Endoscopic resection of a choledochocele

Choledochal cysts are uncommon congenital dilatations of the extrahepatic and/or intrahepatic biliary system. Several serious complications of choledochal cysts have been described, including malignancy. According to Todani et al., choledochal cysts are classified into five types [1]. Type III, or choledochocele, is a cystic dilatation of the intra-ampullary portion of the common bile duct (CBD). Compared with other choledochal cysts, the choledochocele has a very low rate of malignant transformation [2]. Therefore, the choledochocele can be treated with sphincterotomy or endoscopic papillectomy [3, 4]. Here we report a case of a 17-year-old man admitted to our hospital with acute mild pancreatitis.

A preliminary magnetic resonance cholangiopancreatography showed an isolated cystic-like dilatation of the distal portion of the CBD. Duodenoscopy revealed a 25–30-mm subepithelial swelling proximal to the major papilla and protruding into the duodenum (▶Fig. 1). Endoscopic ultrasound confirmed cystic dilatation of the intra-ampullary portion of the CBD and three biliary stones. Choledochocele was diagnosed and the patient was referred for endoscopic treatment (▶Video 1).

The lesion was resected en bloc by hot snare papillectomy (▶Fig. 2) and the stones were also removed (▶Fig. 3). Endoscopic retrograde cholangiopancreatography was then performed and no further biliary alterations were seen. Pancreatic and biliary sphincterotomies were performed and a plastic stent was placed in the pancreatic duct to prevent...
post-procedural acute pancreatitis and papillary stenosis. Two through-the-scope clips were deployed to close the mucosal defect. No post-procedural complications were observed. Pathological examination showed hyperplasia of the biliary epithelium and inflammatory infiltration without dysplasia.

At the 2-month follow-up, duodenoscopy showed no residual lesions in the ampullary area and spontaneous pancreatic stent migration (Fig. 4). In our opinion, this case confirms that endoscopic papillectomy may be a good option for the treatment of patients with choledochocele.

Competing interests

The authors declare that they have no conflict of interest.