Endoscopic resection of a choledochocoele

► **Fig. 1** Subepithelial swelling proximal to the major papilla.

► **Fig. 2** Complete en bloc resection of the lesion by hot snare papillectomy.

Choledochal cysts are uncommon congenital dilations 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 choledochocoele, is a cystic dilatation of the intra-ampullary portion of the common bile duct (CBD). Compared with other choledochal cysts, the choledochocoele has a very low rate of malignant transformation [2]. Therefore, the choledochocoele can be treated with sphincterotomy or endoscopic papillectomy [3,4]. Here we report a case of a 17-year-old man admit-

► **Video 1** Choledochocoele was diagnosed by duodenoscopy and endoscopic ultrasound. A complete en bloc resection with hot snare papillectomy was performed. At the 2-month follow-up duodenoscopy, no residual lesions were seen.

► **Fig. 3** Choledochocoele with stones.

► **Fig. 4** 2-month follow-up duodenoscopy.

ted 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 dilation of the intra-ampullary portion of the CBD and three biliary stones. Choledochocoele

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 choledochocoele.

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Competing interests

The authors declare that they have no conflict of interest.

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