Endocrinology through an endoscope: lesions in the esophagus, stomach, and duodenum in gastrinoma

**Fig. 1** shows the upper endoscopy of a 58-year-old man who was admitted for persistent gastrointestinal bleeding, which eventually required angiography with coiling of the side branches of the pancreaticoduodenal artery. He had been using rabeprazole (20 mg/day) for gastroesophageal reflux disease since 2007. Although a single duodenal ulcer usually requires no further testing, the severity of the bleeding and the extent of the lesions warranted further investigation. Additional tests – serum gastrin (1500 ng/L, normal < 115 ng/L), chromogranin A (1150 µg/L, normal < 94 µg/L), a positive secretin stimulation test (serum gastrin 5251 ng/L 10 minutes after an intravenous 2 U/kg bolus), and somatostatin receptor scintigraphy and endoscopic ultrasound (**Fig. 2**) – suggested a gastrinoma.

Other possibilities were excluded by appropriate tests, including *Helicobacter pylori*, drug-associated causes, vasculitis, ischemia, herpetic simplex, and cytomegalovirus. Computed tomography did not identify the lesion shown in **Fig. 2** or any metastases. During surgery, a palpable lesion near the pancreas was enucleated. Pathological analysis confirmed a peripancreatic lymph node gastrinoma. This case illustrates the following points. First, fundic gland polyps are a less recognized but diagnostically useful manifestation of gastrinoma [1]. Although long-term proton-pump inhibitor therapy can also cause gastric fundic gland polyposis, this manifestation is usually not so elaborate as observed here (**Fig. 1**) [2]. Second, relying on these and other more subtle manifestations may become increasingly important with the widespread use of proton-pump inhibitors, which may mask symptoms and delay diagnosis [3], as in our case. Third, the secretin stimulation test remains essential to differentiate gastrinoma from hypergastrinemia associated with the use of proton pump inhibitor therapy. Clin Gastroenterol Hepatol 2009; 7: 600–602

**Fig. 1** Endoscopic view of a the esophagus, b the stomach, and c the duodenum, showing severe reflux esophagitis, multiple fundic gland polyps, and a single ulcer in the descending part of the duodenum.

**Fig. 2** Preoperative images of the peripancreatic lymph node gastrinoma as visualized by a somatostatin receptor scintigraphy and b endoscopic ultrasound.

Competition interests: None

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Bibliography
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