

# A Rare Case Report of Biloma Post Cholecystectomy

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## Introduction

Biloma is defined as intrahepatic or extrahepatic encapsulated collection of bile outside of the biliary tree and within abdominal cavity. The complication's epidemiology ranges from 0.3 - 2%. Although it is uncommon after cholecystectomy, it most frequently happens after hepatobiliary surgery. Traumatic injuries to the biliary system, spontaneous biliary tract rupture, and abdominal trauma are among the causes of biloma.

The subhepatic area is the most typical location for bile collection, and the cystic duct is the source of 50% of bilomas. Clinical signs and symptoms can include jaundice, stomach discomfort, and even peritonitis. A stent-placed ERCP could be required, which can take two to three months, to drain the biloma.

## Case report

37 years old male with underlying ischemic heart disease (IHD) and history of gallstone pancreatitis with acute cholecystitis was appointed for elective laparoscopic cholecystectomy. Intraoperatively the procedure had to be converted to open technique due to dense adhesion and perforation of gall bladder during manipulation.

After an uneventful post operative observation in ward, he was discharged well. A period of 3 months later, he presented to casualty with symptoms of pain in the left hypochondriac without any evidence of obstructive jaundice.

His bloodwork revealed normal leucocyte count but abnormal liver enzymes. Ultrasound finding showed loculated anechoic lesion seen at the gall bladder bed measuring approximately 1.9x4.5cm with minimal debris and presence of dilated common and bilateral intrahepatic duct measuring 1.0x0.4cm. Computed topography(CT) liver 4 phase images showed loculated rim enhancing collection causing dilatation of common bile duct. No evidence of choledocholithiasis seen in the images.

He then underwent endoscopic retrograde cholangiopancreatography (ERCP) stent placement across the site of biliary leak which resulted in the resolution of the symptoms.

## Discussion

The most frequent side effect of hepatobiliary interventions is hepatobiliary damage, which is not without complications. Cases with difficulties during laparoscopic cholecystectomy were more likely to have leaks after surgery. In this case the procedure had to be converted open due to encountered difficulties which are the adhesions and perforation of gall bladder during manipulation.

After surgery, there is a chance of a minor trauma post surgery that causes biliary leak that gradually progress over long term leading to perforation. This explained delayed biliary leak in this patient that presented to us after 3 months post operation.

Since ERCP offers both diagnostic and therapeutic benefits, it is the procedure of choice for managing this condition. A stent can help mend the damaged bile duct and treat biloma by acting as a bypass for the possible tamponade effect to stop the leak. Eliminating pressure across the Oddi sphincter can encourage the preferential passage of bile into the duodenum.

Its benefits include biliary sphincter preservation and technical simplicity, making it safe and provide highly successful management outcome in this patient

## Conclusion

Iatrogenic biliary leak can develop chronically which should be included in the differentials during patient assessment. Difficulties during cholecystectomy should prompt the surgeons regarding risk of hepatobiliary injuries which may present later with complications.

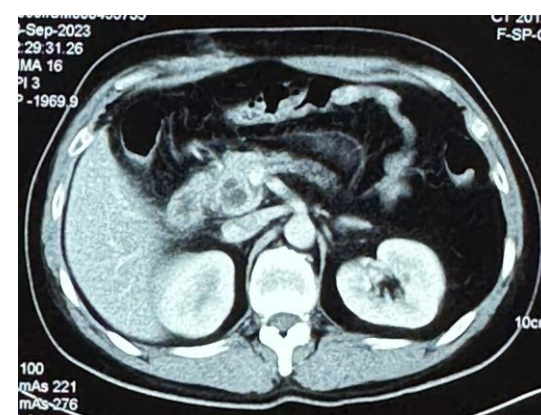


Figure 1 Loculated rim enhancing collection



Figure 2 Dilatation of hepatic ducts