Hypotonic Upper Esophageal Sphincter With Functional Esophagogastric Junction Obstruction in a Patient With Oropharyngeal and Esophageal Dysphagia

Moo In Park

Department of Internal Medicine, Kosin University College of Medicine, Busan, Korea

A 71-year-old female visited to the department of gastroenterology for the evaluation of dysphagia for both liquid and solid foods for 1 month. She had several episodes of nasal regurgitation of water 10 to 20 seconds after swallowing. And, also she complained of mild dysphagia when eating solid foods. A high-resolution manometry (HRM, version 2.1, Manoscan, Sierra Scientific Instruments Inc, Los Angeles, CA, USA) was performed. The peak pharyngeal pressure 2.0 cm above mid upper esophageal sphincter (UES) was 65.1 mmHg. The mean basal pressure and residual pressure of UES was 1.4 and 0.8 mmHg. The mean integrated relaxation pressure of esophagogastric junction was 28.0 mmHg and the mean intrabolus pressure was 18.7 mmHg in 10 swallows of 5 mL. According to the classification of individual swallows based on pressure topography criteria, 7 swallows were categorized into elevated intrabolus pressure (Figure), 2 swallows into spasm and the rest one swallow into hypotensive peristalsis. What is your interpretation by the HRM findings?

The HRM of 10 swallows is classified into functional esophagogastric junction obstruction based on the Chicago classi-

Figure. High-resolution manometry findings. It shows 1.4 mmHg of the mean basal pressure of upper esophageal sphincter, normal contractile front velocity, 26.1 mmHg of integrated relaxation pressure and 19.8 mmHg of intrabolus pressure with a swallow compartmentalized above the esophagogastric junction.

fication of distal esophageal motility disorders.¹ In addition, she had very low resting pressure of UES with preserved coordina-

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*Correspondence: Moo In Park, MD

Department of Internal Medicine, Kosin University College of Medicine, 34 Amnam-dong, Seo-gu, Busan 602-702, Korea
Tel: +82-51-990-6719, Fax: +82-51-990-5055, E-mail: mipark@ns.kosinmed.or.kr

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tion of pharygoesophageal junction. Esophagoscopy and esophagogram showed no abnormal findings. Hypotonic UES with preserved coordination between pharynx and UES may be associated intermittent episodes of nasal regurgitation,^{2,3} and functional esophagogastric junction obstruction may cause mild dysphagia in this patient. However, it is still unclear hypotonic UES cause nasal regurgitation. Video fluoroscopic swallow study can be performed to show how nasal regurgitation occurs in this patient. Further studies are needed to clarify possible causes of abnormal findings of high-resolution esophageal manometry.

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