



VIDEO | BILIARY

# Endoscopic Treatment of a Gangliocytic Paraganglioma Presenting With Upper Gastrointestinal Bleeding

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## CASE REPORT

A 47-year-old woman presented with melena. Initial laboratory evaluation revealed anemia with hemoglobin of 7.3 g/dL from a baseline of 12 g/dL. Upper endoscopy revealed red blood in the second portion of the duodenum with concern for bleeding from the area of the major papilla (Figure 1). After initial endoscopy, computed tomography of the abdomen described a 1.5 cm pedunculated intraluminal lesion around the major papilla.

The patient underwent repeat evaluation 2 days later with a duodenoscope, which confirmed an area of ulceration at the ampulla without active bleeding at the time (Figure 1). Endoscopic ultrasound was performed and showed no intraductal extension of the lesion. Biopsies of the lesion revealed ulcerated mucosa with foveolar metaplasia and reactive changes. Given biopsy and endoscopic ultrasound results, an endoscopic retrograde cholangiopancreatography was performed 2 months later with endoscopic papillectomy using submucosal lifting to remove the endoscopic retrograde cholangiopancreatography ulcerated lesion, establish a diagnosis, and treat the underlying cause of bleeding (Video 1, Figure 1).

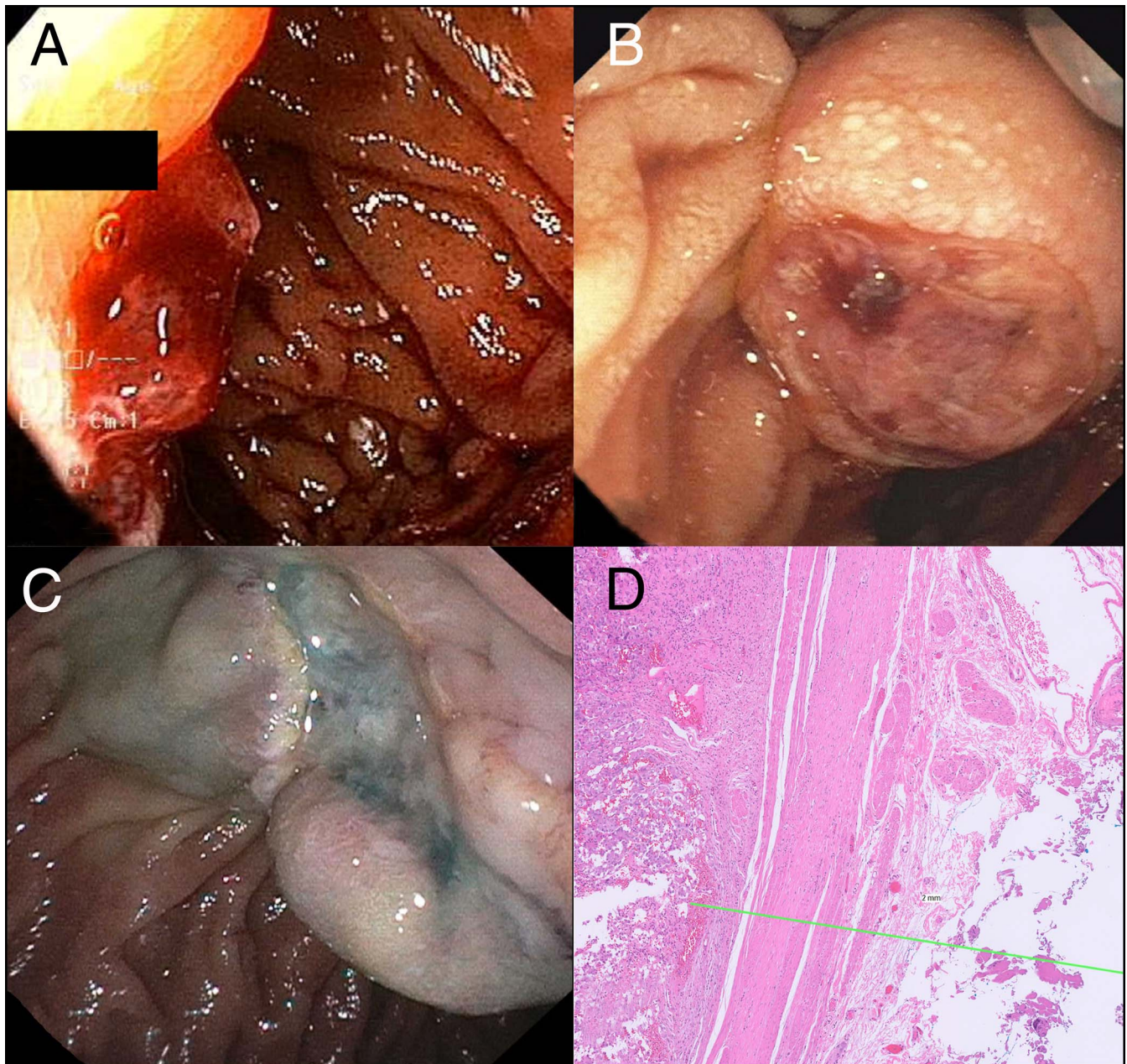
Pathology revealed a tumor composed of spindle cells, epithelial cells, and ganglion measuring 1.2 cm, with deep margins indicating a complete excision of the lesion with 2 mm clearance (Figure 1). Immunohistochemical analysis showed cells that stained positive for chromogranin, synaptophysin, AE1/AE3, and focally positive staining for S100 marker. Based on histology and immunostaining, the diagnosis of gangliocytic paraganglioma was made. Repeat endoscopic retrograde cholangiopancreatography 3 months later revealed no residual tissue at the papillectomy site, and biopsies returned negative for neoplasia.

Gangliocytic paraganglioma is a rare tumor with 3 distinct types of cells: spindle cells, epithelial cells, and ganglion cells.<sup>1,2</sup> The tumor is predominantly seen in middle-aged individuals and affects men slightly more than women. Patients may be asymptomatic or symptoms may include abdominal pain, biliary obstruction, and gastrointestinal bleeding secondary to ulceration,<sup>2,3</sup> as was seen with this case.

## DISCLOSURES

Author contributions: E. Park: drafting of the article, revision of the article, video editing, and is the article guarantor. ML Ramsey: revision of the article. S. Han: revision of the article, final approval.

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**Figure 1.** Endoscopic treatment of a gangliocytic paraganglioma at the major papilla. (A) Upper gastrointestinal bleeding at the major papilla. (B) Ampullary lesion with an area of ulceration. (C) Resection site after endoscopic papillectomy. (D) Complete excision with a 2 mm clearance margin. The lesion was composed of spindle cells, epithelial cells, and ganglion consistent with a gangliocytic paraganglioma.

Informed patient consent was obtained for this case report.

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