophageal leak after endoscopy, the investigation of choice is:  
A. Water-soluble contrast swallow (**correct**)  
B. Barium swallow  
C. CT scan  
D. Chest X-ray  
E. Gastroscopy
79. • The ideal landmark for lumbar puncture is:  
A. Iliac crest (L3–L4 line) (**correct**)  
B. Anterior superior iliac spine  
C. Posterior superior iliac spine  
D. Spinous process of L1  
E. Umbilicus
80. • A patient with diarrhea, hypertension, and a neck mass consistent with MEN 2A should be tested for:  
A. Medullary thyroid carcinoma (**correct**)  
B. Pheochromocytoma  
C. Hyperparathyroidism  
D. Adrenocortical carcinoma  
E. Pituitary adenoma
81. • Anterior drawer test in prone ARDS ventilation is associated with which change?  
A. Reduction in FRC  
B. Improved V/Q ratio  
C. Perfusion mismatch  
D. Alveolar hyperventilation  
E. Increased shunt fraction (**plausible distractor**)
82. • Lines of Zahn are characteristic of a:  
A. Thrombus (**correct**)  
B. Atheroma  
C. Embolus  
D. Aneurysm  
E. Cholesterol cleft
83. • Preoperative prophylaxis for splenectomy includes vaccination against:  
A. Pneumococcus, meningococcus, and Haemophilus influenzae type b (**correct**)  
B. Influenza, varicella, and HPV

- C. Tetanus, diphtheria, pertussis
  - D. BCG and polio
  - E. Hepatitis B and A
84. • A stable elderly alcoholic with isolated hematemesis likely has:
- A. Candida esophagitis
  - B. Carcinoma esophagus
  - C. Mallory–Weiss tear (**correct**)
  - D. Esophageal varices
  - E. Boerhaave syndrome
85. • Sensation over the angle of the mandible is supplied by the:
- A. Great auricular nerve (**correct**)
  - B. Lesser occipital nerve
  - C. Auriculotemporal nerve
  - D. Glossopharyngeal nerve
  - E. Trigeminal nerve
86. • Heparin infusion should be discontinued how long before surgery?
- A. 1 hour
  - B. 6 hours (**correct**)
  - C. 12 hours
  - D. 24 hours
  - E. 2 hours
87. • A 65-year-old man with fasting glucose 7.3 mmol/L and 2-hour post-prandial 13 mmol/L is diagnosed with:
- A. Diabetes mellitus (**correct**)
  - B. Diabetes insipidus
  - C. Impaired glucose tolerance
  - D. Stress hyperglycemia
  - E. Secondary diabetes
88. • In a neonate laparotomy, a structure passing superolaterally from the umbilicus is the:
- A. Urachus
  - B. Vitelline duct (**correct**)
  - C. Ductus venosus
  - D. Umbilical artery
  - E. Umbilical vein
89. • Five days post–MI, intra-aortic balloon pump augments coronary perfusion by:
- A. Decreasing afterload and increasing diastolic pressure (**correct**)
  - B. Increasing systolic ejection fraction
  - C. Supporting right ventricle
  - D. Preventing ventricular rupture
  - E. Reducing preload
90. • Human bite wound infections most commonly involve:
- A. Eikenella corrodens (**correct**)
  - B. Streptococcus pyogenes
  - C. Staphylococcus aureus
  - D. Clostridium perfringens
  - E. Pseudomonas aeruginosa

91. • Which of the following is not a branch of the facial nerve?
- A. Temporal
  - B. Buccal
  - C. Zygomatic
  - D. Maxillary (**correct**)
  - E. Cervical
92. • A patient with recurrent bulbar palsy and stroke history for 3 days requires enteral feeding. The best method is:
- A. Nasogastric tube (**correct**)
  - B. Total parenteral nutrition
  - C. PEG with cuffed tracheostomy
  - D. Early surgical gastrostomy
  - E. Oral thickened feeds
93. • In suspected Le Fort III fracture, urgent CT within 1 hour is indicated for:
- A. Perioral swelling
  - B. Periorbital swelling
  - C. Le Fort III pattern (**correct**)
  - D. Battle's sign
  - E. Ecchymosis
94. • A professional surfer with recurrent otalgia and obstruction of EAC—likely:
- A. Tympanosclerosis
  - B. Glomus tumour
  - C. Otitis media
  - D. Exostoses (**correct**)
  - E. Cholesteatoma
95. • During spinal shock recovery, which reflex returns first?
- A. Plantar
  - B. Ankle jerk (**correct**)
  - C. Biceps
  - D. Delayed plantar
  - E. Abdominal
96. • A cheek stab injuring the buccal branch of facial nerve also risks damage to the:
- A. Parotid duct (**correct**)
  - B. Submandibular duct
  - C. Lingual nerve
  - D. Facial artery branch
  - E. Masseter muscle
97. • Enterobius vermicularis infection in a child presents with:
- A. Abdominal pain
  - B. Perianal itching (**correct**)
  - C. Diarrhea
  - D. Weight loss
  - E. Vomiting
98. • A smooth narrowing of lower esophagus with regurgitation and halitosis suggests:
- A. Achalasia (**correct**)
  - B. Peptic stricture

- C. Carcinoma
  - D. Zenker's diverticulum
  - E. Schatzki ring
99. • Preferred glucocorticoid with mineralocorticoid action in adrenal crisis:
- A. Hydrocortisone (**correct**)
  - B. Dexamethasone
  - C. Prednisone
  - D. Methylprednisolone
  - E. Fludrocortisone
100. • Parkland formula for 20% TBSA burn in 65 kg adult yields:
- A. 1.3 L in 24 h (**correct**)
  - B. 2.6 L
  - C. 4.0 L
  - D. 6.5 L
  - E. 260 mL
101. A 32-year-old man presents with a painless fluctuant swelling in the upper outer quadrant of the right breast. FNAC shows benign ductal cells. The next best step is:
- A. Excision biopsy (**correct**)
  - B. Punch biopsy
  - C. Three-month follow-up with ultrasound
  - D. Reassure and discharge
  - E. MRI
102. A cleft palate in an infant arises from abnormal fusion of which pharyngeal arch?
- A. First arch (**correct**)
  - B. Second arch
  - C. Third arch
  - D. Fourth arch
  - E. Sixth arch
103. A head-injured patient with confusion, vomiting, and a serum sodium of 125 mmol/L requires:
- A. 3% hypertonic saline 50 mL (**correct**)
  - B. Mannitol
  - C. Fluid restriction
  - D. Vasopressors
  - E. Diuretics
104. Shoulder tip pain from gallstones is referred via which dermatomes?
- A. C3–C4 (**correct**)
  - B. C5–C6
  - C. C6–C7
  - D. T1–T2
  - E. T4–T5
105. Warfarin therapy causes deficiency of which factor?
- A. Factor IX (**correct**)
  - B. Factor I
  - C. Factor II

