

This section features outstanding photographs of clinical materials selected for their educational value or message, or possibly their rarity. The images are accompanied by brief case reports (limit 2 typed pages, 4 references). Our readers are invited to submit items for consideration.

Anorexia and pancreatitis associated with a gastric duplication cyst of the pancreas

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A 17-YEAR-OLD FRATERNAL TWIN was seen by her primary physician 2 years previously for intermittent epigastric pain radiating to the back and associated with anorexia. An abdominal ultrasound and computed tomography scan demonstrated a right adnexal mass and free intraperitoneal fluid. Diagnostic laparoscopy was performed. A 5-cm right-sided cyst of Morgagni was discovered and drained. Postoperatively, her epigastric pain continued and was exacerbated by eating. She began to lose weight. She was then sequentially diagnosed with and treated for peptic ulcer disease, *Helicobacter pylori* gastritis, and irritable bowel syndrome caused by stress and anxiety. For the last diagnosis, she was placed on antidepressants. She required hospitalization for dehydration. She continued to experience abdominal pain, nausea, emesis, and further weight loss. When her weight fell to 77 pounds (from 92 at her initial visit) she was admitted for inpatient psychiatric evaluation for anorexia and bulimia. In February 1999, after 6 days of severe vomiting and abdominal pain, physical examination revealed a tender, 6-cm mass in the left upper quadrant. Ultrasound at her local hospital suggested a large pancreatic tail pseudocyst, which was confirmed on computed tomography scan to be 13 cm in diameter and thick-walled

(Figure, A). She was transferred to our hospital for surgical evaluation and gave a history of a left upper quadrant abdominal mass present for several months, which often fluctuated markedly in size from morning to evening of the same day. Magnetic resonance cholangiopancreatography failed to demonstrate a pancreatic duct-cyst communication. Liver function tests and amylase were normal, but serum lipase was slightly elevated. Endoscopic retrograde cholangiopancreatography (Figure, B) demonstrated a dilated, twin pancreatic ductal system that communicated with the cyst.

At laparotomy, operative findings included thickened pancreatic parenchyma consistent with prior pancreatitis and a 6-cm thick-walled cyst adjacent to the pancreatic tail but distinct from the splenic hilum and gastric wall. A distal pancreatectomy with en bloc resection of the cyst and Roux-en-Y pancreaticojejunostomy was performed. Cross section of the cyst showed a folded, soft, velvety mucosal surface and communication with the dual pancreatic ducts. Microscopic examination of the cyst wall showed an orderly histologic structure consistent with stomach wall, containing fundic and antral mucosa and well-developed submucosa, muscularis propria and serosa, consistent with gastric duplication anomaly. Postoperatively, our patient recovered quickly and was discharged one week later. She remains symptom free and has regained weight.

Gastric duplication cysts are alimentary tract duplications that are more common in females. They are generally hollow structures with smooth muscle walls, lined by a formal gastric epithelium containing both parietal and chief cells.¹ Direct continuity with the stomach wall was originally felt

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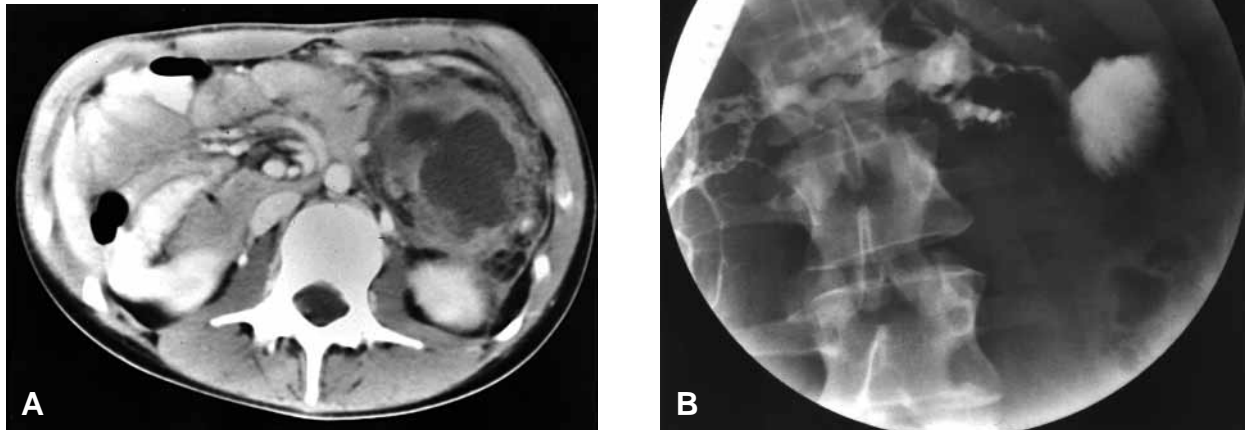


Figure. A, Computed tomography showing the original 13-cm cyst adjacent to pancreatic tail at presentation. **B,** ERCP demonstrates that the cyst communicates with twin dilated pancreatic ducts.

to be necessary for the diagnosis, but this definition has since been modified with the recognition of both a tubular variant that communicates directly with the native stomach and a cystic variant (as in our patient) which is anatomically distinct.² These are often diagnosed in infancy, but may remain occult well into adulthood. Vomiting is the most frequent presenting symptom and may be accompanied by abdominal or back pain, anorexia, fever, failure to thrive, hematemesis, melena, and anemia.³ The cysts may also remain asymptomatic. Palpable abdominal mass is the most common clinical finding. Gastrointestinal bleeding, pancreatitis, perforation, and carcinoma within the cystic specimen are all recognized complications.^{3,4} Recurrent pancreatitis (as seen in our patient) results from obstruction of the communicating pancreatic duct by shed cyst blood or mucoid material originating from within the cyst cavity.

Surgical intervention remains the treatment of choice, with the recommended procedure dictated

by each individual patient's anatomic presentation. Enteric drainage with marsupialization, simple cyst excision, and added distal pancreatectomy with Roux-en-Y pancreaticojejunostomy have all been described as therapeutic. This case points out once again organic causes of anorexia and vomiting in adolescents need to be rigorously excluded before a diagnosis of eating disorders is made, and that results of appropriate therapy are excellent.

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