

## Cholangitis Secondary to Retained Common Bile Duct Clip

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### Abstract

We present a case of an 81-year-old male who presented with a 1-week history of upper abdominal pain and fevers. CT imaging revealed what appeared to be a metal surgical clip in the distal common bile duct related to the patient's laparoscopic cholecystectomy 17 years prior. This was confirmed on a dedicated CT intravenous cholangiogram. The patient went on to have an ERCP, which revealed that the metallic clip had passed spontaneously.

**Keywords:** Cholangitis; Surgical clip; Retained surgical clip; ERCP

### Introduction

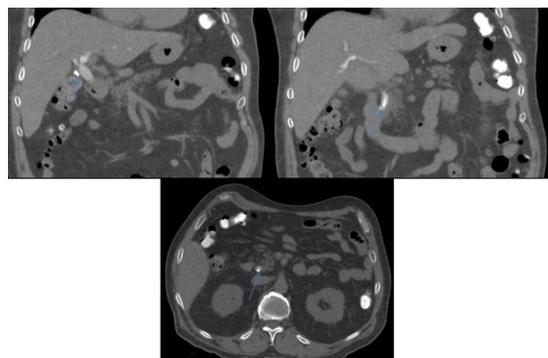
Migration of surgical clips to the common bile duct is a rare complication of cholecystectomy [1]. Several case reports exist documenting this phenomenon, although commented on the potential role for conservative management in this setting.

### Case Report

An 81-year-old initially presented presented with a 1-day history of severe upper abdominal pain and fever. A laparoscopic cholecystectomy had been performed 17 years earlier without complication. Admission bloods revealed mildly deranged LFTs; bili 40, ALT 501 AST 708 ALP 129 GGT 500. A CT abdomen (Figure 1) was subsequently performed to investigate the cause of the patient's abdominal pain. Findings included a dilated CBD (12 mm) and what appeared to be a metallic clip within the lumen of the distal CBD. These findings were confirmed on a CT intravenous cholangiogram with Biliscopin contrast (Figure 2) as well as a plain abdominal film (Figure 3). He was initially treated with



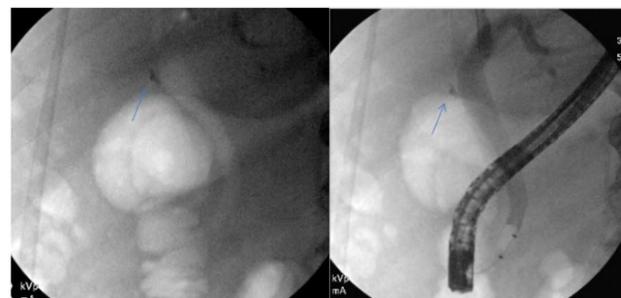
**Figure 1:** CT abdomen. Distal CBD clip denoted by arrow.



**Figure 2:** CT intravenous cholangiogram. Arrows denote presence of clips at the cystic duct stump and distal CBD.



**Figure 3:** Abdominal plain film. Arrows denote presence of clips at the cystic duct stump and distal CBD.



**Figure 4:** ERCP cholangiography. Arrows presence of surgical clips at cystic duct stump.

intravenous antibiotics and his symptoms and LFTs settled over the coming days and he was subsequently discharged home day 3.

Within 24 hours of being discharged, symptoms recurred and the patient re-presented to hospital. LFTs on admission were again deranged; bili 40, ALT 419 AST 477 ALP 292 GGT 722. He was re-commenced on intravenous antibiotics and it was decided to proceed with ERCP, which was performed two days later. At ERCP, no clip was visible in the distal

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CBD on cholangiography (Figure 4). A sphincterotomy was performed and the duct was swept, again revealing that the clip had passed. In the days following ERCP, the patient's symptoms settled and LFTs again improved. On day 3 following ERCP his LFTs were bili 16, ALT 125 AST 58 ALP 163 GGT 374. He was discharged following an uneventful recovery on day 3 post ERCP.

## Discussion

Migration of surgical clips to the common bile duct is a rare but recognized phenomenon [2-4]. It was first reported in 1979 [5] and first reported following laparoscopic cholecystectomy in 1992 [6]. Presenting features for surgical clip migration may include obstructive jaundice, cholangitis, biliary colic and acute pancreatitis [7]. The diagnosis of clip migration can be confirmed on cross-sectional imaging and treatment is similar to that of choledocholithiasis. In other case reports, an ERCP has been required to achieve ductal clearance [8].

## Conclusion

In this case, the decision was made not to proceed to ERCP in the initial instance, as the patient's symptoms and biochemistry had improved, and it was thought that the clip would pass spontaneously. While an ERCP was ultimately performed at the time of the patient's

re-presentation to hospital, the finding of a clear common bile duct at suggests that conservative management with expectation of spontaneous passage may indeed be a viable therapeutic option.

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