Acute Pancreatitis Due to Pancreatic Duct Ascaris Migration After Pancreatic Sphincterotomy and Pancreatic Stent Placement

We report a case of acute pancreatitis resulting from *Ascaris* migration into the pancreatic duct in a patient with recurrent pancreatitis due to pancreatic sphincter dysfunction which was treated by pancreatic sphincterotomy and placement of a pancreatic duct stent.

A 58-year-old woman was referred to our institution for recurrent pancreatitis. She had had seven episodes of acute pancreatitis over the last three years. Sphincter of Oddi manometry demonstrated a hypertensive pancreatic duct sphincter of 110 mmHg (normal values < 35 mmHg) (1). A pancreatic sphincterotomy was performed and a 5 French pancreatic stent was placed into the pancreatic duct. After two days she experienced an attack of acute pancreatitis resulting in emergency duodenoscopy. The duodenoscopic view of the papilla showed a round worm protruding from the pancreatic orifice along with the pancreatic stent. A tripod device was used to capture the worm which was removed by retrieving the duodenoscope. The patient experienced relief of symptoms and the pancreatic stent was removed after 10 days. Careful examination of the stent showed that it was obstructed by food.

Ascariasis is a frequent cause of biliopancreatic disease, mainly in developing tropical countries. Migration of the worm into the ampulla of Vater may cause bile duct obstruction which can lead to acute pancreatitis (3). Occasionally, the worm migrates to the pancreatic duct obstructing pancreatic drainage resulting in severe attacks of acute pancreatitis. (4). Endoscopic extraction of worms has been successfully conducted (5,6). *Ascaris*-induced pancreatitis is a rare complication after pancreatic sphincterotomy. In our case, it is possible that a widened pancreatic orifice facilitated worm entry into the pancreatic duct. Moreover, the stent was occluded which could explain the attack of acute pancreatitis. In such patients, endoscopic extraction of the worm may prevent further complications of the procedure.

a, b

Fig. 1 a: Duodenoscopic view of the papilla showing an *Ascaris* in the pancreatic orifice along with the pancreatic stent. **b** A tripod device captures the worm.

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