- D. Factor X
  - E. Factor V
106. A 34-year-old carpenter sustains a saw injury to the nailbed of his distal phalanx, with an intact phalanx. The nail bed is lacerated. The most appropriate management is:
- A. Remove nail, repair nail bed, apply buddy splint (**correct**)
  - B. Excise distal phalanx
  - C. K-wire fixation
  - D. Nailbed dressing only
  - E. Amputation
107. Which coagulation factor is not synthesized in the liver?
- A. Factor VIII (**correct**)
  - B. Factor II
  - C. Factor IX
  - D. Factor X
  - E. Factor V
108. In MCA stroke, contralateral lower facial paralysis with forehead sparing indicates involvement of:
- A. Upper motor neuron above the facial nucleus (**correct**)
  - B. Lower motor neuron lesion
  - C. Cerebellar lesion
  - D. Basal ganglia
  - E. Brainstem
109. A man with recurrent aspiration and smoking history has FNAC of lymph nodes showing malignant cells without axillary or inguinal nodes, but mediastinal nodes are positive. The most likely diagnosis is:
- A. Non-Hodgkin lymphoma (**correct**)
  - B. Hodgkin lymphoma
  - C. Bronchial carcinoma
  - D. Gastric carcinoma
  - E. Sarcoidosis
110. A 24-year-old with colicky loin-to-groin pain has an 8 mm distal ureteric stone with mild hydronephrosis. The best initial management is:
- A. Extracorporeal shock wave lithotripsy (ESWL) (**correct**)
  - B. Ureteroscopy and stent placement
  - C. Ureterolithotomy
  - D. Medical expulsive therapy
  - E. Percutaneous nephrostomy
111. A patient on isoniazid with elevated creatinine and hyperkalemia will have decreased:
- A. 1,25-(OH)<sub>2</sub> vitamin D (**correct**)
  - B. 25-(OH) vitamin D
  - C. Parathyroid hormone
  - D. Calcitonin
  - E. Renin
112. An 11-year-old child weighing 34 kg requires maintenance fluid over 24 hours. According to Holliday–Segar, the volume is:



- A. 680 mL (**correct**)
  - B. 500 mL
  - C. 1000 mL
  - D. 2000 mL
  - E. 340 mL
113. A patient with hypercalcemia presents to the ED. Initial treatment includes:
- A. ECG monitoring, IV fluids, bisphosphonate (**correct**)
  - B. Calcium supplementation
  - C. Loop diuretics only
  - D. Phosphate binders
  - E. Oral calcium
114. Abduction of vocal cords during respiration is performed by:
- A. Posterior cricoarytenoid (**correct**)
  - B. Lateral cricoarytenoid
  - C. Cricothyroid
  - D. Thyroarytenoid
  - E. Vocalis
115. A 62-year-old woman with breast cancer undergoes wide local excision and axillary clearance. Which histological finding would alter management to include chemotherapy?
- A. >3 positive axillary nodes (**correct**)
  - B. Estrogen receptor positivity
  - C. HER2 amplification
  - D. Lymphovascular invasion
  - E. Bloom–Richardson grade III
116. The mylohyoid muscle forms the floor of the mouth and resists downward spread of infection into the neck. This muscle is innervated by which nerve?
- A. Mylohyoid (branch of V3) (**correct**)
  - B. Hypoglossal nerve
  - C. Glossopharyngeal nerve
  - D. Facial nerve
  - E. Ansa cervicalis
117. A 35-year-old woman post–gastric bypass reports dizziness, sweating, and palpitations after meals, without pain or vomiting. The most likely cause is:
- A. Reactive hypoglycemia (**correct**)
  - B. Dumping syndrome
  - C. Bile reflux
  - D. Pernicious anemia
  - E. Internal herniation
118. A 40-year-old presents with low back pain and left calf numbness; MRI shows L4/5 disc herniation compressing the thecal sac. The herniation involves the:
- A. Nucleus pulposus (**correct**)
  - B. Annulus fibrosus
  - C. Posterior longitudinal ligament
  - D. Ligamentum flavum
  - E. Anterior longitudinal ligament

119. A 21-year-old man with stab injury to the right chest has pulse 110, BP 85/40, CXR shows large right haemothorax. He is hypotensive; what initiates increased renal sodium retention?
- A. Renin release (**correct**)
  - B. Angiotensin II
  - C. Aldosterone
  - D. ADH
  - E. ANP suppression
120. A postoperative patient 7 days after major surgery presents with hypotension and warm peripheries. The most likely shock type is:
- A. Septic shock (**correct**)
  - B. Hypovolemic shock
  - C. Cardiogenic shock
  - D. Obstructive shock
  - E. Neurogenic shock
121. A 40-year-old woman with rheumatoid arthritis has knee pain and signs of inflammation but no fever; the most definitive diagnostic test is:
- A. Knee aspiration with synovial fluid analysis (**correct**)
  - B. Knee MRI
  - C. ESR
  - D. CRP
  - E. Plain X-ray
122. A cyclist presents with a 2 cm bruise 2 cm above the umbilicus, tachycardia, and hypotension. The most likely injured organ is:
- A. Pancreas
  - B. Transverse colon
  - C. Left lobe of liver (**correct**)
  - D. Small bowel
  - E. Spleen
123. A blunt abdominal trauma patient with left flank ecchymosis and hypotension should first undergo:
- A. FAST ultrasound (**correct**)
  - B. CT abdomen
  - C. Diagnostic peritoneal lavage
  - D. MRI abdomen
  - E. Exploratory laparotomy
124. A 53-year-old woman on three-month antibiotics for UTIs develops poor urinary stream; the most likely cause is:
- A. Underactive bladder
  - B. Urethral stricture (**correct**)
  - C. Bladder neck contracture
  - D. Stone
  - E. Bladder neck incompetence
125. A man has a tibial fracture reduced and casted. One hour later he has severe pain and numbness in the leg. The most appropriate management is:
- A. Analgesia and observation

- B. Assess compartment pressures
  - C. Immediate fasciotomy (**correct**)
  - D. Elevation and ice
  - E. Splint adjustment
126. Histology in rheumatoid arthritis often shows:
- A. Osteophytes
  - B. Granulomatous necrobiotic inflammation (**correct**)
  - C. Onion-skin periosteal reaction
  - D. Calcification
  - E. Fibrinoid necrosis
127. A multi-trauma patient suddenly develops dyspnea, tracheal deviation, and absent breath sounds on one side. The most likely diagnosis is:
- A. Tension pneumothorax (**correct**)
  - B. Fat embolism
  - C. Pulmonary contusion
  - D. Hemothorax
  - E. Flail chest
128. A lateral approach incision between the lateral malleolus and Achilles tendon risks injury to which structure?
- A. Sural nerve (**correct**)
  - B. Tibial nerve
  - C. Lateral plantar nerve
  - D. Saphenous nerve
  - E. Superficial peroneal nerve
129. Pigment stones in hereditary spherocytosis are composed of:
- A. Calcium bilirubinate (**correct**)
  - B. Calcium oxalate
  - C. Cholesterol
  - D. Mixed
  - E. Cystine
130. A 55-year-old woman complains of leg pain on walking that improves when leaning forward on a shopping trolley and has a positive shopping cart sign. The likely diagnosis is:
- A. Spinal canal stenosis (**correct**)
  - B. Intermittent claudication
  - C. Ankylosing spondylitis
  - D. Disc prolapse
  - E. Peripheral neuropathy
131. A 43-year-old post-ERCP patient has severe abdominal pain but normal labs; the likely diagnosis is:
- A. Duodenal perforation (**correct**)
  - B. Pancreatitis
  - C. Cholangitis
  - D. Retained stone
  - E. Sphincter of Oddi dysfunction

