Chapter 6: Training in Geriatric Gastroenterology

DDSEP Chapter 4: Question 6

A 40-year-old woman with intermittent heartburn and dysphagia to liquids and solids is seen in consultation. Review of systems reveals she has occasional arthralgias and Raynaud's phenomenon. The esophageal manometry in this patient would be characterized by:

A. Hypertensive LES with normal esophageal peristalsis
B. Hypertensive EUS with incomplete relaxation
C. **Hypotensive LES and aperistalsis in esophageal body**
D. Increased frequency of transient LES relaxation
E. Normal peristalsis in the distal smooth muscle portion of the esophageal body

The recommended response is C.

In scleroderma of the esophagus, collagenous deposits in the smooth muscle of the LES eventually prevent the smooth muscle from contracting and result in hypotensive LES and aperistalsis in the esophageal body. The aperistalsis in the esophageal body results from both loss of neural elements in the esophageal wall as well as loss of smooth muscle and contractility of the esophageal wall. In scleroderma, the striated muscle function in the proximal esophageal body maintains normal contractility. Thus, esophageal dysphagia resulting from scleroderma can involve both decreased peristalsis in the esophageal body and various degrees of peptic stricture in the LES area due to gastroesophageal acid reflux. The best option is C.