## CLINICAL IMAGE

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# Peroral endoscopic myotomy is an effective treatment for diffuse esophageal spasm

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Abstract

**KEYWORDS** 

diffuse esophageal spasm, peroral endoscopic myotomy

ered a good indication for peroral endoscopic myotomy.

Diffuse esophageal spasm (DES) causes symptoms such as dysphagia. However,

DES is sometimes difficult to diagnose. DES can be diagnosed based on a characteristic image through esophageal radiography. As in the present case, DES is consid-

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#### **INTRODUCTION** 1

A 79-year-old man had dysphagia and chest pain for 2 years. Esophageal radiography revealed a corkscrew esophagus. Diffuse esophageal spasm (DES) was diagnosed. The patient underwent peroral endoscopic myotomy (POEM), which resolved the abnormal peristaltic movement. Even for markedly abnormal peristaltic movement in DES, POEM can provide sufficient therapeutic effects.

A 79-year-old man had dysphagia, particularly to solids, and frequent chest pain for 2 years. He underwent four esophagogastroduodenoscopy (EGD) examinations at another hospital, but an accurate diagnosis could not be made. The Eckardt score was 5 when he visited our hospital for treatment. EGD showed few obvious findings, but esophageal radiography (ER) revealed a corkscrew esophagus (Figure 1). He also underwent high-resolution manometry (HRM), but the pharyngeal reflex was too strong to allow adequate examination. Symptoms and ER suggested DES. Because he wanted more radical treatment, he underwent peroral endoscopic myotomy (POEM). The distance of the myotomy was 17 cm, which was equivalent to the abnormal esophageal peristalsis on ER before POEM. Three days later, his symptoms improved (Eckardt score 0). DES is an esophageal motility disorder of the esophagus body. Although its primary cause

**FIGURE 1** The figure of esophageal radiography

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is unknown, nitric oxide deficiency in the esophageal body can lead to abnormal esophageal motility.<sup>1</sup> Although HRM could not be performed adequately in the present case, it is the gold standard for diagnosis of DES. POEM is recognized as the first treatment choice for achalasia.<sup>2,3</sup> Furthermore, even for abnormal peristaltic movement in DES, POEM can provide sufficient therapeutic effects.4,5

## **CONFLICT OF INTEREST**

None declared.

## **AUTHOR CONTRIBUTIONS**

YS, HS, KH, and HO: made substantial contributions to conception and design. YS: made acquisition of data and has been involved in drafting the manuscript or revising it critically for important intellectual content. YS, HS, KH, and HO: made analysis and interpretation of data. All authors approved the final manuscript and agreed to be accountable for all aspects of the work.

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