132. Which agent constricts the efferent glomerular arteriole?  
A. Angiotensin II (**correct**)  
B. Renin  
C. Angiotensin I  
D. ANP  
E. NO
133. A 65-year-old man post-hip surgery day 6 has sudden SOB, tachycardia, and warm peripheries. Diagnosis:  
A. Septic shock  
B. Pulmonary embolism (**correct**)  
C. Hypovolemic shock  
D. Cardiogenic shock  
E. Anaphylactic shock
134. A patient with chronic pancreatitis and steatorrhea should be tested with:  
A. Fecal elastase (**correct**)  
B. Fecal calprotectin  
C. Serum lipase  
D. Serum trypsinogen  
E. Serum transglutaminase
135. Osteosarcoma metastasizes first to the:  
A. Lungs (**correct**)  
B. Liver  
C. Brain  
D. Bone  
E. Kidneys
136. For biopsy of a middle lobe lung lesion, the best intercostal space and line is:  
A. 4th ICS midclavicular line (**correct**)  
B. 6th ICS midaxillary line  
C. 2nd ICS midclavicular line  
D. 5th ICS anterior axillary line  
E. 7th ICS posterior axillary line
137. A patient after AAA repair has high  $K^+$ , low urine output: first action is:  
A. Measure intra-abdominal pressure (**correct**)  
B. Bolus Hartmann's  
C. Start insulin infusion  
D. Diuretics  
E. Dialysis
138. Post-parotidectomy gustatory sweating (Frey's syndrome) is due to:  
A. Aberrant regeneration of auriculotemporal nerve parasympathetics into sympathetic sweat fibers (**correct**)  
B. Injury to sympathetic chain  
C. Chorda tympani damage  
D. Great auricular nerve injury  
E. Glossopharyngeal anastomosis
139. A 56-year-old with two-week headache, CT shows parietal lobe lesion and papilledema; sudden homonymous hemianopia indicates involvement of:

- A. Optic radiation (**correct**)
  - B. Optic chiasm
  - C. Optic nerve
  - D. Visual cortex
  - E. Lateral geniculate body
140. A 1-year-old with brown umbilical discharge most likely has a patent:
- A. Vitelline duct (**correct**)
  - B. Urachus
  - C. Processus vaginalis
  - D. Ductus arteriosus
  - E. Foramen ovale
141. • A patient with unstable angina, poorly controlled diabetes (HbA1c 9%), and an EF of 40% is scheduled for elective hernia repair. His ASA grade is:
- A. ASA 1
  - B. ASA 2
  - C. ASA 3 (**correct**)
  - D. ASA 4
  - E. ASA 5
142. • A 45-year-old with a rotator cuff tear cannot internally rotate his arm. Which rotator cuff muscle is also an internal rotator?
- A. Supraspinatus
  - B. Infraspinatus
  - C. Teres minor
  - D. Subscapularis (**correct**)
  - E. Teres major
143. • A gastric perforation near the greater curvature at the antrum is closest to which vessel?
- A. Gastroduodenal artery
  - B. Right gastric artery
  - C. Right gastroepiploic artery (**correct**)
  - D. Left gastric artery
  - E. Left gastroepiploic artery
144. • Leriche syndrome (claudication, impotence, absent femoral pulses) results from occlusion of the:
- A. External iliac artery
  - B. Common femoral artery
  - C. Aortic bifurcation (**correct**)
  - D. Internal iliac artery
  - E. Superior mesenteric artery
145. • Twelve days after renal transplant, a patient develops graft site swelling and anuria. The most likely cause is:
- A. Acute cellular rejection
  - B. Renal vein thrombosis (**correct**)
  - C. Renal artery thrombosis
  - D. Ureteric obstruction
  - E. Fluid overload

146. • A high jejunal fistula typically leads to which electrolyte disturbance?
- A. Hypokalemia (**correct**)
  - B. Hyperkalemia
  - C. Hypocalcemia
  - D. Hypercalcemia
  - E. Hyponatremia
147. • A 65-kg diabetic receives a 5% dextrose/insulin infusion. The solution's tonicity is:
- A. Isotonic and isosmotic
  - B. Hypertonic and hyperosmotic (**correct**)
  - C. Hypotonic and hypo-osmotic
  - D. Hypertonic and hypo-osmotic
  - E. Hypotonic and hyperosmotic
148. • To diagnose exocrine pancreatic insufficiency in chronic pancreatitis, the best test is:
- A. Fecal elastase (**correct**)
  - B. Fecal calprotectin
  - C. Serum lipase
  - D. Serum trypsinogen
  - E. 72-hour fecal fat
149. • A 16-year-old with recurrent swimming-related pneumonia is diagnosed with primary ciliary dyskinesia. The primary defect is in:
- A. Goblet cell hyperplasia
  - B. Ciliary dynein arms (**correct**)
  - C. Smooth muscle
  - D. Alveolar macrophages
  - E. Surfactant
150. • A painful pilonidal sinus is driven by which prostaglandin?
- A. PGE2 (**correct**)
  - B. PGI2
  - C. PGD2
  - D. PGF2 $\alpha$
  - E. Thromboxane A2
151. • A patient given penicillin develops anaphylaxis via which mechanism?
- A. IgE-mediated mast cell degranulation (**correct**)
  - B. IgG-mediated complement activation
  - C. T-cell-mediated cytotoxicity
  - D. Type III immune complex
  - E. Non-immunologic histamine release
152. • A 45-year-old post-MI patient one week post-aortic balloon pump insertion has signs of low cardiac output despite support. The likely complication is:
- A. Papillary muscle rupture
  - B. Left ventricular free wall rupture
  - C. Vascular injury at insertion site (**correct**)
  - D. Aortic dissection
  - E. Thrombocytopenia

153. • A young adult with fever, neck stiffness, and blood-stained CSF that clears in successive tubes most likely bled from:  
A. Subarachnoid vein (**correct**)  
B. Epidural artery  
C. Subdural vein  
D. Spinal branch artery  
E. Epidural venous plexus
154. • In respiratory failure developing post-pancreatitis, central chemoreceptors respond primarily to:  
A. CO<sub>2</sub> concentration in medulla (**correct**)  
B. Arterial O<sub>2</sub> tension  
C. CSF bicarbonate  
D. CSF hydrogen ion  
E. Peripheral chemoreceptors
155. • A pregnant woman with leg swelling and family history of clotting disorders tests positive for:  
A. Anti-endomysial antibodies  
B. Anti-mitochondrial antibodies  
C. Antiphospholipid antibodies (**correct**)  
D. Antinuclear antibodies  
E. Anti-thyroglobulin antibodies
156. • The most common organism causing discitis is:  
A. Staphylococcus epidermidis  
B. Streptococcus pyogenes  
C. Staphylococcus aureus (**correct**)  
D. Escherichia coli  
E. Clostridium perfringens
157. • A 36-year-old presents 12 hours post-open tibial fracture with severe pain and exposed bone. The optimal initial management is:  
A. Immediate split-thickness skin graft  
B. Free flap coverage  
C. Delayed primary closure  
D. Immediate debridement and fixation (**correct**)  
E. Delayed skin graft
158. • In chronic kidney disease, low calcium and high creatinine predict a decrease in:  
A. 1,25-(OH)<sub>2</sub> vitamin D (**correct**)  
B. 25-(OH) vitamin D  
C. PTH  
D. Calcitonin  
E. Aldosterone
159. • A 12-year-old child weighing 34 kg in shock requires initial resuscitation with:  
A. 680 mL normal saline (**correct**)  
B. 680 mL 5% dextrose  
C. 340 mL colloid

