

Clinical Images

Gossypibomas as a rare cause of common bile duct dilation

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Gossypibomas are any foreign bodies left inside the patient after an operation. It represents a diagnostic challenge in clinical practice because the clinical consequence may manifest in different forms immediately, months, or even years after the surgical procedure. For this reason we believe that it is worth reporting our case which was primarily diagnosed via endoscopic ultrasonography (EUS) and then treated endoscopically.

An 83-year-old woman complained of abdominal discomfort and visited our office. The ultrasonography showed a dilated intra- and extra-hepatic bile duct with a diameter of 20 mm. Her medical histories include type 2 diabetes, endoscopic removal of colon polyp and video-laparoscopic cholecystectomy for gallstones three years before the admission. On presentation, the patient was hemodynamically stable and afebrile. Her physical examination was unremarkable. The hepatic and renal function was normal as well as the white blood cell count; there were a slight increase in C-reactive protein serum levels (1.86 mg/dL). The dilation of the common bile duct seen at ultrasonographic scan was confirmed at an abdominal contrast-enhanced computed tomographic scan (Fig. 1). To further investigate the dilation, we examined the patient with EUS and found a hilar polypoid lesion (Fig. 2). We suspected a mucinous lesion of the bile duct. The patient underwent an endoscopic retrograde cholangiopancreatography with sphincterotomy and choledoscopy using a SpyGlass Direct Visualization System (Boston Scientific, Milan, Italy). The polypoid lesion had a black surface (Fig. 3). The specimen taken by the micro-forceps was inadequate for a histological diagnosis. A direct choledoscopy was then performed, and a diagnostic gastroscope was directly inserted through the papilla. The polypoid lesion was endoscopically removed with a regular forceps and no complication was registered after the procedure. The lesion was a retained silk knot (gossypibomas) from the previous video-laparoscopic cholecystectomy (Fig. 4). Three months after hospital discharge the patient was well recovered and no complains of abdominal discomfort.

Gossypibomas are any foreign bodies left inside the body of patient after an operation. With more than 28.4 million operations performed in the United States each year, the number of cases in which foreign bodies are left during the procedures has been



Fig. 1. Contrast-enhanced computed tomography of the abdomen confirming the dilation of the common bile duct.

estimated at around 1500 [1]. Regarding cholecystectomy, complications are divided into bile duct injury or ligation and a variety of pathologic fluid collections or retained foreign body [2]. Lesions are bile duct injury, accidental bile duct ligation, ductal stricture, abscess, biloma, hematoma, infected pancreatic pseudocyst, and stones. Symptoms varied from persistent abdominal discomfort as in our case to persistent abdominal pain associated to fever and jaundice. Usually further surgical procedure is required to remove foreign bodies but recently interventional radiological or endoscopic approaches have been suggested with reduced surgical complications and hospital stay [3]. Direct choledoscopy can be performed only in selected cases and often needs a two-step procedure but it provides a very accurate visualization of the inner surface of the bile duct for operation [3].

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Fig. 2. Endoscopic ultrasonography showing the presence of a hilar polypoid lesion.

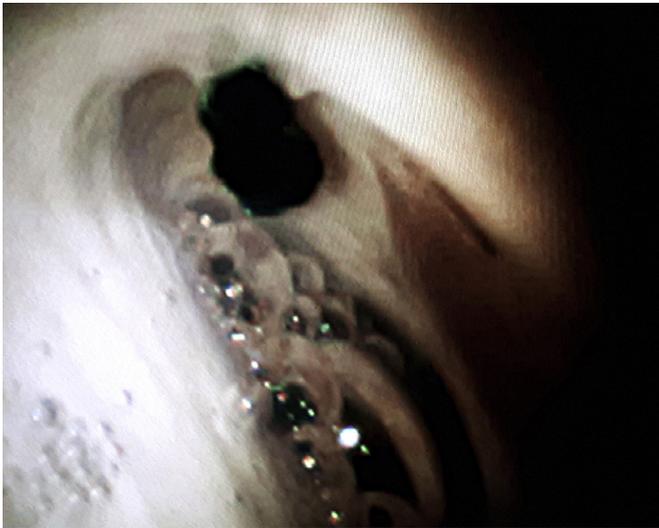


Fig 3. SpyGlass Direct Visualization System showing the polypoid lesion having a black surface.

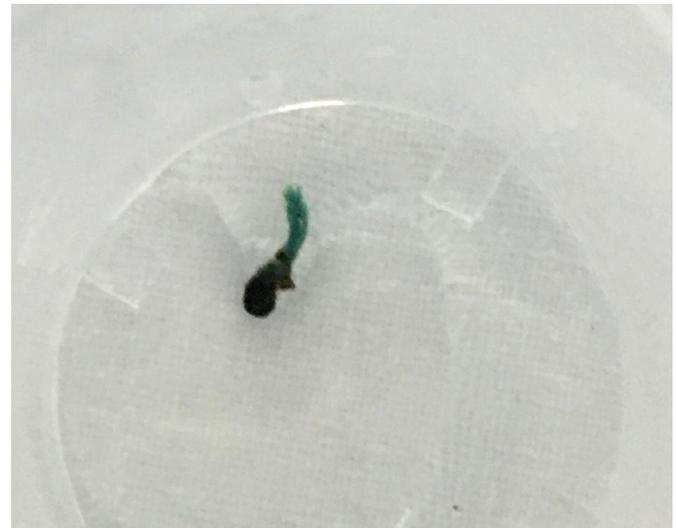


Fig. 4. Retained silk knot of the previous video-laparoscopic cholecystectomy.

Contributors

PR proposed the study and wrote the first draft. All authors contributed to the design and interpretation of the study and to further drafts. PR is the guarantor.

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Ethical approval

The consent for publication was obtained from the reported patient.

Competing interest

No benefits in any form have been received or will be received from a commercial party related directly or indirectly to the subject of this article.

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