1. Which of the following conditions will produce a transudative pleural effusion?

A. Kaposi’s sarcoma  
B. Pneumonia  
C. Cirrhosis  
D. Mesothelioma  

Answer: C. Cirrhosis  

Transudative pleural effusions result from alteration in the formation of pleural fluid, the absorption of pleural fluid, or both, by systemic factors. Local factors affecting pleural fluid absorption and/or formation produce exudative pleural effusions.

2. Which of the following pathophysiological processes is believed to initiate acute appendicitis?

A. Obstruction  
B. Perforation  
C. Hemorrhage  
D. Vascular compromise  

Answer: A. Obstruction  

Obstruction of the appendiceal lumen by lymphoid hyperplasia, a fecalith or foreign body initiates most cases of appendicitis.

3. A 23 year-old female with history of palpitations presents for evaluation. She admits to acute onset of rapid heart beating lasting seconds to minutes with associated shortness of breath and chest pain. The patient states she can relieve her symptoms with Valsalva.
Which of the following is the most appropriate diagnostic study to establish a definitive diagnosis in this patient?

A. Cardiac catheterization
B. Cardiac MRI
C. Chest CT scan
D. Electrophysiology study

Answer: D. Electrophysiology study

Electrophysiology study is useful in establishing the diagnosis and pathway of complex arrhythmias such as supraventricular tachycardia.

4. A known alcoholic presents to the emergency department with altered level of consciousness and a blood glucose level of 35 mg/dL. Which of the following best explains this glucose result?

A. Excess pancreatic insulin release
B. Rapid carbohydrate discharge into the small bowel
C. Agonist insulin-receptor antibody formation
D. Hepatic glycogen depletion and impaired gluconeogenesis

Answer: D. Hepatic glycogen depletion and impaired gluconeogenesis

Alcohol-related hypoglycemia results from hepatic glycogen depletion and impaired gluconeogenesis and not due to antibody formation, excessive insulin release from the pancreas, or rapid release of carbohydrate into the small bowel.

5. Which of the following is the chief adverse effect of thiazide diuretics?

A. Hypokalemia
B. Hypernatremia
C. Hypocalcemia
D. Hypermagnesemia

Answer: A. Hypokalemia

Thiazide diuretics can induce electrolyte changes. Principle among those is hypokalemia.

6. The most distinctive sign of pertussis is

A. stridor without cough.
B. productive cough with basilar rales.
C. loose cough with coarse rhonchi.
D. paroxysmal cough with crowing inspiration.

Answer: D. paroxysmal cough with crowing inspiration.

A paroxysmal cough with a loud inspiration (the whoop) is noted in pertussis.

7. The finding of egophony is most consistent with
A. emphysema.
B. atelectasis.
C. pneumothorax.
D. lobar pneumonia.

Answer: D. Lobar pneumonia

Egophony occurs with consolidation caused by lobar pneumonia.

8. A patient presents with edema, which is most noticeable in the hands and face. Laboratory findings include proteinuria, hypoalbuminemia, and hyperlipidemia. The most likely diagnosis is
A. congestive heart failure.
B. end-stage liver disease.
C. nephrotic syndrome.
D. malnutrition.

Answer: C. nephrotic syndrome.

Proteinuria, hyperlipidemia, and hypoalbuminemia are consistent with nephrotic syndrome.

9. The best course of action for a patient with a bothersome inflamed pinguecula (pingueculitis) is
A. antibiotic drops.
B. excision.
C. Visine drops.
D. no treatment.

Answer: D. no treatment.

With pingueculitis, no treatment is necessary; a short course of NSAID drops or steroids may help.
10. An immunocompromised patient presents with signs and symptoms consistent with *Legionella pneumophila* who has not responded to initial antibiotic therapy with a macrolide. Which of the following should be added?

A. Clarithromycin (Biaxin)
B. Rifampin (Rifadin)
C. Levofloxacin (Levaquin)
D. Amoxicillin-clavulanate (Augmentin)

Answer B. Rifampin

Rifampin should be used as an adjunct in patients with either a macrolide or quinolone antibiotic, who have failed therapy, are immunocompromised or have severe illness.