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. Clin Gastroenterol Hepatol 2009; 7: 600–602

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References
1 Aprile MR, Azzoni C, Gibril F et al. Intramucosal cysts in the gastric body of patients with Zollinger-Ellison syndrome. Hum Pathol 2000; 31: 140–148
2 Freeman HJ. Proton pump inhibitors and an emerging epidemic of gastric fundic gland polyposis. World J Gastroenterol 2008; 14: 1318–1320

Bibliography
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