- D. 1 L Hartmann's
  - E. 1 L blood
160. • A patient with asymptomatic osteoporosis presenting with a hip fragility fracture is most likely experiencing:
- A. Secondary osteoporosis
  - B. Postmenopausal osteoporosis (**correct**)
  - C. Senile osteoporosis
  - D. Disuse osteoporosis
  - E. Steroid-induced osteoporosis
161. During TURP, thigh adductor twitching indicates stimulation of which nerve?
- A. Obturator nerve (**correct**)
  - B. Femoral nerve
  - C. Sciatic nerve
  - D. Pudendal nerve
  - E. Ilioinguinal nerve
162. In the Pringle manoeuvre during hepatic trauma surgery, which structure lies posterior to the hepatoduodenal ligament?
- A. Inferior vena cava (**correct**)
  - B. Portal vein
  - C. Hepatic artery
  - D. Common bile duct
  - E. Caudate lobe of liver
163. Which qSOFA criterion contributes one point to the score?
- A. Altered mental status (**correct**)
  - B. Heart rate > 90 bpm
  - C. Respiratory rate < 20/min
  - D. Systolic BP > 100 mmHg
  - E. Temperature > 38°C
164. Indication for intubation in a burn victim rescued from a fire includes:
- A. Decreased level of consciousness (**correct**)
  - B. Dyspnea
  - C. Hypoxia alone
  - D. RR > 35
  - E. Facial singed hairs
165. Over 200 colonic polyps on colonoscopy is diagnostic of:
- A. Familial adenomatous polyposis (FAP) (**correct**)
  - B. Peutz-Jeghers syndrome
  - C. Lynch syndrome
  - D. Juvenile polyposis
  - E. Cowden syndrome
166. Indication for excision of a thyroglossal cyst in a child is:
- A. Recurrent infections (**correct**)
  - B. Cosmetic concern
  - C. Thyroid dysfunction
  - D. Rapid enlargement
  - E. Family history



167. Isoprenaline acts on  $\beta_1$  at low doses and  $\alpha_1$  at high doses; its precursor is:  
A. Dopamine (**correct**)  
B. Noradrenaline  
C. Adrenaline  
D. Phenylephrine  
E. Dobutamine
168. Premalignant epithelial change without invasion of the basement membrane is called:  
A. Dysplasia (**correct**)  
B. Metaplasia  
C. Neoplasia  
D. Hyperplasia  
E. Carcinoma in situ
169. The **least** reliable sign of compartment syndrome is:  
A. Absent distal pulse (**correct**)  
B. Pain on passive stretch  
C. Paresthesia  
D. Swelling  
E. Pallor
170. In posterolateral knee approach for Baker's cyst excision, the structure at risk is the:  
A. Common peroneal (fibular) nerve (**correct**)  
B. Tibial nerve  
C. Saphenous nerve  
D. Popliteal artery  
E. Popliteal vein
171. Lymphatic drainage of the cecum primarily follows the:  
A. Ileocolic vessels (**correct**)  
B. Superior mesenteric vessels  
C. Inferior mesenteric vessels  
D. Internal iliac vessels  
E. Para-aortic vessels
172. Trauma near the fibular neck causing loss of dorsiflexion and foot eversion with sensory loss over the dorsum of the foot indicates injury to the:  
A. Common peroneal nerve (**correct**)  
B. Superficial peroneal nerve  
C. Deep peroneal nerve  
D. Tibial nerve  
E. Sural nerve
173. A high jejunal fistula leads to:  
A. Hypokalemia (**correct**)  
B. Hyperkalemia  
C. Hypocalcemia  
D. Hypercalcemia  
E. Hyponatremia

174. A 65-kg diabetic patient receives 5% dextrose in water infusion. The solution is:
- A. Iso-osmolar and isotonic
  - B. Hypo-osmolar and hypotonic (**correct**)
  - C. Hyper-osmolar and hypertonic
  - D. Iso-osmolar and hypotonic
  - E. Hypo-osmolar and hypertonic
175. A pancreatic cancer patient with obstructive jaundice should have which study to evaluate biliary drainage?
- A. ERCP
  - B. MRCP (**correct**)
  - C. CT abdomen
  - D. Ultrasound
  - E. PTC
176. Malignant melanoma's best prognostic factor is:
- A. Breslow thickness (**correct**)
  - B. Clark level
  - C. Ulceration
  - D. Mitotic rate
  - E. Lymphovascular invasion
177. In a 45-year-old with tension pneumothorax, immediate management is:
- A. Needle decompression in 2nd ICS midclavicular line (**correct**)
  - B. Tube thoracostomy
  - C. High-flow oxygen
  - D. Urgent CT scan
  - E. Intubation
178. In metabolic acidosis with partial respiratory compensation, expected  $\text{PCO}_2$  is calculated by:
- A.  $(1.5 \times [\text{HCO}_3^-]) + 8 \pm 2$  (**correct**)
  - B.  $(1.2 \times [\text{HCO}_3^-]) + 5$
  - C.  $(1.5 \times [\text{HCO}_3^-]) - 8$
  - D.  $(1.2 \times [\text{HCO}_3^-]) - 5$
  - E.  $(2 \times [\text{HCO}_3^-]) + 7$
179. In patients with emphysema on high-flow  $\text{O}_2$ , ABG pH 7.28,  $\text{PaO}_2$  62,  $\text{PaCO}_2$  80,  $\text{HCO}_3^-$  36, base excess +5 indicates:
- A. Partially compensated respiratory acidosis (**correct**)
  - B. Uncompensated respiratory acidosis
  - C. Metabolic acidosis
  - D. Metabolic alkalosis
  - E. Mixed respiratory and metabolic alkalosis
180. Cavernous sinus thrombosis presents with diplopia due to involvement of which cranial nerve?
- A. Abducent nerve (VI) (**correct**)
  - B. Oculomotor nerve (III)
  - C. Trochlear nerve (IV)
  - D. Ophthalmic branch of V
  - E. Facial nerve (VII)

181. A 75-year-old post-hemicolectomy patient on day 6 develops sudden chest pain and dyspnea without sepsis—most likely diagnosis?
- A. Pneumonia
  - B. Atelectasis
  - C. Pulmonary embolism (**correct**)
  - D. Acute respiratory distress syndrome
  - E. Myocardial infarction
182. A hypertensive patient on diuretics presents with hypercalcemia. The most likely offending agent is:
- A. Thiazide diuretic (e.g., bendroflumethiazide) (**correct**)
  - B. Loop diuretic (e.g., furosemide)
  - C. ACE inhibitor
  - D. Beta-blocker
  - E. Calcium channel blocker
183. A patient with hyponatremia, hyperkalemia, and skin hyperpigmentation likely has:
- A. Cushing syndrome
  - B. Primary adrenal insufficiency (Addison's) (**correct**)
  - C. SIADH
  - D. Conn's syndrome
  - E. Hypothyroidism
184. A peritonsillar abscess causing uvular deviation and respiratory distress is called:
- A. Ludwig's angina (**correct**)
  - B. Peritonsillar abscess
  - C. Retropharyngeal abscess
  - D. Epiglottitis
  - E. Lemierre's syndrome
185. A newborn with respiratory distress and lung hypoplasia due to a posterolateral diaphragmatic hernia most often has the defect in the:
- A. Left pleuroperitoneal membrane (**correct**)
  - B. Right pleuroperitoneal membrane
  - C. Septum transversum
  - D. Dorsal mesentery
  - E. Ventral mesentery
186. Passage of chyme from stomach to duodenum is primarily stimulated by:
- A. Gastrin (**correct**)
  - B. Cholecystokinin
  - C. Secretin
  - D. GIP
  - E. VIP
187. A child with meningitis has CSF showing abundant neutrophils and gram-positive diplococci—most likely organism:
- A. Streptococcus pneumoniae (**correct**)
  - B. Neisseria meningitidis
  - C. E. coli

