



IMAGE OF THE MONTH

Bile duct stone formation around migrated surgical clip 17 years after laparoscopic cholecystectomy



Formación de cálculos en el conducto biliar alrededor de una grapa quirúrgica migrada 17 años después de una colecistectomía laparoscópica

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69-year old female presented with a monthlong abdominal pain and nausea with vomiting. Initial workup showed mild increase of aminotransferases (AST, 64.8 U/L; ALT, 99.6 U/L). Ultrasound was unremarkable. Few days later aminotransferases increased (AST, 1652 U/L; ALT, 1785 U/L), with elevated total bilirubin (1.7 mg/dL), CRP (47 mg/L) and leukocytosis. Her medical history was notable for laparoscopic cholecystectomy 17 years earlier during which cystic duct and artery were ligated. During current work up patient underwent endoscopic ultrasound that showed 11 mm gallstone in the bile duct. At subsequent ERCP a 10 mm × 6 mm suspected stone with a central oval radiopaque defect (Fig. 1) in the common hepatic duct at the level of cystic duct was successfully extracted. Surgical clip within the stone was identified (Fig. 2).

Surgical clip migration is an uncommon complication of laparoscopic cholecystectomy, which may occur days to years following surgery and can lead to clip-related biliary stones.¹ The exact mechanism is not fully understood. Some authors hypothesize that clip migration is consequence of the pressure induced by surrounding structures such as liver on the clipped cystic duct, which is inverted into the lumen of the common bile duct.² Clip migration with gallstone formation should be considered



Figure 1 A 10 mm × 6 mm suspected stone with a central oval radiopaque defect in the common hepatic duct.

in the differential diagnosis of postcholecystectomy biliary colic and cholangitis. Management with ERCP is the treatment of choice although some cases require surgical therapy.

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Figure 2 Surgical clip within the stone was identified.

Author contributions

AG, SS drafted the manuscript; LS, SP reviewed the manuscript. LS performed ERCP. AG is the article guarantor.

Patient consent

Written informed consent was obtained from the patient.

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