Endoscopic drainage and necrosectomy for inoperable gangrenous cholecystitis

A 56-year-old man with liver, peritoneal, and lymph node metastases after previous transthoracic esophagectomy was diagnosed with acute calculus cholecystitis. Transduodenal endoscopic ultrasound-guided gallbladder drainage (EUS-GBD) was performed using a 10 × 10 mm cautery-enhanced lumen-apposing metal stent (LAMS). Purulent fluid was aspirated and submitted for culture, which identified Enterococcus faecium. After EUS-GBD the patient initially recovered well, but 3 weeks later fever and abdominal pain recurred. A computed tomography (CT) scan revealed a persistent hydropic gallbladder suggesting stent dysfunction. An upper endoscopy was then performed, which showed obstruction of the LAMS with necrotic tissue (▶ Fig. 1). Using forceps and a snare, the necrotic tissue was removed from the stent and gallbladder (▶ Video 1). The largest specimen removed measured 9 × 1.5 cm and histopathological examination revealed a necrotic gallbladder wall (▶ Fig. 2). Complete evacuation of debris was confirmed by cholecystoscopy, which also showed a vital gallbladder wall. Two double-pigtail stents, 7 Fr × 5 cm, were placed to allow long-term drainage. Hereafter the patient showed significant clinical improvement without recurrence of fever or pain. A CT scan performed 2 weeks later revealed collapsed gallbladder without signs of inflammation.

EUS-GBD using LAMS is an innovative technique for patients with acute cholecystitis who are unfit for surgery [1]. The solid necrotic tissue in the gallbladder contained pockets of pus, which impeded adequate drainage. The LAMS allowed complete removal of the necrotic tissue by endoscopy.

In conclusion, to the best of our knowledge, we present the first report of endoscopic drainage and subsequent endoscopic necrosectomy of gangrenous cholecystitis.

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Competing interests

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References


Bibliography

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