How to solve misplacement of a lumen-apposing metal stent during cholecystogastrostomy: immediately perform a second one!

A 66-year-old man was referred to our endoscopy unit because of a computed tomography (CT) scan diagnosis of a 4-cm pancreatic head neoplasia causing malignant biliary obstruction (MBO) with a 3-cm distal common bile duct (CBD) obstruction owing to neoplastic infiltration. The patient underwent endoscopic ultrasoundography (EUS) plus fine needle biopsy with macroscopic on-site evaluation (MOSE) of the specimen [1]. Subsequently an attempt to approach the major papilla for CBD drainage was performed using endoscopic retrograde cholangiopancreatography (ERCP) but was unsuccessful because of infiltration in the duodenal and papillary area. Because of gallbladder distension, we therefore decided to perform a freehand cholecystogastrostomy under EUS guidance from the anterior wall of the gastric antrum with a new 10 × 20-mm electrocautery-enhanced lumen-apposing metal stent (EC-LAMS; Hot-Spaxus; Taewoong Medical Co., Gimpo, Korea) [2, 3]. During the EC-LAMS placement, after the device had entered the gallbladder, the distal flange was accidentally released inside the abdominal cavity, causing bile extravasation inside the peritoneum. We extracted the stent with a tooth-rat forceps and immediately performed a successful second cholecystogastrostomy (Video 1).

In the next 24 hours, the patient did not experience abdominal pain or fever and was discharged without symptoms 3 days later. A CT scan performed 12 hours after the procedure showed a correctly placed LAMS, with a small bile extravasation inside the peritoneum (Fig. 1a).

The patient received antibiotic therapy for 5 days and, 1 week after the procedure, a second CT scan was performed, which showed complete resolution of the abdominal bile extravasation (Fig. 1b). In conclusion, should misplacement of an EUS-guided LAMS occur, in referral centers and expert hands, an immediate second LAMS placement can avoid percutaneous or surgical intervention.

E-Videos

Video 1 A failed cholecystogastrostomy owing to accidental opening of the distal flange in the abdominal cavity is salvaged with an immediate second rescue cholecystogastrostomy.

Fig. 1 Computed tomography images performed: a 12 hours after the procedure, showing bile extravasation; b 7 days after the procedure, showing complete resolution of the abdominal bile extravasation.

Competing interests

The authors declare that they have no conflict of interest.
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