- D. *Klebsiella pneumoniae*
  - E. *Haemophilus influenzae*
188. Serosanguinous discharge from a midline laparotomy wound post-appendectomy indicates:
- A. Wound dehiscence (**correct**)
  - B. Surgical site infection
  - C. Hematoma
  - D. Seroma
  - E. Enterocutaneous fistula
189. During cystectomy for bladder cancer, the branch of the anterior division of the internal iliac artery supplying the bladder is the:
- A. Inferior vesical artery (**correct**)
  - B. Superior vesical artery
  - C. Obturator artery
  - D. Uterine artery
  - E. Internal pudendal artery
190. A pathologic fracture of the radius due to metastasis is best managed with:
- A. Intramedullary nailing (**correct**)
  - B. Casting
  - C. Plate fixation
  - D. External fixation
  - E. Radiation alone
191. A knife wound at the right 9th costal cartilage level injures an intra-abdominal organ. Which organ is most likely damaged?
- A. Gallbladder (**correct**)
  - B. Right kidney
  - C. Liver lobe
  - D. Colon
  - E. Pancreas
192. Coronary blood flow autoregulates during tachycardia primarily by:
- A. Increased diastolic pressure
  - B. Increased systolic pressure
  - C. Metabolic vasodilatation (**correct**)
  - D. Increased end-systolic volume
  - E. Sympathetic vasoconstriction
193. A 55-year-old man with DVT and hemoglobin 18.3 g/dL is found to have erythrocytosis and risk of malignancy. The most likely associated cancer is:
- A. Renal cell carcinoma (**correct**)
  - B. Pancreatic carcinoma
  - C. Prostatic carcinoma
  - D. Bronchial carcinoma
  - E. Colonic carcinoma
194. Before resection of a carotid body tumor, which potential complication must be discussed?
- A. Diaphragm paralysis
  - B. Horner's syndrome (**correct**)

- C. Dysphagia
  - D. Facial nerve palsy
  - E. Vocal cord paralysis
195. Lymphatic drainage of the scrotum is to the:
- A. Superficial inguinal nodes (**correct**)
  - B. Deep inguinal nodes
  - C. External iliac nodes
  - D. Para-aortic nodes
  - E. Sacral nodes
196. On DRE, a structure palpable 4 cm above the anal verge is the:
- A. Puborectalis sling (**correct**)
  - B. Internal anal sphincter
  - C. External anal sphincter
  - D. Levator ani
  - E. Rectovesical pouch
197. In a child with a palpable renal mass, the appropriate initial imaging is:
- A. Ultrasound abdomen (**correct**)
  - B. Plain abdominal X-ray
  - C. CT abdomen
  - D. IV pyelogram
  - E. MRI abdomen
198. Coagulopathy with hyperfibrinolysis in polytrauma is mediated by:
- A. Activated protein C (**correct**)
  - B. Plasminogen
  - C. Thromboxane A<sub>2</sub>
  - D. Tissue factor
  - E. Factor VII
199. Lactational mastitis without abscess is most often due to:
- A. Staphylococcus aureus (**correct**)
  - B. Streptococcus pyogenes
  - C. E. coli
  - D. Pseudomonas aeruginosa
  - E. Candida albicans
200. Endogenous fibrinolysis of a DVT is primarily mediated by:
- A. Plasmin (**correct**)
  - B. Antithrombin III
  - C. Factor XII
  - D. Thrombin
  - E. Tissue plasminogen activator
201. • During median sternotomy for CABG, the first structure encountered beneath the manubrium is the:
- A. Thymus (**correct**)
  - B. Right atrium
  - C. Right ventricle
  - D. Aorta
  - E. Left ventricle

202. • A trauma patient with absent urine output after catheterization likely has:
- A. Intraperitoneal bladder rupture
  - B. Extraperitoneal bladder rupture (**correct**)
  - C. Urethral injury
  - D. Renal contusion
  - E. Ureteric obstruction
203. • A 59-year-old with post-op hypothermia (35 °C) is best managed by:
- A. Bair Hugger warming (**correct**)
  - B. Ambient temperature reduction
  - C. IV cold saline
  - D. Passive rewarming
  - E. Critical incident report
204. • A patient on warfarin and aspirin presents with a supra-patellar swelling and inability to extend the knee. The most likely diagnosis is:
- A. Quadriceps tendon rupture (**correct**)
  - B. Patellar fracture
  - C. Patellar tendon rupture
  - D. Prepatellar bursitis
  - E. Suprapatellar abscess
205. • Post-hysterectomy, a woman presents with vomiting, distension, and absolute constipation—abdominal X-ray shows multiple air-fluid levels. Diagnosis:
- A. Small bowel obstruction (**correct**)
  - B. Large bowel obstruction
  - C. Paralytic ileus
  - D. Volvulus
  - E. Peritonitis
206. • A knee bruise and palpable femoral pulse with absent distal pulses indicates:
- A. Supracondylar femur fracture
  - B. Knee dislocation (**correct**)
  - C. Popliteal artery entrapment
  - D. Tibial plateau fracture
  - E. Femoral artery thrombosis
207. • In pulmonary embolism, changes include:
- A. Increased arterial CO<sub>2</sub>
  - B. Increased V/Q ratio (**correct**)
  - C. Decreased dead space
  - D. Decreased shunt
  - E. Alveolar hyperventilation
208. • Blood supply of a Meckel's diverticulum is from the:
- A. Ileocolic artery
  - B. Superior mesenteric artery (vitelline branch) (**correct**)
  - C. Inferior mesenteric artery
  - D. Left colic artery
  - E. Middle colic artery
209. • In acute pancreatitis, autodigestion is mediated by:
- A. Trypsin (**correct**)

- B. Lipase
  - C. Amylase
  - D. Elastase
  - E. Phospholipase A<sub>2</sub>
210. • In malignant melanoma, the most important prognostic factor is:
- A. Breslow thickness (**correct**)
  - B. Margins of excision
  - C. Completeness of excision
  - D. Lymphovascular invasion
  - E. Mitotic index
211. • A typist with carpal tunnel syndrome will have dysfunction of the:
- A. Flexor pollicis longus
  - B. Opponens pollicis (**correct**)
  - C. Flexor carpi radialis
  - D. Flexor digitorum profundus
  - E. Abductor digiti minimi
212. • An IVDU with inguinal abscess and psoas abscess is best managed with:
- A. I&D plus antibiotics (**correct**)
  - B. IV antibiotics alone
  - C. Percutaneous drainage
  - D. Surgical excision
  - E. CT angiography
213. • Post-abdominal aneurysm repair with hyperkalemia and oliguria, the first step is:
- A. Measure intra-abdominal pressure (**correct**)
  - B. Insulin-dextrose infusion
  - C. IV loop diuretic
  - D. Hemodialysis
  - E. IV calcium gluconate
214. • Gustatory sweating after parotidectomy is due to:
- A. Misguided regeneration of parasympathetic to sweat glands (**correct**)
  - B. Sympathetic denervation
  - C. Chorda tympani transection
  - D. Auriculotemporal nerve entrapment
  - E. Great auricular nerve injury
215. • A parietal lobe lesion causing homonymous hemianopia affects the:
- A. Optic radiation (**correct**)
  - B. Optic chiasm
  - C. Lateral geniculate body
  - D. Optic tract
  - E. Visual cortex
216. • A 1-year-old with brown umbilical discharge likely has a patent:
- A. Urachus (**correct**)
  - B. Vitelline duct
  - C. Processus vaginalis

