

BILIARY CLIP MIGRATION CAUSING OBSTRUCTIVE JAUNDICE IN A GASTRIC BYPASS PATIENT 28 YEARS AFTER CHOLECYSTECTOMY

Fowler BB, Zurcher JR, Sobba KS, Powell MS
Department of Bariatric and Minimally Invasive Surgery, Wake Forest Baptist Medical Center, Winston-Salem, NC

CASE PRESENTATION

- 48 year old Caucasian female, referred for migrated biliary clip and obstructive jaundice presenting with one week of worsening right upper quadrant abdominal pain and hyperbilirubinemia (7.6 mg/dL).
- CT abdomen and pelvis with IV contrast revealed biliary ductal dilation (20 mm), pancreatic ductal dilation (2.5 mm) and an obstructing surgical clip at the ampulla.
- Physical exam revealed cutaneous jaundice and mild right upper quadrant tenderness without symptoms of cholangitis.
- Surgical history notable for laparoscopic cholecystectomy secondary to cholecystitis (1991) and an open roux-en-y gastric bypass performed for obesity (2005).

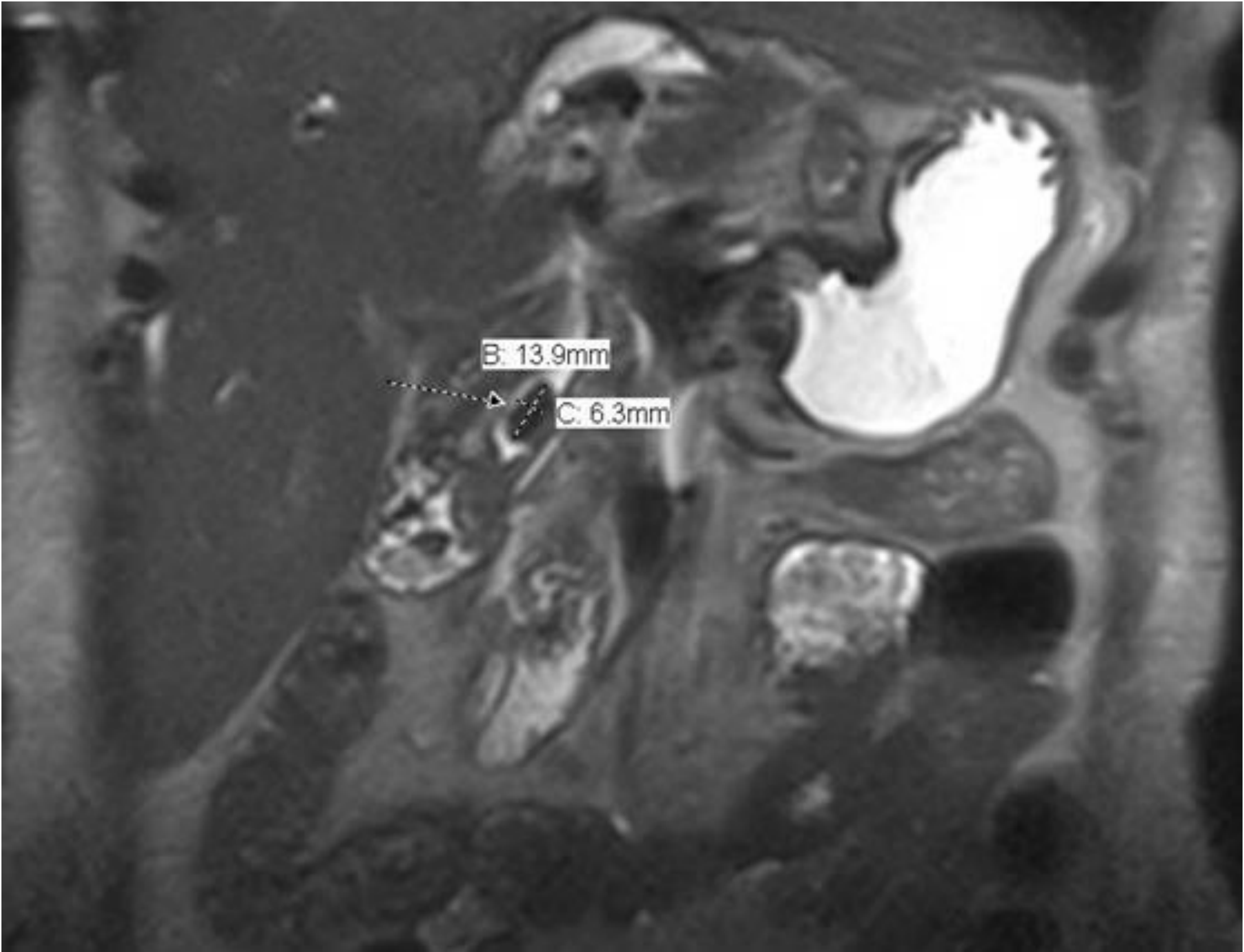


Figure 1 MRCP with ovoid foreign body in the distal common bile duct

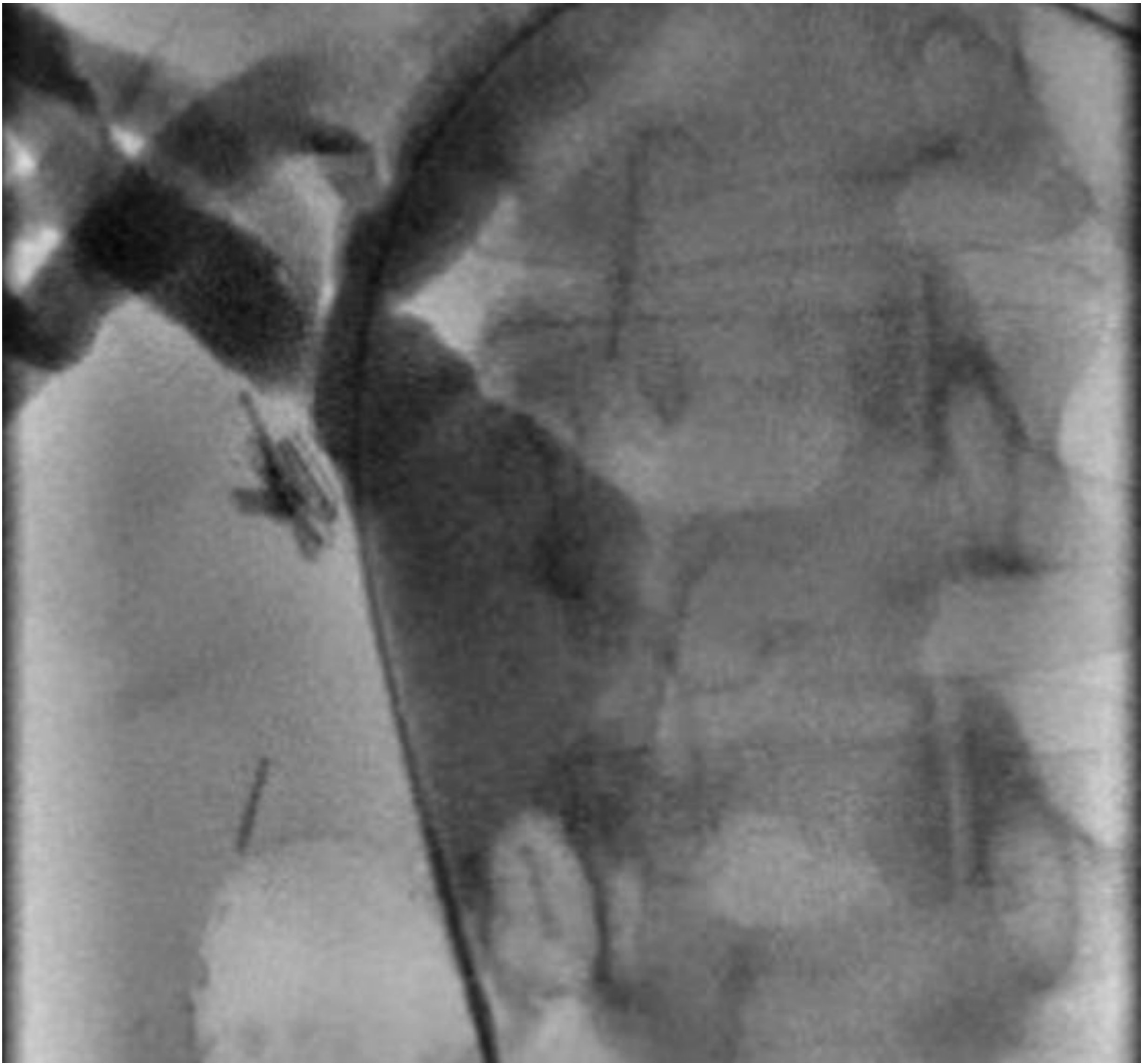


Figure 2 PTC showing clip-stone in the distal common bile duct prior to expulsion

- Magnetic Resonance Cholangiopancreatography (MRCP) revealed an ovoid, mobile, metallic foreign body with accumulated concretions in the distal common bile duct with dilation to 13 mm.
- Percutaneous Transhepatic Cholangiography (PTC) performed with placement of a 10 French biliary drain and stone expulsion into the duodenum.
- Repeat cholangiogram was performed on post-procedure day 3 that showed patent common bile duct with free flow into the small bowel.
- The patient's bilirubin normalized and the rest of her hospital course was uneventful and the patient was discharged. She returned for follow-up doing well with subsequent drain removal.

DISCUSSION

