

CASE REPORT

Villous Adenoma of the Duct of Wirsung

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Villous tumors near the papilla of Vater are well recognized. Almost all of those previously reported have arisen from duodenal or ampullary mucosa (1-3), occasionally from biliary epithelium. We report a most unusual patient found to have a villous adenoma originating within and confined to the pancreatic duct.

CASE REPORT

A 65-year-old man suffered four bouts of pancreatitis in four years. There was no history of ethanol abuse. Several ultrasound examinations, an upper gastrointestinal series, and a computed tomographic scan of the abdomen showed no abnormality. The serum bilirubin, alkaline phosphatase, and transaminase levels were never elevated. The ampulla of Vater appeared normal by endoscopic examination, but a pancreatogram revealed a 1-cm rounded defect in the proximal pancreatic duct with minimal distal dilatation (Figure 1). The object did not move with attempts to dislodge it using the cannulation catheter. At operation the pancreas was slightly firm and nodular. The orifice of the papilla of Vater was widely patent. The orifice of the duct of Wirsung was exposed by a long sphincteroplasty, and the pancreatic duct was opened for a distance of 1 cm by cutting the common septum between the bile duct and duct of Wirsung. No abnormality was seen. A 3-mm stone-retrieving spoon was passed into the pancreatic duct, and a soft round 1-cm tumor on a stalk was delivered. The stalk was divided and ligated. Frozen-section evaluation suggested a benign lesion. Permanent sections showed the tumor to be a villous adenoma without malignant elements (Figure 2). The stalk was free of neoplastic elements. A pancreatogram performed one week later via a catheter left in the pancreatic duct showed no residual tumor (Figure 3).

He has remained well for 24 months since the surgery. A pancreatogram obtained at 20 months showed no recurrence of the tumor.

DISCUSSION

Villous adenomas of the duodenum are rare but well recognized. Despite their curious tendency to occur near the papilla of Vater, pancreatitis is unusual. In a recent review from this hospital, only three of 19 patients with villous tumors of the ampulla presented with pancreatitis (3).

This case is a rare example of a villous adenoma arising from within the pancreatic duct without involvement of the ampulla or bile duct. A very few previous descriptions of "papilloma" of the pancreatic duct have been recorded (4). The tumor could not be seen at endoscopy and was so far within the pancreas that it could not be seen directly even after sphincteroplasty and opening as far as was safely possible into the pancreatic duct. The mechanism of chronic subacute pancreatitis with acute exacerbations in this case is believed to be partial obstruction of the duct of Wirsung by the tumor. The patient has apparently been cured by removal of the lesion.

Villous adenomas of this region share the potential for malignant degeneration that is the property of villous adenomas elsewhere in the gut (4). In our experience with ampullary villous adenomas, the prevalence of malignancy exceeded 50% (3). Continuing surveillance of patients such as this one for residual or new adenomas is indicated.

SUMMARY

A patient presenting with recurrent pancreatitis was found to have a benign polypoid villous adenoma of the duct of Wirsung. The tumor was excised locally via transduodenal access to the duct. The patient has now remained free of pancreatitis for 24

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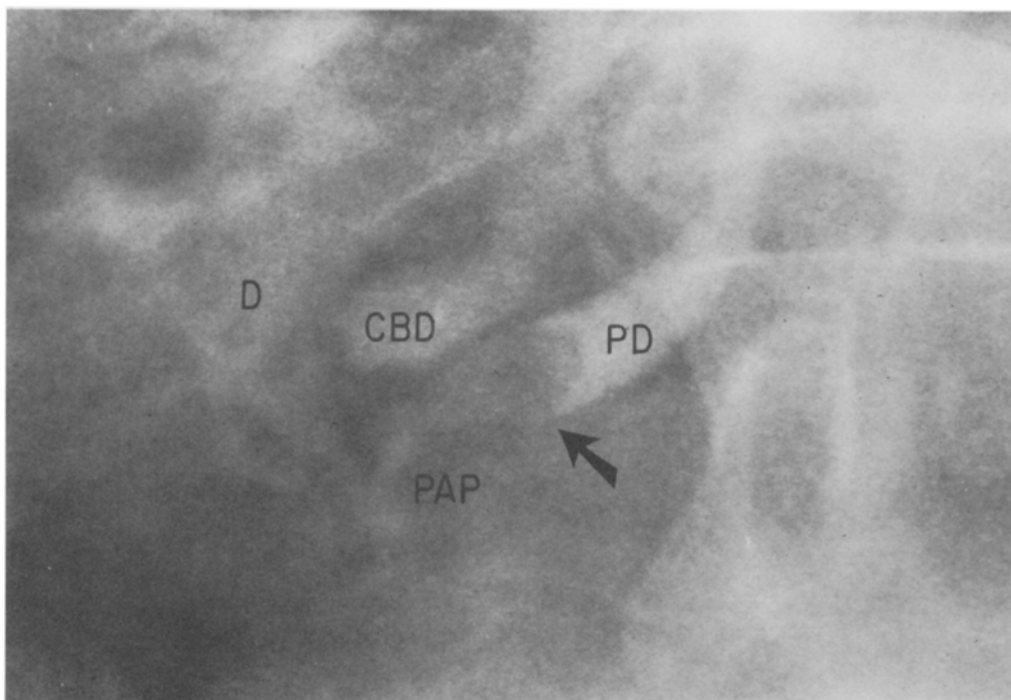


Fig 1. Preoperative endoscopic retrograde pancreatogram. Note the filling defect in the proximal pancreatic duct (arrow). D, duodenum; CBD, common bile duct; PD, pancreatic duct; PAP, papilla of Vater.