- D. Ductus arteriosus
  - E. Foramen ovale
217.       • In a breast mass that is benign on FNAC in a 3 cm lesion in a 30-year-old, the next step is:
- A. Excision biopsy (**correct**)
  - B. Core biopsy
  - C. Follow-up in 3 months
  - D. Reassure and discharge
  - E. MRI
218.       • A cleft palate results from malfusion of what embryonic structure?
- A. Palatal shelves (1st arch derivatives) (**correct**)
  - B. Pharyngeal pouch 2
  - C. Pharyngeal arch 3
  - D. Thyroglossal duct
  - E. Midline nasal process
219.       • Managing hyponatremia in head injury with confusion requires:
- A. 3% hypertonic saline (**correct**)
  - B. Mannitol
  - C. Fluid restriction
  - D. Loop diuretics
  - E. Vasopressors
220.       • Shoulder tip pain in biliary colic refers via:
- A. C3–C4 dermatomes (**correct**)
  - B. C5–C6
  - C. T1–T2
  - D. C4–C5
  - E. T6–T7
221.       • A 34-year-old woman with biliary colic complains of right shoulder tip pain radiating down her arm. This referred pain follows the dermatome of:
- A. C3–C4 (**correct**)
  - B. C5–C6
  - C. C6–C7
  - D. T1–T2
  - E. T4–T5
222.       • Warfarin anticoagulation causes deficiency of which vitamin K–dependent factor first?
- A. Factor VII (**correct**)
  - B. Factor I
  - C. Factor II
  - D. Factor IX
  - E. Factor X
223.       • A carpenter with distal phalanx fracture and nailbed laceration but intact bone should be managed by:
- A. Remove nail, repair nailbed, apply splint (**correct**)
  - B. Excise distal phalanx
  - C. K-wire fixation



- D. Nailbed dressing only
  - E. Amputation
224.       • Which coagulation factor is not synthesized in the liver?
- A. Factor VIII (**correct**)
  - B. Factor IX
  - C. Factor X
  - D. Factor II
  - E. Factor V
225.       • In an MCA stroke, contralateral lower facial weakness with forehead sparing indicates:
- A. Upper motor neuron lesion (**correct**)
  - B. Lower motor neuron lesion
  - C. Cerebellar lesion
  - D. Basal ganglia lesion
  - E. Brainstem lesion
226.       • A 63-year-old post-liver transplant patient shows Pearl's Prussian blue stain of high iron deposition in the liver. The most likely underlying pathology is:
- A. Hemochromatosis (**correct**)
  - B. Cirrhosis
  - C. Hepatocellular carcinoma
  - D. Wilson's disease
  - E. Alpha-1 antitrypsin deficiency
227.       • A swimmer with chronic shoulder pain is diagnosed with a Pancoast tumor. The common cause is:
- A. Repeated microtrauma
  - B. Direct trauma
  - C. Smoking-related malignancy (**correct**)
  - D. Viral infection
  - E. Autoimmune inflammation
228.       • A footballer post-twisting knee injury has a positive McMurray's test and delayed effusion. The most likely injury is:
- A. Meniscal tear (**correct**)
  - B. MCL tear
  - C. ACL tear
  - D. PCL tear
  - E. LCL tear
229.       • Clearance of inhaled carbon particles in the alveoli is primarily by:
- A. Macrophage phagocytosis (**correct**)
  - B. Cough and sneeze
  - C. Mucociliary action
  - D. Immunoglobulin binding
  - E. Lymphatic drainage
230.       • A 3-year-old with painless rectal bleeding and a pedunculated polyp on colonoscopy most likely has:
- A. Juvenile polyp (**correct**)
  - B. Adenomatous polyp

- C. Peutz-Jeghers polyp
  - D. Hyperplastic polyp
  - E. Inflammatory polyp
231. • A middle-aged man with a forehead pulsatile mass and a thyroid nodule is most likely to have:
- A. Follicular thyroid carcinoma (**correct**)
  - B. Papillary thyroid carcinoma
  - C. Medullary thyroid carcinoma
  - D. Anaplastic thyroid carcinoma
  - E. Lymphoma
232. • A patient with familial hypercholesterolemia has markedly elevated LDL. This condition is due to deficiency of:
- A. LDL receptor (**correct**)
  - B. ApoE
  - C. VLDL receptor
  - D. HDL receptor
  - E. LRP1
233. • A patient with non-atherosclerotic aortic dissection due to cystic medial degeneration is most likely:
- A. 16-year-old with Marfan syndrome (**correct**)
  - B. 65-year-old with hypertension
  - C. 50-year-old smoker
  - D. 30-year-old with hyperlipidemia
  - E. 45-year-old diabetic
234. • For DVT prophylaxis in a patient who refuses injections, the best oral alternative is:
- A. Rivaroxaban (**correct**)
  - B. Warfarin
  - C. Clopidogrel
  - D. Aspirin
  - E. Dabigatran
235. • Bleeding lateral to the femoral canal wall during hernia repair is most likely from the:
- A. Femoral artery (**correct**)
  - B. Femoral vein
  - C. Lacunar ligament
  - D. Inferior epigastric vessels
  - E. Great saphenous vein
236. • Injury to the obturator internus tendon occurs via which foramen?
- A. Greater sciatic foramen (**correct**)
  - B. Lesser sciatic foramen
  - C. Obturator canal
  - D. Alcock's canal
  - E. Inguinal canal
237. • Injury to the ulnar nerve at the wrist results in inability to hold paper between thumb and index finger due to paralysis of:

- A. Adductor pollicis (**correct**)
  - B. Opponens pollicis
  - C. First lumbrical
  - D. First dorsal interossei
  - E. Flexor pollicis brevis
238.       • The left ureter crosses under which vessel at the pelvic brim?
- A. Gonadal vessels
  - B. Internal iliac artery
  - C. Common iliac artery (**correct**)
  - D. External iliac vein
  - E. Uterine artery
239.       • A stable patient with acute pulmonary embolism should receive:
- A. LMWH (**correct**)
  - B. UFH
  - C. Thrombolysis
  - D. IVC filter
  - E. Warfarin only
240.       • A patient with peripheral vascular disease undergoing surgery should receive DVT prophylaxis with:
- A. LMWH plus compression stockings (**correct**)
  - B. LMWH alone
  - C. Unfractionated heparin
  - D. Aspirin
  - E. Elastic bandaging
241.       • A young man presents with nasal septal hematoma after trauma. Immediate management is:
- A. Incision and drainage (**correct**)
  - B. Antibiotics
  - C. Observation
  - D. Nasal packing
  - E. Reconstructive surgery
242.       • A 72-year-old man with recent MI presents with sudden-onset abdominal pain and blood in stool. The likely diagnosis is:
- A. Ischemic colitis (**correct**)
  - B. Ulcerative colitis
  - C. Crohn's disease
  - D. Colorectal carcinoma
  - E. Diverticulitis
243.       • A patient with dyspnea and reduced tactile vocal fremitus, dullness to percussion, and decreased breath sounds likely has:
- A. Pleural effusion (**correct**)
  - B. Pneumothorax
  - C. Consolidation
  - D. Bronchial asthma
  - E. Pulmonary embolism

244. • A patient has hyperresonant percussion and decreased breath sounds after trauma. Most likely diagnosis:  
A. Pneumothorax (**correct**)  
B. Pulmonary contusion  
C. Hemothorax  
D. Pleural effusion  
E. Bronchial asthma
245. • A patient with a chronic perianal discharge has an external opening 3 cm from the anal verge posteriorly. The most likely diagnosis is:  
A. Low trans-sphincteric fistula (**correct**)  
B. High intersphincteric fistula  
C. Suprasphincteric fistula  
D. Extrasphincteric fistula  
E. Horseshoe fistula
246. • A man presents with headache and blurred vision. CT shows a pituitary mass compressing the optic chiasm. He has bitemporal hemianopia. The first step in management is:  
A. Neurosurgical referral (**correct**)  
B. Start cabergoline  
C. MRI brain  
D. Visual evoked potential  
E. Blood glucose test
247. • In achalasia cardia, the typical manometry finding is:  
A. Failure of lower esophageal sphincter relaxation (**correct**)  
B. Absent peristalsis in proximal esophagus  
C. High pressure at upper esophageal sphincter  
D. Normal lower esophageal pressure  
E. Hypercontractile esophagus
248. • A 5-year-old child with limp, fever, and hip pain on movement. WBC is raised. Most likely diagnosis:  
A. Septic arthritis (**correct**)  
B. Transient synovitis  
C. Perthes disease  
D. Juvenile idiopathic arthritis  
E. Slipped capital femoral epiphysis
249. • An asthmatic man on salbutamol and steroids develops sudden pain, crepitus in the neck, and chest tightness. CXR shows air outlining the heart. Most likely diagnosis:  
A. Pneumomediastinum (**correct**)  
B. Pneumothorax  
C. Mediastinitis  
D. Cardiac tamponade  
E. Pulmonary embolism
250. • A man with direct trauma to the abdomen has elevated serum amylase and left upper quadrant pain radiating to the back. The likely diagnosis is:  
A. Pancreatic contusion (**correct**)  
B. Splenic laceration

