Removal of A Retained TTube from the Common Bile Duct  
(Case Report)

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Introduction

In 1972, Ban\(^1\) published his paper about foreign bodies of the biliary tract and advocated their open surgical removal. Since then, techniques have been described for their endoscopic removal\(^2\)-\(^4\). We report a case of removal of a T-tube which was caught in a suture while closing the anterior abdominal wall.

Case Report

An 44-year-old woman was referred from another hospital with a retained T-tube. She had an open cholecystectomy during which common bile duct was divided. This was recognised and an end-to-end anastomosis was performed about a number 12 T-tube. Post-operative recovery was uneventful and an early T-tube cholangiogram indicated satisfactory alignment without significant leak out of the ductal system. T-tube was left in for six weeks during which time she had occasional episodes of cholangitis. The patient was admitted for the removal of the T tube after a further satisfactory cholangiogram. When the tube was pulled, it broke. She was then left with a portion of T tube presumably lying within the duct. An attempt to pass fibroptic cystoscope through the biliary fistula was unsuccessful. She was then referred for retrieval of T-tube using lateral duodenoscope.

At the X-ray department of Shotley Bridge General Hospital, a 5F catheter was introduced into the T-tube tract and contrast injected. It did not reach the biliary tree. A side view duodenoscope was then introduced and the papilla was visualised. Biliary duct was cannulated. After injecting the contrast, it was clearly seen that the cross limb of the T tube was lying in the bile duct. Contrast was running down the T-tube laterally and a considerable part of the T-tube was seen towards the anterior abdominal wall. After the passage of guide wire up in the common bile duct, an endoscopic sphincterotomy was performed. After the serial passage of balloon catheters, the cross limb of T-tube was pulled down into the duodenum. This was then caught using a snare and an attempt was made to pull it out. However, the traction on the T tube did not cause any further displacement and it was felt that the long arm of the T-tube was probably caught in a suture at the level of pentoneum or anterior abdominal wall. The procedure was abandoned. Two days later, the patient was taken to theatre. The side viewing duodenoscope was passed and the T-tube was grasped using alligator forceps. While an assistant was holding the duodenoscope and the alligator forceps, the drain site opening and the T-tract opening on skin were joined together with an incision. Digital exploration of the wound revealed any long suture, which was divided and was removed in part. Following this, the retained T-tube was easily removed with the endoscope and alligator forceps. The patient was discharged home three days later and was reviewed in the outpatient department after six weeks when she was found to be totally asymptomatic.

Discussion

Exogenous biliary tract foreign bodies can predispose to stone formation and inflammation\(^1\). Re-exploration of the biliary tract increases the risk of stricture formation\(^4\). Despite the advances achieved
in endoscopic therapy of bile duct pathology, scant information exists about the best technique for their removals\(^2\). We believe that the case reported above, illustrates the fact that foreign bodies of the biliary tract can be removed without an open exploration of the common bile duct.

References