Recurrent pancreatitis caused by pancreatic ductal villous adenoma treated with endoscopic snare polypectomy

Adenomas can develop anywhere along the gastrointestinal tract. Herein we describe pancreatic ductal adenoma causing recurrent pancreatitis treated by endoscopic snare polypectomy. A 70-year-old white male with recurrent acute pancreatitis (index attack 5 years ago) was referred for endoscopic ultrasound (EUS) and endoscopic retrograde cholangiopancreatography (ERCP) evaluation. The latest magnetic resonance scan showed a pancreatic ductal filling defect with ductal dilatation (Fig. 1). Linear array EUS examination revealed a 1.5 × 1.6 cm submucosal, mixed echogenic mass lesion causing upstream pancreatic ductal dilatation. The common bile duct was of normal caliber with no filling defects. ERCP confirmed a bulging ampulla and pancreatogram (Fig. 2) established the dilated pancreatic duct with an irregular, mobile filling defect. Following pull-type pancreatic sphincterotomy, balloon extraction exposed a floppy, exuberant, irregular, adenomatous appearing polyp arising from the inferior wall of the pancreatic duct (Fig. 3). Standard snare polypectomy was carried out with blended current and a 5-Fr pancreatic ductal stent was placed (Video 1). Histological assessment of the resected specimen revealed a villous adenoma with focal high grade dysplasia (Fig. 4). The patient continues to do well with no further episodes of pancreatitis.

Pancreatic ductal polyps are rare with few case reports in the literature [1,2].

Fig. 1 Magnetic resonance cholangiopancreatography (MRCP) in a 70-year-old white man with recurrent acute pancreatitis showing the bile and pancreatic ducts. The main pancreatic ductal dilatation is noted with an irregular filling defect within.

Fig. 2 Fluoroscopic image at endoscopic retrograde cholangiopancreatography (ERCP) confirms the filling defect in a dilated pancreatic duct.

Fig. 3 Endoscopic view of balloon adenoma “extraction” following pancreatic sphincterotomy.

Fig. 4 Histological section of the resection specimen depicting villous fronds and high grade dysplasia (hematoxylin and eosin, magnification × 20).

Video 1
The technique of pancreatic ductal polypectomy.
Presentations include mass lesions in the pancreas and recurrent acute pancreatitis. Intraductal papillary mucinous neoplasm is a much more common cause of ductal dilation and pancreatitis with progression to adenocarcinoma. This patient, however, presented with a villous adenoma of the pancreatic duct causing recurrent acute pancreatitis. These lesions appear to follow the adenoma-carcinoma pathway [3,4] seen in the colon and therefore need removal. Transduodenal endoscopic polypectomy of a ductal adenoma has been described before [5] but this is the first report describing potentially curative endoscopic polypectomy of a ductal adenoma. Our patient remains under regular surveillance with follow-up ERCP for stent removal and reevaluation of the pancreatic duct.

Competing interests: None

References
1 Rogers PN, Seywright MM, Murray WR. Diffuse villous adenoma of the pancreatic duct. Pancreas 1987; 2: 727–730