

Title:

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Endoscopic rescue of a fistulizing biliary plastic stent

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Dear Editor,

The complication rate associated with biliary plastic stents is 8-10 % (1), with migration being the most common. Duodenal perforation secondary to such migration is infrequent (2,3), with a single case of jejunojejunal fistula described (4). These complications were treated endoscopically (3-5) or surgically, as in the case of entero-enteric fistula. Currently, given the rarity of these complications, there is no established therapeutic consensus (2,3).

Case report

We present the case of a 55-year-old male with a history of cholecystectomy complicated by perforation of the common bile duct, contained with placement of a 10 French thick x 7 cm long plastic stent by means of endoscopic retrograde cholangiopancreatography (ERCP). After placement, the patient evolved favorably in terms of the perforation. After four months, the stent was removed and the patient remained clinically stable. In subsequent years, he presented with acute cholangitis

secondary to biliary lithiasis and residual benign stenosis of the common bile duct, which resolved after ERCP with stone extraction and placement of a new plastic stent. Despite this, in the same year, the patient presented with new episodes of acute cholangitis for the same reason described above, which recurred despite stent replacements. Finally, given the recurrence of infectious symptoms, hepatojejunostomy was proposed.

The surgery was successful, with the only incident being the failure to identify the plastic stent in the biliary tract, implanted two months earlier. An abdominal computed tomography (CT) scan was performed, identifying a stent with a fistulous trajectory between the duodenal wall and the wall of the ascending colon (Fig. 1A and B).

In view of these findings, it was decided to perform a gastroscopy, in which the migrated plastic biliary stent was identified at the level of the second duodenal portion, with the distal end fistulizing the posterior duodenal wall and the proximal end free in the duodenal lumen, in front of the papilla. The stent was removed with a polypectomy loop and subsequently, a millimetric solution of continuity in the duodenal wall was verified, with no signs of infection or other associated complications (Fig. 1C). In our case, this solution of continuity was not closed, despite what is stated in the literature (3-5), due to the fact that it was minimal, there were no signs of complication and the communication to the colon was objectified.

After the endoscopic procedure, the patient evolved favorably and was followed up with an abdominal CT scan at one month, with no fistulous tract and no associated complications.

With this case, we wish to present the endoscopic approach as a therapeutic option to be taken into account in the therapeutic algorithm for duodenal perforation and/or endoscopically accessible entero-enteric fistulas secondary to the migration of plastic biliary stents.

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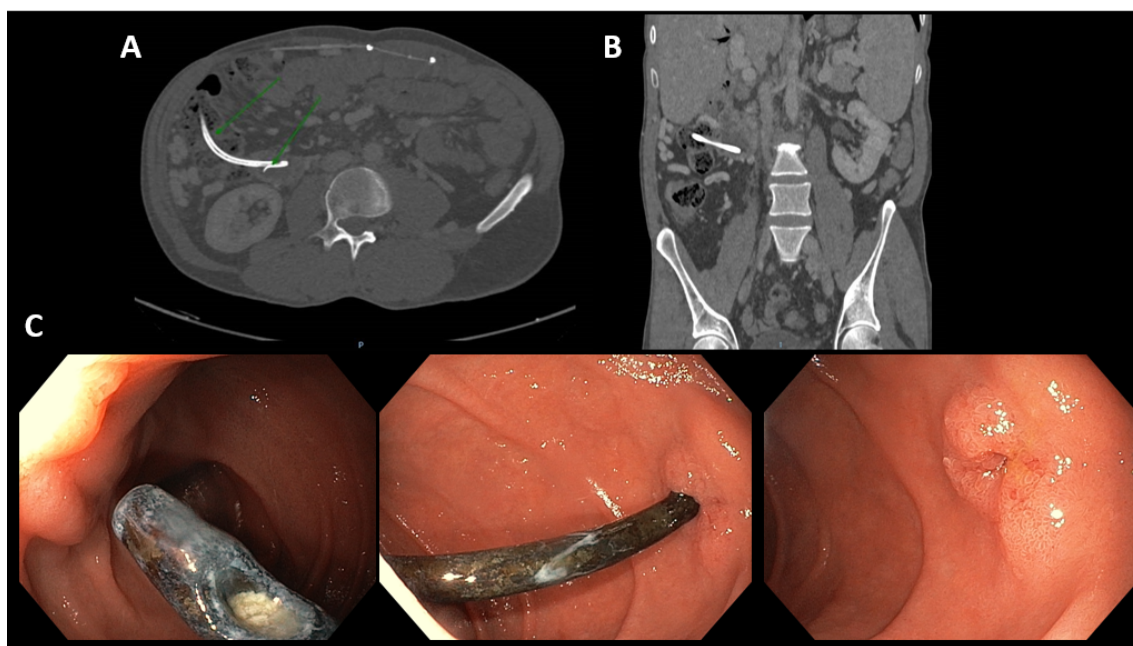


Fig. 1. A and B. Computed tomography (CT) scan of the abdomen with intravenous contrast, axial (A) and coronal (B) sections, showing a migrated biliary stent with a fistulous tract between the second duodenal portion and the ascending colon. C. Phases of the endoscopic extraction of the stent, from left to right: proximal end of the migrated plastic biliary stent free in the duodenal lumen, distal end fistulizing through the posterior duodenal wall, and solution of continuity after stent extraction.