Question 8 – Week of August 23

The anatomical complex that acts as a defense against esophageal acid reflux includes all of the following, except:

- A. Lower esophageal sphincter (LES)
- B. Diaphragmatic crura
- C. Angle of His
- D. Upper esophageal sphincter (UES)
- E. Phrenoesophageal ligaments

Answer: D

The development of gastroesophageal reflux disease is the result of an imbalance in the defensive factors protecting the esophagus. The esophageal defenses against acid include antireflux barriers, esophageal acid clearance, and tissue resistance. The anatomical components which make-up the antireflux barrier includes the LES, diaphragmatic crura, angle of His, and phrenoesophageal ligaments. The UES is not included in this anatomical complex.