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IMAGE | PANCREAS

Intraductal Papillary Mucinous Neoplasms of Pancreas: The Good, the Bad, and the Ugly

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Case Report

Intraductal papillary mucinous neoplasms (IPMN) arise from main pancreatic duct (MD-IPMN) and/or branch ducts (BD-IPMN), and are characterized by intraductal papillary proliferation of mucin-producing epithelial cells exhibiting various degrees of dysplasia.[1] IPMNs have a potential for malignant transformation with a well-described adenoma carcinoma sequence. We present endoscopic images from 3 cases of IPMN: without dysplasia, with high-grade dysplasia, and with invasive carcinoma.

The Good: A 62-year-old woman presented with bloating, unintended weight loss, loose stools, and a past history of heavy alcohol and tobacco use. Endoscopic ultrasound (EUS) showed chronic pancreatitis with but no mural nodules. Pancreatoscopy showed a widely patent papilla with gaping or "fish mouth" appearance (Figure 1) and diffusely dilated duct with mucous (Figure 2), suggestive of MD-IPMN. Intraductal biopsies showed inflammatory changes but no dysplasia. Recommendations were made per guidelines and the patient elected to pursue surveillance.[2] She remained healthy 3 years since diagnosis.

The Bad: A 77-year-old man with history of heavy alcohol and tobacco use presented with unintended weight loss and recurrent episodes of abdominal pain. EUS showed segmental dilation of the pancreatic duct (PD) up to 20 mm in the body of pancreas,

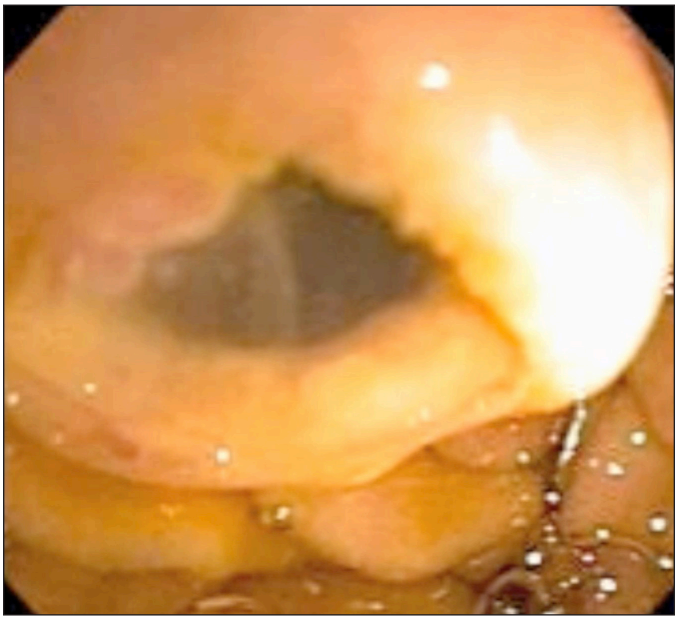

Figure 1. "Fish mouth" appearance of major papilla with extruding mucous.

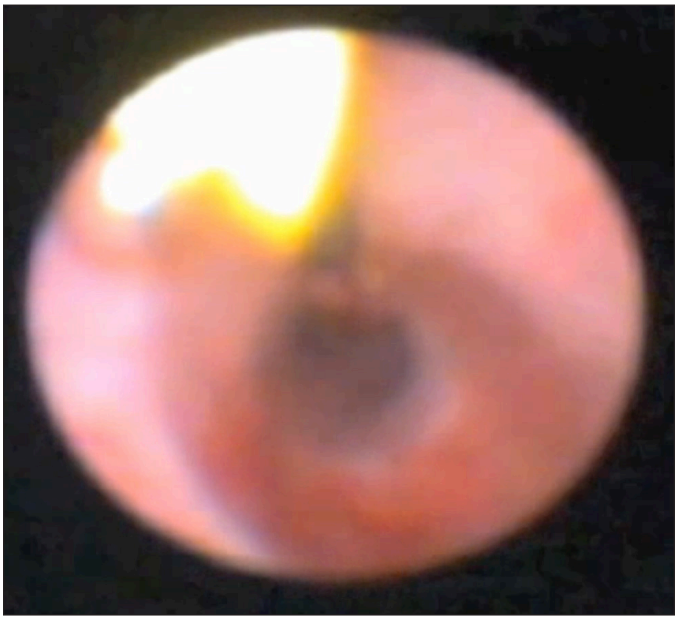

Figure 2. Dilated main pancreatic duct with mucous but no irregularities.

