Endoscopic Treatment of Gallstone-Impacted Choledochocoele Precisely Diagnosed by Endoscopic Ultrasonography

We present here a rare case of choledochocoele (1) in association with an impacted gallstone leading to obstructive jaundice, which was diagnosed by endoscopic ultrasonography (EUS) and treated endoscopically.

A 70-year-old Japanese man, who had been diagnosed as having choledochocoele with gallbladder debris six months previously, was readmitted due to fever and jaundice. The laboratory data showed a total bilirubin level of 9.2 mg/dl (direct bilirubin 6.6 mg/ml). EUS demonstrated that there was an impact gallstone, 9 mm in diameter in the choledochocoele. The intramural roof of the choledochocoele was thickened (Figure 1). However, gallbladder debris previously noted on EUS had disappeared. We assumed that the gallbladder debris had migrated into the common bile duct and then became impacted in the choledochocoele. An endoscopic incision of the intramural roof of the choledochocoele and sphincterotomy was therefore performed. A gallstone was extracted using a basket catheter (Figure 2). The postoperative course was uneventful, with resolution of the jaundice and a decrease in the total bilirubin level.

Figure 1: EUS showing a choledochocoele with an impact gallstone 9 mm in diameter, and the thickened intramural roof of the choledochocoele.

Figure 2: Endoscopic incision of the intramural roof of the choledochocoele and sphincterotomy were carried out. The gallstone was then extracted endoscopically with a basket catheter.

The management of choledochocoele with an impact gallstone has not previously been reported in the literature; the present case showed that endoscopic therapy can be successful. Although the indications for endoscopic management of symptomatic choledochocoele are still controversial (2–4), in our case it was safe, effective, efficient, and resulted in a short hospitalization period.

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