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Image and Learning

A 47-Year-Old Woman With Dysphagia and Food Getting Stuck: What Is Your Impression?

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A 47-year-old woman presented with dysphagia and food getting stuck for 6 months. There were no abnormal findings on esophagogastroduodenoscopy. She underwent a high-resolution manometry (HRM, version 2.0.1, Manoscan, Sierra Scientific Instruments, Los Angeles, CA, USA) with a 4.2 mm HRM catheter equipped with 36 pressure transducers spaced 1 cm apart. Ten swallows of 5 mL water was given to the patient in a supine position. Among the 10 swallows, 3 swallows revealed rap-



Figure 1. High-resolution manometry findings. (A) It illustrates a swallow with rapid contractile front velocity (CFV) attributable to spasm. The CFV of 30 and 50 mmHg isobaric contours parallel each other, indicating that no compartmentalized esophageal pressurization has occurred. The CFV value is 10 cm/sec with normal esophagogastric junction relaxation. (B) It shows a swallow with normal CFV (4.2 cm/sec) on S2, although rapid CFV (20 cm/sec) is still observed on S3.

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id contractile front velocity (CFV) (> 8 cm/sec) attributable to spasm on entire distal smooth muscle esophageal segment (S2 and S3) (Fig. 1A). In contrast, 7 swallows showed normal CFV (< 8 cm/sec) on S2 and rapid CFV (> 8 cm/sec) on S3 (Fig. 1B). What is your impression by the HRM plots?

In the Chicago classification of distal esophageal motility disorders, distal esophageal spasm is defined when spasm (CFV > 8 cm/sec) is detected in $\geq 20\%$ of swallows in distal esophageal segment.¹ Distal esophageal segment is consisted of smooth muscle and composed with S2 and S3. When the spasms involve both S2 and S3, we can diagnose diffuse esophageal spasm by the Chicago classification. But, when only 1 segment of distal esophagus is involved by spasms, the diagnosis should be segmental esophageal spasm. Diffuse esophageal spasm is a quite rare disease according to a previous study.² Among 400 patients, only 6 patients (1.5%) had a CFV > 8 cm/sec in \geq 20% of swallows and met the criteria for a rapidly propagated contraction. In this case, the HRM plots are consistent with diffuse esophageal spasm.

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