

A 74-Year-Old Woman With Dysphagia: What Is Your Diagnosis by Endoscopic and Barium Swallow Finding?

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A 74-year-old woman visited the department of gastroenterology by 4 months of dysphagia. Dysphagia was intermittent, nonprogressive and occurred with solid foods. The patient underwent an upper gastrointestinal endoscopy, which showed a clearly demarcated smooth concentric narrowing at 2 cm above the squamocolumnar junction (Fig. 1A). A barium swallow showed a focal smooth narrowing in the distal esophagus, with openings of variable diameter during the course of examination (Fig. 1B and 1C). What is your diagnosis by endoscopy and

barium swallow finding? Considering a possibility of a muscular ring in the distal esophagus, endoscopic ultrasound examination with conventional radial echoendoscopy was performed. Focal thickening of inner circular muscle layer at 2 cm above the squamocolumnar junction was noted. Esophageal manometry was performed by standard techniques using a water-perfused catheter system (Fig. 2). The lower esophageal sphincter pressure was 63.3 mmHg and relaxed completely with swallows. Postrelaxation high-amplitude contractions of lower esophageal sphincter

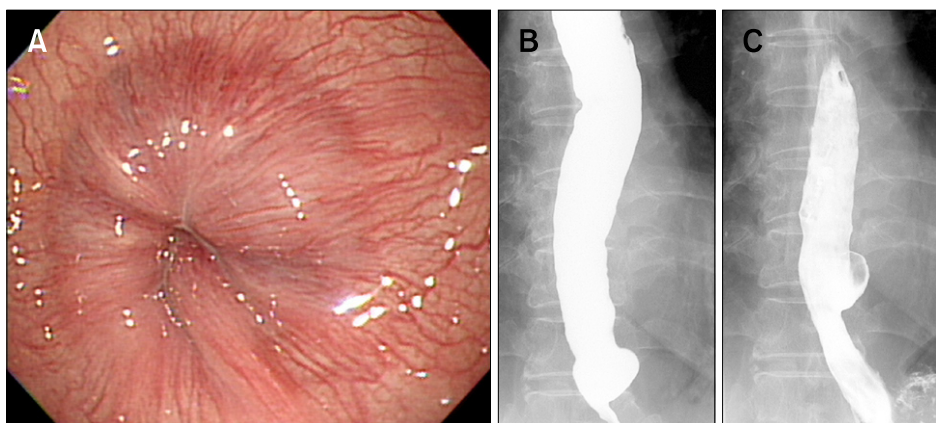


Figure 1. (A) Upper gastrointestinal endoscopic finding shows a concentric ring-like mucosal narrowing just above the squamocolumnar junction. (B) Barium esophagogram shows focal luminal constriction through which a small amount of barium transit into the stomach. (C) The same area of the esophagus showing relative opening of the constriction.

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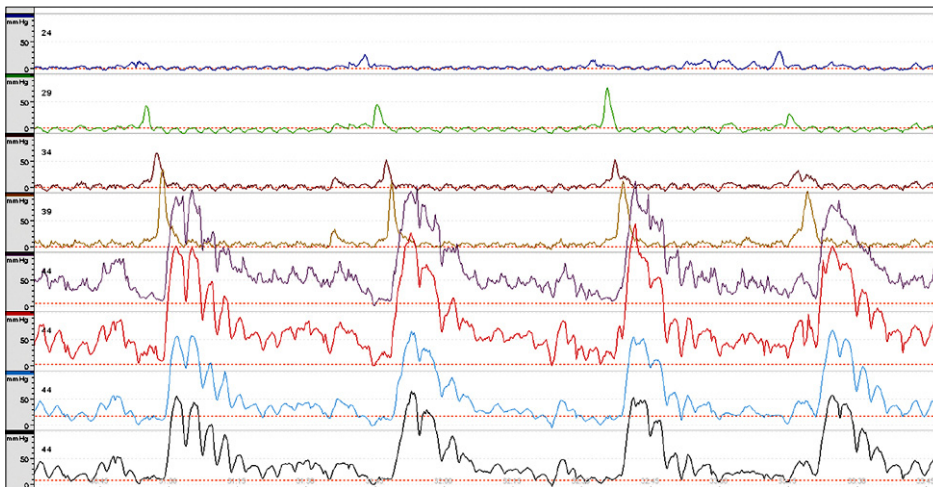


Figure 2. Esophageal manometric findings. Wet swallows evoke normal peristaltic contractions of esophageal body and complete relaxation of lower esophageal sphincter (LES). Postrelaxation high-amplitude contractions of LES are also observed with intermittent multiple-peaked contractions.

were observed with intermittent multiple-peaked contractions. Amplitudes of the esophageal contraction waves were normal and propagated well. High-amplitude, long-duration contraction of esophageal body was not observed during 10 wet swallows. She was diagnosed as having a lower esophageal muscular ring and treated with calcium channel blocker. On follow-up after 6 months, she was doing well and complete resolution of dysphagia was noted. Esophageal muscular ring is an uncommon cause of dysphagia.¹⁻³ Distinguishing the muscular ring from achalasia and other causes of focal esophageal stenosis is important because of the differences in treatment and outcome.⁴

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