Post-operative migrating biliary clips after laparoscopic cholecystectomy have been described in the literature but remains a rare complication, generally presenting years after cholecystectomy with obstructive jaundice, cholangitis, biliary colic or pancreatitis. Clip choledocholithiasis is typically managed with ERCP. [1]

Management of choledocholithiasis with Roux-en-y anatomy is challenging with treatment options including double balloon endoscopy, transgastric ERCP, laparoscopic CBD exploration, PTC, and lithotripsy. [2]

Formerly, PTC has been described when more conventional endoscopic measures have failed but is regarded as safe and effective. In a retrospective review of 261 patients with choledocholithiasis, 248 of their patients were found to have extrahepatic calculi in the CBD. They achieved an overall success of 97.5% of stone expulsion using PTC with minimal complication rate and no mortalities. [3]

In our literature review, only one case report describing similar latent clip obstruction after gastric bypass. This was managed with successful PTC after endoscopic measures failed. [4]

Due to our patient's anatomy, she was not a candidate for a traditional ERCP. While there are several options for managing retained biliary clip, percutaneous transhepatic cholangiography remains a viable, effective and safe treatment option.

REFERENCES

1. Chong, V.H., Chong, C.F. Biliary complications secondary to post-cholecystectomy clip migration: A review of 69 cases. J Gastrointest Surg. 2010;14:688–696
2. Tucker O, Soriano I, Szomstein S, et al. Management of choledocholithiasis after laparoscopic Roux-en-Y gastric bypass. Surg Obes Relat Dis. 2008;4:674–8.
3. Ozcan N, Kahriman G, Mavili E percutaneous transhepatic removal of bile duct stones: results of 261 patients. Cardiovasc Intervent Radiol. 2012;35:621–7.
4. Singh MK, Kinder KZ, Braverman SE. Transhepatic management of a migrated intraductal surgical clip after cholecystectomy and gastrectomy. J Vasc Interv Radiol. 2015;26:1866