- C. Gastric rupture
  - D. Colon injury
  - E. Liver laceration
251. • A woman with persistent ductal discharge from the nipple has a 0.5 cm central intraductal lesion seen on ultrasound. The best management is:
- A. Microdochectomy (**correct**)
  - B. Total duct excision
  - C. Wide local excision
  - D. Core needle biopsy
  - E. MRI breast
252. • Which of the following is the most important early factor in fracture healing?
- A. Hematoma formation (**correct**)
  - B. Osteoid deposition
  - C. Soft callus formation
  - D. Osteoblast migration
  - E. Bone remodeling
253. • A man has swelling in the groin and scrotum that reduces partially on lying down. Cough impulse is present. The most likely diagnosis is:
- A. Indirect inguinal hernia (**correct**)
  - B. Direct inguinal hernia
  - C. Femoral hernia
  - D. Hydrocele
  - E. Varicocele
254. • A 62-year-old man develops sudden shortness of breath 3 days after hemicolectomy. ECG shows sinus tachycardia. The most likely diagnosis is:
- A. Pulmonary embolism (**correct**)
  - B. Myocardial infarction
  - C. Stroke
  - D. Pericarditis
  - E. Pneumonia
255. • A 30-year-old female with BMI 35 presents with right upper quadrant pain and fever. US shows gallstones and gallbladder wall thickening. Diagnosis:
- A. Acute cholecystitis (**correct**)
  - B. Choledocholithiasis
  - C. Acute pancreatitis
  - D. Chronic cholecystitis
  - E. Ascending cholangitis
256. • A young man falls on his outstretched hand and develops wrist pain. X-ray is normal. Tenderness is in the anatomical snuffbox. Most likely injury:
- A. Scaphoid fracture (**correct**)
  - B. Colles fracture
  - C. Lunate dislocation
  - D. Capitate fracture
  - E. Triquetral fracture
257. • A neonate fails to pass meconium in 48 hours. Contrast enema shows a transition zone in the rectosigmoid. The most likely diagnosis is:

- A. Hirschsprung's disease (**correct**)
  - B. Meconium ileus
  - C. Necrotizing enterocolitis
  - D. Intussusception
  - E. Volvulus
258. • A patient is on long-term parenteral nutrition and develops jaundice, itching, and elevated ALP. The most likely cause is:
- A. Cholestasis due to TPN (**correct**)
  - B. Drug-induced liver injury
  - C. Viral hepatitis
  - D. Gallstones
  - E. Biliary stricture
259. • A patient presents with painless jaundice, palpable gallbladder, and weight loss. The most likely diagnosis is:
- A. Carcinoma head of pancreas (**correct**)
  - B. Gallbladder carcinoma
  - C. Klatskin tumor
  - D. Hepatocellular carcinoma
  - E. Ampullary carcinoma
260. • In trauma, Beck's triad (hypotension, muffled heart sounds, distended neck veins) suggests:
- A. Cardiac tamponade (**correct**)
  - B. Tension pneumothorax
  - C. Hemothorax
  - D. Myocardial rupture
  - E. Aortic dissection
261. • A 28-year-old woman with fatigue and palpitations has Hb 8 g/dL, MCV 68 fL, serum ferritin low. The most likely cause is:
- A. Iron deficiency anemia (**correct**)
  - B. Thalassemia minor
  - C. Anemia of chronic disease
  - D. Sideroblastic anemia
  - E. Megaloblastic anemia
262. • A patient with 2 cm breast lump and mobile ipsilateral axillary lymph nodes is staged as:
- A. T2 N1 M0 (**correct**)
  - B. T1 N0 M0
  - C. T3 N1 M0
  - D. T2 N0 M1
  - E. T2 N2 M0
263. • A 65-year-old smoker presents with hematuria. Imaging shows a bladder mass. The most likely histology is:
- A. Transitional cell carcinoma (**correct**)
  - B. Adenocarcinoma
  - C. Squamous cell carcinoma

- D. Small cell carcinoma
  - E. Renal cell carcinoma
264. • A 6-year-old boy presents with a limp and hip pain. X-ray shows increased joint space and fragmentation of the femoral head. Most likely diagnosis:
- A. Perthes disease (**correct**)
  - B. Slipped capital femoral epiphysis
  - C. Septic arthritis
  - D. Transient synovitis
  - E. Juvenile idiopathic arthritis
265. • An 18-year-old presents with painless scrotal swelling that transilluminates. Most likely diagnosis:
- A. Hydrocele (**correct**)
  - B. Varicocele
  - C. Epididymal cyst
  - D. Testicular torsion
  - E. Inguinal hernia
266. • A patient has recurrent headaches worse in the morning, vomiting, and papilledema. Most likely underlying pathology:
- A. Raised intracranial pressure (**correct**)
  - B. Migraine
  - C. Cluster headache
  - D. Subarachnoid hemorrhage
  - E. Tension headache
267. • A man with a crush injury to the leg develops increasing pain, paresthesia, pallor, and pulselessness. Best next step:
- A. Emergency fasciotomy (**correct**)
  - B. Duplex scan
  - C. Arterial line
  - D. Elevation
  - E. IV analgesia
268. • A 60-year-old man with liver cirrhosis presents with confusion. Serum ammonia is elevated. Diagnosis:
- A. Hepatic encephalopathy (**correct**)
  - B. Delirium tremens
  - C. Wernicke's encephalopathy
  - D. Sepsis
  - E. Hypoglycemia
269. • A central venous catheter inserted via the subclavian vein is most likely to cause:
- A. Pneumothorax (**correct**)
  - B. Hemothorax
  - C. Air embolism
  - D. Phlebitis
  - E. Cardiac tamponade
270. • A patient with ulcerative colitis develops fever, tachycardia, and distended abdomen. X-ray shows dilated colon >6 cm. Diagnosis:

- A. Toxic megacolon (**correct**)
  - B. Large bowel obstruction
  - C. Volvulus
  - D. Ileus
  - E. Perforation
271. • A woman with a thyroid mass has hoarseness of voice. Which structure is likely involved?
- A. Recurrent laryngeal nerve (**correct**)
  - B. External branch of superior laryngeal nerve
  - C. Vagus nerve
  - D. Glossopharyngeal nerve
  - E. Hypoglossal nerve
272. • A child presents with a hard, non-mobile, bony swelling at the metaphysis of the distal femur. Most likely diagnosis:
- A. Osteosarcoma (**correct**)
  - B. Ewing sarcoma
  - C. Osteochondroma
  - D. Osteomyelitis
  - E. Chondroblastoma
273. • A patient with hematemesis is found to have a mucosal tear at the gastroesophageal junction. Diagnosis:
- A. Mallory–Weiss tear (**correct**)
  - B. Boerhaave’s syndrome
  - C. Esophageal varices
  - D. Gastric ulcer
  - E. Gastritis
274. • A man post head injury has CSF leak through the nose. Beta-2 transferrin is positive. Diagnosis:
- A. CSF rhinorrhea (**correct**)
  - B. Allergic rhinitis
  - C. Viral rhinitis
  - D. Sinusitis
  - E. Serous otitis media
275. • A patient with Marfan syndrome complains of chest pain and widened mediastinum. Most likely diagnosis:
- A. Aortic dissection (**correct**)
  - B. Myocardial infarction
  - C. Pulmonary embolism
  - D. Pericarditis
  - E. Pneumomediastinum
276. • A patient with right iliac fossa pain and raised CRP has free fluid in the pelvis on ultrasound. Next best step:
- A. Diagnostic laparoscopy (**correct**)
  - B. CT abdomen
  - C. IV antibiotics



