Endoscopic treatment of acute *Ascaris* pancreatitis

A 36-year-old man presented with a 2-day history of epigastric pain and fever. Physical examination revealed marked epigastric tenderness. Laboratory values were: white blood cell count 22 000/µL; serum amylase 1461 U/L; lipase 1531 U/L. Computer tomography (CT) scan showed pancreatic swelling with a long, linear filling defect in the pancreatic duct, which was dilated, and mild dilatation of the common bile duct (**Fig. 1**). Endoscopic retrograde cholangiopancreatography (ERCP) was performed. The endoscopic view showed a round worm protruding from the ampulla of Vater. A snare was placed around the worm and pulled gently until the worm was extracted from the duodenum (**Fig. 2**). However, the pancreatogram showed another tubular-shaped filling defect occupying the whole of the dilated pancreatic duct (**Fig. 3**). Pancreatic sphincterotomy was performed and another round worm was successfully removed with a Dormia basket catheter over a guide wire. The patient was treated with mebendazole and his symptoms completely resolved.

Infestation with *Ascaris lumbricoides* begins with the ingestion of food contaminated with fertilized eggs. The eggs hatch in the duodenum, releasing the parasites in the larval stage [1]. Rarely, the larvae can migrate into the pancreatic duct (1.4%) [2], causing acute pancreatitis. ERCP is a highly effective method of demonstrating the worm in the biliary tract and pancreatic duct, while providing a therapeutic option for removing the worms [2,3]. Extraction of the worm is easiest if it is protruding out of the papilla, when a grasping forceps can be applied. Worms that are entirely within the bile duct may be stimulated to migrate out of the papilla by contrast injection, or they can be extracted using basket or balloon catheters. The worm should be extracted completely since remnants can lead to stone formation [4]. Anthelmintic treatment with mebendazole or albendazole is effective in eradicating *Ascaris lumbricoides* in 90% of cases [5].

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Fig. 1 CT scan showed a long, linear filling defect in the pancreatic duct and mild dilatation of the common bile duct.

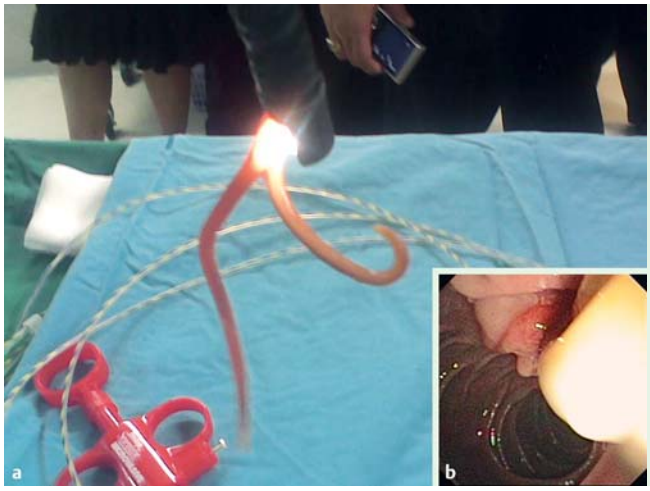

Fig. 2 **a** The *Ascaris lumbricoides* (at the tip of the duodenoscope) that was extracted from the ampulla by Dormia basket (**b**).

Fig. 3 The pancreatogram showed a long, smooth, linear filling defect and stricture of the pancreatic duct.

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