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, herpes 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 due to proton-pump inhibitor therapy, although a false-positive test was recently reported [4]. Finally, our case reiterates the usefulness of somatostatin receptor scintigraphy and endoscopic ultrasound in the preoperative work-up of gastrinoma [5].

Competing interests: None

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Bibliography
Endoscopy 2011; 43: E32
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