An Obstructive Wind Sock Web Deformity of the Proximal Duodenum

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Received: 13 February 2017 / Accepted: 11 April 2017 / Published online: 27 April 2017
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Abstract We herein present a case of a wind sock web deformity of the proximal duodenum causing episodic duodenal obstruction in a 43-year-old male patient.

Keywords Wind sock web deformity · Duodenal obstruction · Upper gastrointestinal endoscopy · Diverticulum

A 43-year-old man presented with a several weeks history of abdominal distention and epigastric pain accompanied by episodes of emesis. His medical history was significant for autoimmune atrophic gastritis, diabetes mellitus, Hashimoto's thyroiditis, as well as a distant hospitalization for pulmonary embolism secondary to protein C deficiency. On presentation, the patient had a temperature of 37 °C, blood pressure of 150/

80 mmHg, heart rate of 110 beats/min, and respiratory rate of 16/min. Abdominal examination revealed moderate epigastric tenderness with normal bowel sounds and no signs of peritoneal irritation. Laboratory studies were unremarkable apart from mild macrocytic anemia. ECG and troponin levels were normal.

Upper gastrointestinal endoscopy showed the previously known atrophic gastritis with a 0.6 cm-sized neuroendocrine tumor in the gastric body, as well as a giant diverticular orifice in the second portion of duodenum distal to the ampulla of Vater (Fig. 1). The lumen of the duodenum appeared to be compressed by the diverticular orifice. Intubation of the diverticulum revealed erythematous mucosa and a pill at its fundus. Of note, insufflation during the endoscopy led to significant patient's discomfort.

Subsequent abdominal computed tomography, magnetic resonance imaging, and upper gastrointestinal series confirmed the diagnosis of a wind sock web deformity of the proximal duodenum causing duodenal obstruction (Fig. 2).

The aforementioned diverticulum was considered to be the underlying cause of patient's chronic abdominal complaints [1, 2]. Surgical management was performed leading to complete resolution of symptoms.

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Fig. 1 **a** Endoscopic view of the diverticular opening (*on the left*) and the normal duodenal lumen (*on the right*). **b** The sac of the diverticulum inside the duodenal lumen

Fig. 2 The wind sock web deformity on CT (**a**), MRI (**b**), and upper gastrointestinal series (**c**)

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

Funding No funding to declare.

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