- D. Observation
  - E. Repeat ultrasound
277. • A 30-year-old with ulcerative colitis on steroids presents with hip pain. X-ray is normal. Most likely diagnosis:
- A. Avascular necrosis of femoral head (**correct**)
  - B. Septic arthritis
  - C. Perthes disease
  - D. Slipped capital femoral epiphysis
  - E. Reactive arthritis
278. • A man with a penetrating chest wound becomes hypotensive with distended neck veins and muffled heart sounds. Diagnosis:
- A. Cardiac tamponade (**correct**)
  - B. Hemothorax
  - C. Tension pneumothorax
  - D. Myocardial infarction
  - E. Pulmonary embolism
279. • A man is found to have a right-sided varicocele. Most appropriate next investigation:
- A. CT abdomen (to rule out renal tumor) (**correct**)
  - B. Scrotal ultrasound
  - C. Doppler ultrasound
  - D. Semen analysis
  - E. FSH and LH
280. • A patient undergoing thyroidectomy develops perioral tingling and carpopedal spasm. Most likely electrolyte abnormality:
- A. Hypocalcemia (**correct**)
  - B. Hyperkalemia
  - C. Hyponatremia
  - D. Hypermagnesemia
  - E. Hypokalemia
281. • A 4-week-old infant presents with projectile non-bilious vomiting and a palpable olive-shaped mass in the epigastrium. Diagnosis:
- A. Pyloric stenosis (**correct**)
  - B. Duodenal atresia
  - C. Malrotation
  - D. Gastroesophageal reflux
  - E. Hirschsprung's disease
282. • A 22-year-old man presents with soft, reducible groin swelling that extends into the scrotum. Most likely diagnosis:
- A. Indirect inguinal hernia (**correct**)
  - B. Direct inguinal hernia
  - C. Hydrocele
  - D. Femoral hernia
  - E. Spermatocele
283. • A 45-year-old man with known liver cirrhosis presents with massive hematemesis. The most likely cause is:

- A. Esophageal varices (**correct**)
  - B. Gastric ulcer
  - C. Gastritis
  - D. Mallory-Weiss tear
  - E. Portal hypertensive gastropathy
284. • A 70-year-old man has pain, swelling, and erythema of the great toe. Serum uric acid is elevated. Diagnosis:
- A. Gout (**correct**)
  - B. Septic arthritis
  - C. Rheumatoid arthritis
  - D. Cellulitis
  - E. Osteoarthritis
285. • A motorcyclist has mid-shaft humerus fracture and cannot extend the wrist. The injured nerve is:
- A. Radial nerve (**correct**)
  - B. Ulnar nerve
  - C. Median nerve
  - D. Axillary nerve
  - E. Musculocutaneous nerve
286. • A patient with persistent dyspepsia undergoes upper GI endoscopy. Biopsy shows intestinal metaplasia. This change is termed:
- A. Metaplasia (**correct**)
  - B. Dysplasia
  - C. Anaplasia
  - D. Hyperplasia
  - E. Neoplasia
287. • A 60-year-old man with a history of smoking presents with hematuria. Investigation of choice is:
- A. Flexible cystoscopy (**correct**)
  - B. Urinalysis
  - C. CT KUB
  - D. Ultrasound
  - E. Urine cytology
288. • A 45-year-old woman has a thyroid swelling that moves with deglutition but not with tongue protrusion. Most likely diagnosis:
- A. Thyroid nodule (**correct**)
  - B. Thyroglossal cyst
  - C. Branchial cyst
  - D. Dermoid cyst
  - E. Cystic hygroma
289. • After blunt abdominal trauma, a patient presents with hypotension and abdominal distension. FAST scan shows free fluid. Next step:
- A. Emergency laparotomy (**correct**)
  - B. Diagnostic peritoneal lavage
  - C. CT abdomen

- D. Observation
  - E. Repeat FAST
290. • A patient with a deep perineal laceration and blood at the urethral meatus has a high-riding prostate. Likely injury is:
- A. Membranous urethral injury (**correct**)
  - B. Bulbar urethral injury
  - C. Penile urethra injury
  - D. Bladder rupture
  - E. Testicular rupture
291. • A 55-year-old smoker presents with back pain and weight loss. X-ray shows lytic lesion in the spine. Most likely primary tumor:
- A. Lung carcinoma (**correct**)
  - B. Prostate carcinoma
  - C. Breast carcinoma
  - D. Multiple myeloma
  - E. Thyroid carcinoma
292. • A young male presents with a non-tender midline neck swelling that moves with tongue protrusion. Diagnosis:
- A. Thyroglossal cyst (**correct**)
  - B. Thyroid nodule
  - C. Branchial cyst
  - D. Cystic hygroma
  - E. Dermoid cyst
293. • A patient has delayed presentation of testicular torsion. Most appropriate next step:
- A. Orchiectomy and fixation of contralateral testis (**correct**)
  - B. Manual detorsion
  - C. Color Doppler
  - D. IV antibiotics
  - E. Observation
294. • A 24-year-old man with head injury has a lucid interval followed by unconsciousness. Most likely diagnosis:
- A. Extradural hematoma (**correct**)
  - B. Subdural hematoma
  - C. Subarachnoid hemorrhage
  - D. Intracerebral hemorrhage
  - E. Concussion
295. • After a stab wound to the neck, a patient presents with hoarseness and loss of cough reflex. The nerve involved is:
- A. Vagus nerve (**correct**)
  - B. Recurrent laryngeal nerve
  - C. Hypoglossal nerve
  - D. Glossopharyngeal nerve
  - E. Accessory nerve
296. • A 7-year-old boy presents with a painless testicular mass. Tumor markers show elevated AFP. Most likely diagnosis:

- A. Yolk sac tumor (**correct**)
  - B. Seminoma
  - C. Teratoma
  - D. Embryonal carcinoma
  - E. Leydig cell tumor
297.       • A neonate presents with copious salivation and choking on feeding. A nasogastric tube coils in the upper esophagus. Diagnosis:
- A. Esophageal atresia with tracheoesophageal fistula (**correct**)
  - B. Pyloric stenosis
  - C. Duodenal atresia
  - D. Hirschsprung's disease
  - E. Malrotation
298.       • A patient with suspected aortic dissection should undergo which initial investigation?
- A. CT angiography (**correct**)
  - B. Chest X-ray
  - C. ECG
  - D. D-dimer
  - E. Echocardiogram
299.       • A patient with small bowel obstruction and no improvement after 48 hours of conservative management is best treated by:
- A. Exploratory laparotomy (**correct**)
  - B. Continue NG decompression
  - C. Gastrografin challenge
  - D. Colonoscopy
  - E. Laparoscopy
300.       • In organ donation, brainstem death is confirmed by absence of:
- A. Brainstem reflexes (**correct**)
  - B. Pupillary light reflex alone
  - C. Respiratory effort
  - D. EEG activity
  - E. Cerebral blood flow