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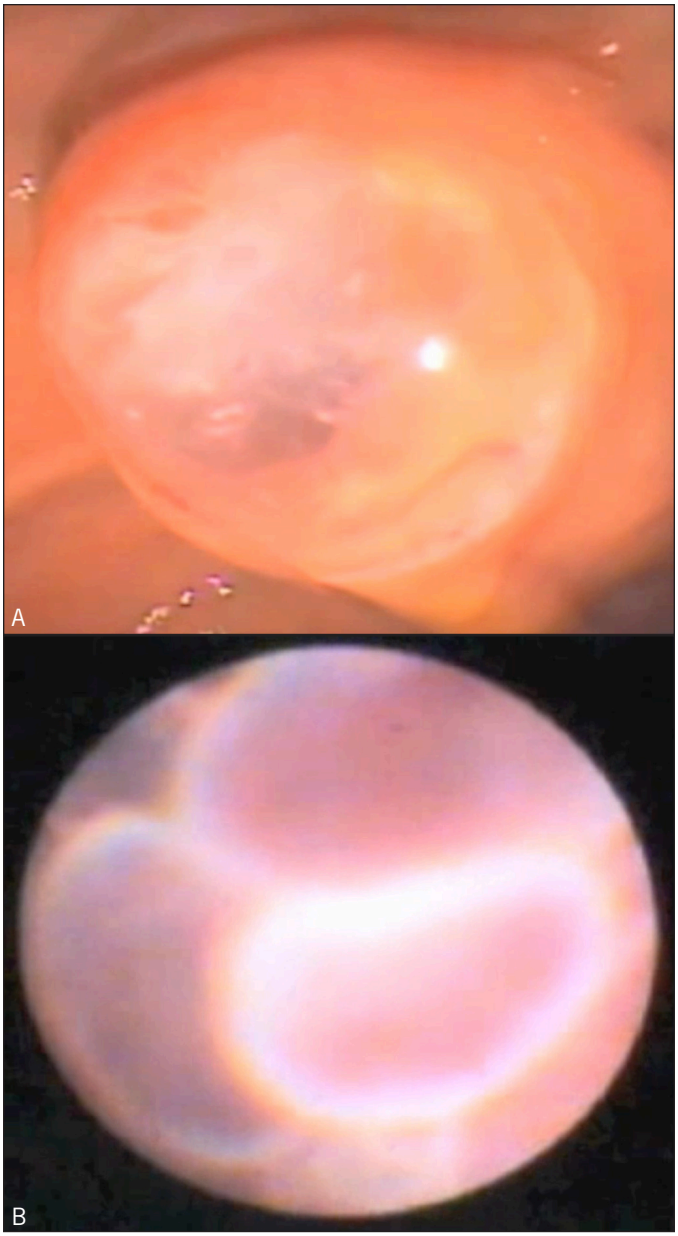

Figure 3. (A) Mucous plug obstructing the gaping papilla. (B) "Fish egg" appearance of mural nodules seen during pancreatoscopy.

no mural nodules, and no chronic pancreatitis. Pancreatoscopy showed mucous plug obstructing a gaping papilla (Figure 3) and an MD-IPMN with mural nodules (papillary projections) giving a "fish egg" appearance (Figure 3). Biopsy showed high-grade dysplasia. The patient was evaluated for surgical resection, but he decided to undergo close surveillance.

The Ugly: A 73-year-old man presented with profound weight loss and severe abdominal pain. EUS showed PD dilation up to 20 mm with a cystic lesion in the head of pancreas extending into the gastric and duodenal wall. Upper endoscopy revealed a fistula adjacent to the ampulla covered in profuse amount of thick mucous (Figure 4). Intracystic pancreatoscopy revealed multiple polypoid lesions (Figure 4), and biopsy confirmed moderately differentiated adenocarcinoma of IPMN origin. He was not a surgical candidate and later passed away.

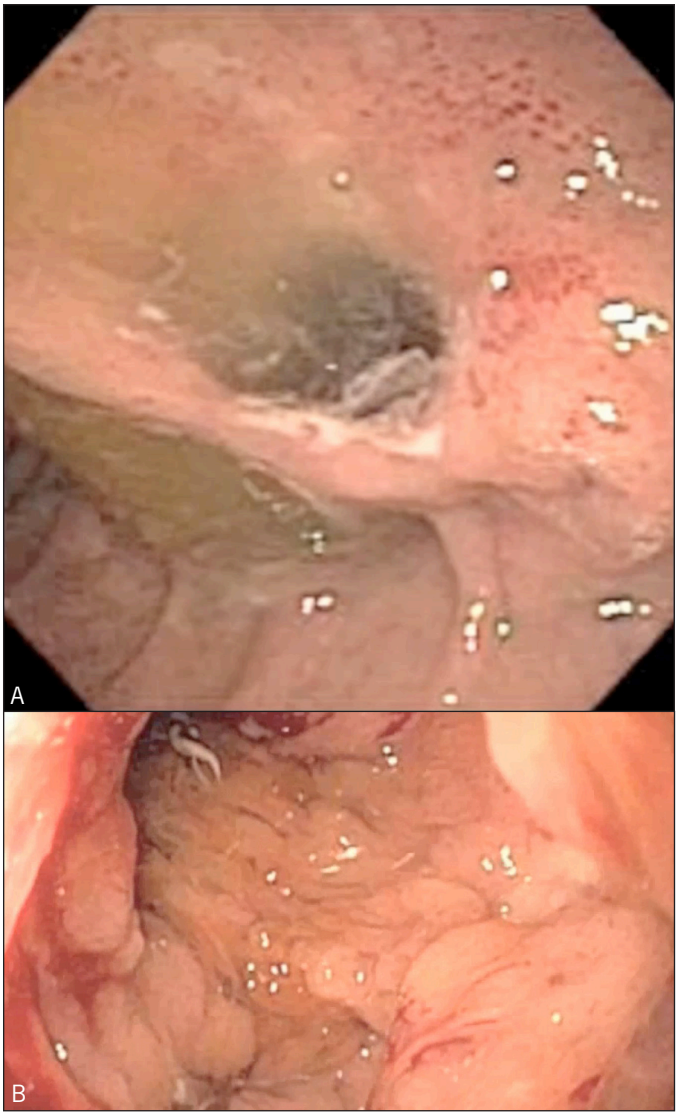

Figure 4. (A) Fistula formation between main pancreatic duct, stomach, and duodenum. (B) Intracystic polypoid lesions seen on pancreatoscopy.

Disclosures

Author contributions: U. Mondal wrote the manuscript, edited the images, and is the article guarantor. J. Echavarria and G. Lee obtained the images. S. Patel and L. Rosenkranz revised the manuscript.

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