Now You See Me and Now You Don't: A Rare Case of Post Cholecystectomy Clip Migration

Brittney Shupp DO, Janak Bahirwani MD, Zarian Prenatt DO, Hussam Tayel MD, Gurshawn Singh MD, Noel Martins MD



INTRODUCTION:

- Laparoscopic cholecystectomies (LC) have grown to become the gold standard treatment for symptomatic biliary disease, such as cholelithiasis.
- Each year, over 13 million LC are performed globally.
 Post Cholecystectomy Clip Migration (PCCM) is a known but rare complication of LC that occurs in less than 5% of cases.
- We present a case of PCCM presenting as choledocholithiasis that was successfully treated with ERCP.

CASE REPORT:

- 68-year-old female with a history of laparoscopic cholecystectomy 7 years ago presented with RLQ pain and nausea with vomiting.
- CT abdomen/pelvis was completed and revealed a migrated cholecystectomy clip within the CBD measuring 2.1 cm.
- On the second day of admission, laboratory values peaked to AST 520 U/L, ALT 593 U/L, alkaline phosphatase 217 U/L, and total bilirubin 2.32 mg/dL.
- ERCP was performed during which the CBD was found to be dilated to a maximum diameter of 14 mm.
 Two floating filling defects were noted. One defect had a hyperdense focus suggesting the presence of the migrated clip.
- A major papilla sphincterotomy was performed, and two large stones were successfully extracted. One of the two stones was found to have the migrated surgical clip embedded within.

IMAGES: В

(A) CT abdomen/pelvis with contrast revealing a migrated cholecystectomy clip within the distal CBD measuring 2.1 cm. Moderate intrahepatic biliary dilation also noted. (B) ERCP with fluoroscopy demonstrating a floating filling defect due to stones in the distal and mid CBD. One defect noted to have a hyperdense focus consistent with migrated cholecystectomy clip. (C, D) Extraction of the stone with embedded cholecystectomy clip.

DISCUSSION:

- During cholecystectomy, surgical clips are placed prior to transection of the cystic duct to allow for gallbladder removal.
- Clips remain in place for years without need for removal but can act as a potential nidus for stone formation.
- Problems arise when the surgical clips migrate into the CBD, such as in this case, creating an obstructing pattern and requiring advanced intervention.

CONCLUSION:

 Although rare, the number of PCCM cases is expected to steadily rise with an increasing number of LC being performed annually. Therefore, it is imperative that physicians understand and recognize this as a potential complication of LC.

REFERENCES:

- Gonzalez FJ, Dominguez E, Lede A, Jose P, Miguel P. Migration of vessel clip into the common bile duct and late formation of choledocholithiasis after laparoscopic cholecystectomy. The American Journal of Surgery. 2011 Oct 1;202(4):e41-3.
- Ghavidel A. Migration of clips after laparoscopic cholecystectomy; a case report and literature review. Middle East Journal of Digestive Diseases. 2015 Jan;7(1):45.
- Ng DY, Petrushnko W, Kelly MD. Clip as nidus for choledocholithiasis after cholecystectomy—literature review. JSLS: Journal of the Society of Laparoscopic & Robotic Surgeons. 2020 Jan;24(1).