Esophageal intramural pseudodiverticulosis in a patient with food bolus impaction

Pseudodiverticulosis intramural esofágica en un paciente con impactación de bolo alimentario

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ABSTRACT
Esophageal intramural pseudodiverticulosis is an uncommon esophageal benign disease. The typical finding during endoscopy is the presence of numerous pinhead-sized outpouchings along the esophageal wall. We reported a case of food bolus impaction secondary to esophageal intramural pseudodiverticulosis. A 67-year-old man presented with sudden-onset dysphagia. Multiple tiny orifices were revealed during upper endoscopy. In addition, there were an impacted food bolus and an esophageal web. The patient was treated with balloon dilatation and proton pump inhibitors. As a result the symptoms disappeared completely. Esophageal intramural pseudodiverticulosis is a rare cause of food bolus impaction and its treatment is directed towards the underlying associated conditions as well as the resolution of complications.

Keywords: Dysphagia; Esophageal diseases; Gastric balloon (source: MeSH NLM).

INTRODUCTION
Esophageal intramural pseudodiverticulosis (EIPD) is an uncommon esophageal benign disease whose etiology is still unclear. Clinical features include dysphagia, chest pain, vomiting, weight loss and upper gastrointestinal bleeding1,2,3. This rare disease has been associated with several underlying conditions, such as diabetes mellitus (DM), gastroesophageal reflux disease, HIV infection, eosinophilic esophagitis, esophageal candidiasis and esophageal carcinoma4-10. This article aimed to report a case of food impaction secondary to EIPD.

CASE REPORT
A 67-year-old man presented with sudden-onset dysphagia and chest tightness while he was having steak. The patient had a medical history of DM treated with metformin/saxagliptin and without complications. He smoked 15 cigarettes per day. There were no remarkable findings in the physical examination. Electrocardiogram and routine analytical tests were within normal limits. Upper endoscopy was performed five hours after the onset of symptoms, revealing multiple lines of tiny diverticular orifices in the middle and lower esophagus (Figure 1). In addition, there was an impacted food bolus at 4 cm above the gastroesophageal junction, which was extracted en bloc by using a polypectomy snare. Afterwards, an esophageal web was found, therefore, a through-the-scope balloon dilation was performed by filling up the balloon from 15 mm to 18 mm. Biopsies were taken from the upper, lower esophagus and the esophageal web. Histopathology reported basal cell hyperplasia, elongation of papillae and eosinophilic infiltration <5 cells per high-power field, without evidence of malignancy. Esophageal manometry did not reveal motility disorders. The patient was treated with omeprazole for three months. The patient did not present recurrence of the symptoms for a 12-month follow-up period.

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DISCUSSION

EIPD was first reported by Mendl et al. in a patient who had presented with dysphagia and chest pain and the barium swallow showed intramural diverticula [4]. The pathogenesis is still unclear. Histologically, EIPD is characterized by dilated excretory ducts of submucosal glands, bordered by an inflammatory infiltrate. Thus, it is thought that a chronic inflammatory condition blocks excretory ducts of submucosal glands which leads to the formation of pseudo diverticula [1,3,7,9].

This condition is more frequent among patients in their fifties and sixties [7]. Nevertheless, it has been reported some cases in younger patients [10]. Usually, symptoms include dysphagia, which can be either intermittent or progressive, chest tightness, odynophagia, vomiting, chest pain, weight loss and rarely hematemesis and melena [1]. In the present case, the symptoms were dysphagia and chest tightness. Our patient had a past history of diabetes mellitus and histological findings compatible with reflux esophagitis, which are underlying conditions that have been associated to EIPD. Others include HIV infection, eosinophilic esophagitis, esophageal candidiasis and esophageal carcinoma [3-5].

Diagnosis of EIPD is established by either barium esophagogram or upper endoscopy. The typical finding during upper endoscopy is the presence of numerous pinhead-sized outpouchings along the esophageal wall [3]. In the current case, multiple tiny orifices in the middle and lower esophagus were revealed during endoscopy. In addition, an esophageal web was found and was treated by balloon dilation. Approximately half of patients present with strictures at the moment of diagnosis and represent the most common complication [11]. Strictures are often treated by using bougienage (with excellent improvement of the dysphagia) and balloon dilation. However, in cases of extensive and refractory strictures, esophageal resection should be considered. The management of EIPD includes treatment of the underlying conditions as well as the resolution of complications (strictures, perforation, broncho-esophageal fistula and gastrointestinal bleeding) [12,13]. Our patient did not have recurrence of the symptoms during the follow-up period.

As shown above, we reported a case of food bolus impaction secondary to EIPD, which was successfully treated by balloon dilation and omeprazole.

Author contributions: JF Piñerúa-Gonsálvez and RC Zambrano-Infantino drafted the manuscript. M Sulbaran reviewed and approved final draft of the manuscript. JF Piñerúa-Gonsálvez is the article guarantor.

Financial disclosure: None to report.

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