Colloid carcinoma of the minor duodenal papilla

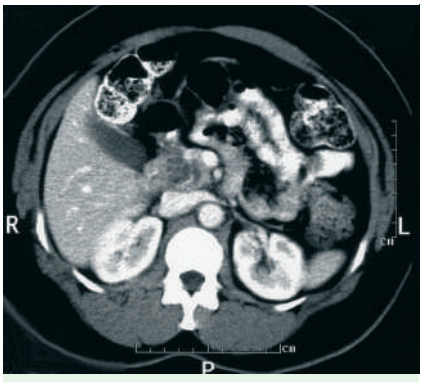

Figure 1 Computed tomography showing cystic mass in the head of the pancreas.

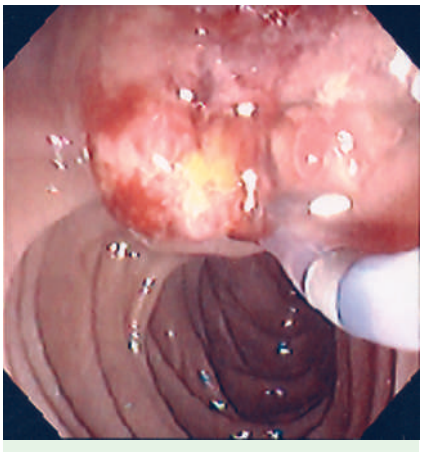

Figure 2 Ulcerated, polypoid mass at the minor duodenal papilla.

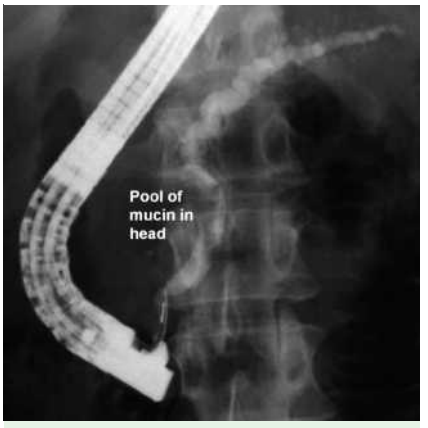

Figure 3 Stricture of the proximal duct of Wirsung seen at ERCP.

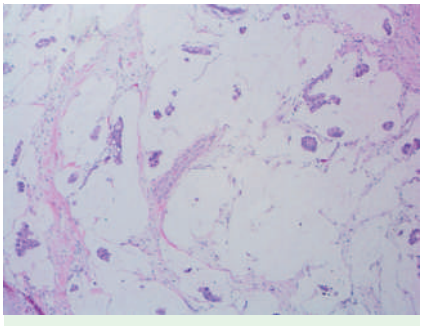

Figure 4 Histological appearance of the tumor with pools of mucin containing scant malignant glandular epithelial cells. (H&E; original magnification × 20).

A 43-year-old woman presented with intermittent epigastric pain and nausea. Her hemoglobin concentration was 10.3 g/dL. Abdominal imaging revealed a 4-cm cystic mass in the pancreatic head (**Figure 1**). ERCP showed an ulcerated polypoid mass at the minor duodenal papilla (**Figure 2**). Cannulation of the normal-appearing major papilla showed a dilated, 4-mm main pancreatic duct and a stricture of the main duct in the head of the gland (**Figure 3**). Cannulation through the mass showed contrast in the ectatic dorsal pancreatic duct, which confirmed involvement of the minor papilla by tumor. Pancreas divisum was not present. A pancreaticoduodenectomy (Whipple procedure) revealed a polypoid gelatinous mass measuring 3 × 2 × 1.5 cm protruding from the minor papilla. Histologically the tumor showed mucin pools containing malignant epithelial cells (**Figure 4**). Resection margins and 15 peripancreatic lymph nodes were free of tumor. Despite an uncomplicated immediate postoperative course, CA 19–9 levels are rising 22 months later along with possible liver metastases.

Tumors of the minor papilla are uncommon, but carcinoid tumors [1], somatostatinomas [2], and a case of a nonendocrine ductal adenocarcinoma [3] have been reported. Reasons for the rarity of recorded tumors in this location may be a low incidence but also the lack of symptoms caused by small indolent endocrine neoplasms and the absence of jaundice owing to patency of the major papilla [3]. Aggressive neoplasms may overgrow adjacent structures, thus obscuring their origin at the minor papilla [3]. Mucinous noncystic (colloid) carcinoma of the pancreas represents only 1%–2% of all pancreatic nonendocrine neoplasms [4,5] and has not been described in the minor papilla previously. It is characterized histologically by extracellular mucin lakes with "floating" malignant epithelial cells [4,5]. It is important to distinguish colloid carcinoma from mucin-producing adenocarcinoma, signet-ring cell carcinoma and mucinous cystic neoplasms because the prognosis of colloid carcinoma is significantly better than that of ordinary pancreatic ductal adenocarcinoma, with a 5-year survival rate of 57% [4,5].

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Bibliography

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