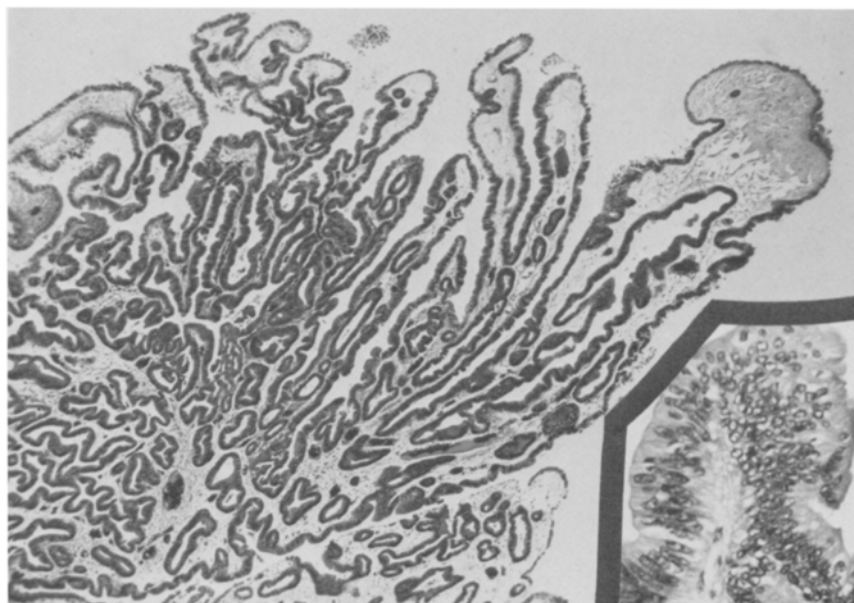


Fig 2. Low-power photomicrograph of the tumor illustrates the frond-like pattern of a villous adenoma ($\times 37$). High-power view (inset) reveals benign, mildly atypical stratified columnar epithelium.

VILLOUS ADENOMA OF THE DUCT OF WIRSUNG

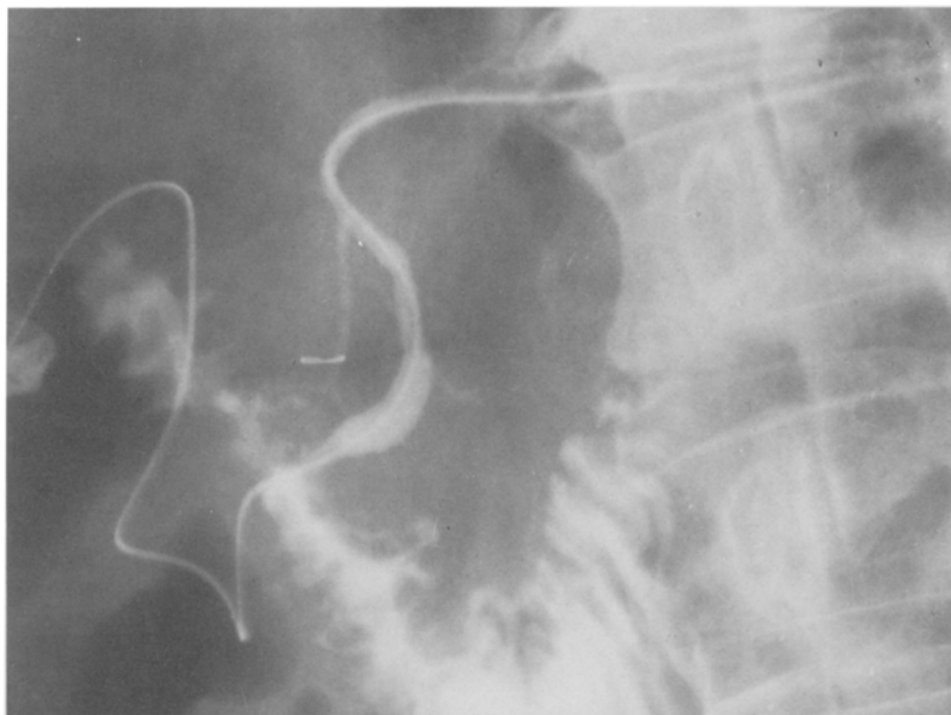


Fig 3. Postoperative pancreatogram obtained via the drainage catheter placed in the pancreatic duct at operation. The previously noted filling defect is now absent.

months. Obstruction of the pancreatic duct by this rare tumor appears to have been the cause of pancreatitis. Villous adenomas of the pancreatic duct epithelium may be premalignant.

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