Ampullectomy of an unusual lesion developing 20 years after endoscopic treatment of a type III choledochocoele

A type III choledochocoele is a rare congenital cystic dilation of the intraduodenal portion of the main bile duct, representing 5% of all choledochal cysts according to the Toldani classification [1]. Choledochocoeles may cause biliary obstruction and carcinoma development with a reported incidence of 2.5%. To date, endoscopic treatment remains the less invasive technique, which consists of cystic mass removal associated with sphincterotomy [2,3]. However, the risk of carcinoma development may persist even after treatment and reports of long-term outcomes are lacking [4].

Herein we report the original case of a 78-year-old woman presenting with a previous history of sphincterotomy for a type III choledochocoele 20 years ago (► **Video 1**). She presented with a 12-mm low-grade dysplasia adenoma arising from the sphincterotomy scar (► **Fig. 1**), mimicking an ampulloma. To the best of our knowledge, such a lesion has yet to be reported. Imaging modalities (endoscopic ultrasound and magnetic resonance imaging) revealed a 9-mm moderate dilation of the main bile duct upstream of a distal stenosis (► **Fig. 2**).

A new endoscopic procedure was performed. The patient was placed in a dorsal position under general anesthesia. Similar to an ampullectomy, a duodenoscope under CO₂ insufflation was used. An en bloc resection was performed using a 15-mm braided snare (Lariat; Life Partners Europe, Bagnolet, France) and the specimen was immediately retrieved (► **Fig. 3**). Cholangiography revealed a delayed clearance of the contrast due to the distal stenosis (► **Fig. 4**). Complementary intraductal biopsies of the stenosis were performed using a pediatric biopsy forceps. Prevention of post-ampullectomy pancreatitis was ensured by intrarectal indometacine ad-

► **Video 1** Ampullectomy of an unusual lesion that developed 20 years after endoscopic treatment of a type III choledochocoele.

► **Fig. 1** Endoscopic view of the ampulloma-like lesion involving the biliary tract and the whole ampulloma mass.

► **Fig. 2** Endoscopic aspect of the duodenal wall after resection.

ministration, pancreatic stenting with a 5-Fr×5-cm plastic stent, and ringer lactate hyperhydration. The patient was discharged after 24h without complications.

Final histology confirmed the R0 resection of a low-grade dysplasia adenoma. Biopsies of the stenosis revealed only fi-

brotic tissue. The 4-month follow-up duodenoscopy confirmed the absence of local recurrence.

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► **Fig. 3** Additional biopsies of the stenosis were guided by cholangiography. Cholangiography revealed a distal stenosis of the main bile duct. Biopsy sampling of the stenosis was performed using pediatric biopsy forceps.

► **Fig. 4** Histological features of the ampulloma-like resection. Hematoxylin and eosin staining revealed a tubulovillous adenoma with low-grade dysplasia arising and surrounding the biliary orifice.

Competing interests

The authors declare that they have no conflict of interest.

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