

weak anticholinergics properties. Extrapyramidal symptoms are frequent in patients receiving haloperidol. Dystonic reactions may occur in 30–64% of patients and usually present within the first 24–96 h of treatment. The dystonic reactions are usually treated with anticholinergic agents such as benztropine and diphenhydramine. Benztropine is a synthetic muscarinic-receptor antagonist that competes with acetylcholine at the muscarinic receptor site. It is used in the treatment of Parkinson's disease and drug-induced parkinsonism and extrapyramidal symptoms. Constipation is a minor side effect of haloperidol therapy because of its weak anticholinergics effect. However, significant gastrointestinal hypomotility and rarely paralytic ileus can occur with benztropine. The anticholinergics interaction from the combination of these two drugs may cause serious impairment of gastrointestinal motility. Although pathophysiologically plausible, acute intestinal pseudo-obstruction has not been reported as a complication of this drug interaction.

The diagnosis of acute intestinal pseudo-obstruction is essentially clinical and rests on excluding the mechanical causes of colonic dilation. Plain x-rays of the abdomen are critical in the diagnosis and day-to-day follow-up. A colonic diameter of 9 cm is commonly used as the value associated with high risk of perforation, although duration of colonic dilation may be more important than actual colonic diameter (7). Most patients respond to conservative management. This includes treating the underlying illness if possible, correcting electrolyte and metabolic disturbances, and stopping medications that may impair colonic motility. Nasogastric suction, rectal tubes, and frequent change of position are useful. A recent randomized, placebo-controlled trial revealed that intravenous neostigmine rapidly decompressed the colon in patients who did not respond to conservative therapy (8). Colonoscopic decompression is used when severe colonic dilation persists in spite of conservative treatment. This decreases the colonic distension in 70% of patients although 40% require repeat colonoscopy. Placing a drainage tube on the right side of the colon at the time of colonoscopy reduces the recurrence rate (4, 9). Acute surgical intervention carries a high mortality and is indicated only in patients who fail conservative and endoscopic treatment and those who are suspected to have perforation (3).

Although the long-acting verapamil may have contributed to the intestinal hypomotility in this patient, we believe the acute distension was precipitated by drug interaction between haloperidol and the parenteral benztropine. Haloperidol is commonly used in hospitalized patients to control agitation. When acute dystonic reactions occur from this therapy, they are treated with parenteral benztropine or diphenhydramine. Both of these drugs may acutely potentiate the anticholinergics effect of haloperidol. This interaction may be particularly significant and serious in elderly patients who are receiving multiple medications. Thus, great caution is warranted in prescribing parenteral drugs with

anticholinergics properties to patients who are already on medications that impair intestinal motility.

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Posttraumatic Pancreatitis

TO THE EDITOR: Pancreatic trauma is a typically acute, however, uncommon event. Blunt injury to the pancreas may rarely cause late complications caused by ductal fibrosis (1).

A 22-yr-old woman presented with a 3-month history of recurrent bouts of epigastric pain and nausea. Two weeks before admission, her family physician had determined elevated pancreatic enzymes. The past medical history in this otherwise healthy woman was unrewarding. She never drank alcoholic beverages or took any medication. Physical examination revealed a tender upper abdomen. Biochemistry showed mild systemic inflammation (CRP 3.1 mg/dl)



Figure 1. Smooth focal stricture of the main pancreatic duct on ERCP.

and moderately increased serum amylase (670 IU/L). Abdominal ultrasound ruled out gallstone disease. A computed tomography scan confirmed acute pancreatitis with inhomogenous thickening and peripancreatic edema of the pancreatic tail. At ERCP a focal stricture of the duct of Wirsung was noted in the body of the pancreas (Fig. 1) causing acute pancreatitis in the upstream part of the organ. However, brush cytology was nondiagnostic. Both endosonography and magnetic resonance imaging failed to detect a pancreas mass. Exploratory surgery was both diagnostic and therapeutic in that a distal pancreatectomy with splenectomy had to be performed in the face of the localized pancreatic duct stenosis and splenic vein thrombosis.

The differential diagnosis of isolated pancreatic duct strictures includes pancreatic neoplasm, focal chronic pancreatitis, a scar from previous acute pancreatitis and, rarely, ductal fibrosis as a sequela of pancreatic trauma (2, 3). As in our patient, the classic site of pancreatic duct injury lies over the vertebral column in the midportion of the pancreas (3). Pancreatic cancer is the most worrisome culprit and should be considered in all patients in whom a pancreatic duct stricture is identified. Increasingly, neuroendocrine tumors of the pancreas are disclosed as the cause of pancreatic duct stenosis (1, 2). It may be difficult to distinguish malignant from benign disease on the basis of the radiological appearance of an isolated stricture. A focal mass seems to favor malignancy whereas islet cell tumors are frequently tiny and undetectable by sophisticated imaging procedures. Even if evaluation fails to reveal a small pancreatic mass, pancreatic resection remains the treatment of choice (4). Indeed, surgical exploration offers the advantage of both definite tissue diagnosis and symptom relief (5). The role of pancreatic ductal stenting as first-line treatment of benign strictures is still under debate (6).

Eighteen months after surgery, the patient remains free of symptoms. On repeat questioning, she eventually remem-

bered a blunt abdominal trauma by a ski pole in a Rocky Mountain ski resort 4 yr before presentation.

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Transnasal Placement of Percutaneous Endoscopic Gastrostomy With a Pediatric Endoscope in Oropharyngeal Obstruction

TO THE EDITOR: There is a growing body of literature examining the use of transnasal endoscopy (T-EGD). A variety of endoscopes for various indications have been studied, including ultrathin, pediatric, and standard diameter endoscopes (1-6). Besides discomfort on initial insertion, T-EGD with pediatric or ultrathin scopes has been shown to be better tolerated and requires less additional sedation than transoral EGD (2, 11). Additionally, smaller endoscopes have not been associated with epistaxis. T-EGD has shown to be feasible from the endoscopist's view as well.

Transnasal placement of percutaneous endoscopic gastrostomy has been attempted in cases of oropharyngeal obstruction; however, there are no known cases in the gastrointestinal literature using smaller endoscopes (7-10). We describe two cases of transnasal percutaneous endoscopic gastrostomy (termed T-PEG for discussion) using pediatric endoscopes in patients with oropharyngeal obstruction.

A 70-yr-old woman presented after cardiac arrest secondary to ventricular fibrillation. The patient was subsequently diagnosed with anoxic encephalopathy. Her hospital course was complicated by aspiration pneumonia. Physical examination revealed severe trismus and a partially transected