Endoscopic ultrasound-guided transgastric drainage for omental bursa abscess complicating appendicitis with diffuse peritonitis

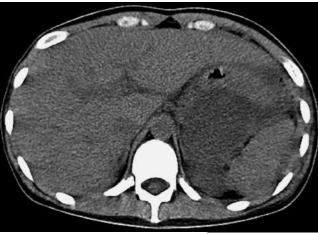


Fig. 1 Computed tomography showed a 5-cm omental bursa abscess adjacent to the stomach.

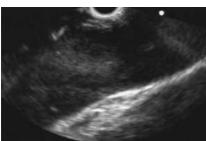


Fig. 2 Endoscopic ultrasound view of the omental bursa abscess.



Fig. 3 7 Fr naso-abscess Teflon catheter and a 5-cm-long 10 Fr double pigtail Teflon stent was successfully inserted into the abscess cavity.

Surgery is currently the mainstay of treatment for intra-abdominal abscess, although operative mortality is high [1]. Percutaneous drainage is another option but is associated with significant morbidity due to the relatively long route used for catheter placement [1,2]. Endoscopic ultrasound (EUS)-guided drainage is potentially safe and effective for intra-abdominal abscess. We report a case of omental bursa abscess complicating appendicitis with diffuse peritonitis that was successfully and safely drained under EUS guidance.

A 28-year-old woman underwent appendectomy and surgical irrigation drainage of Pouch of Douglas, left subphrenic space, and right iliac fossa for appendicitis with diffuse peritonitis. Postoperatively after 2 weeks, the patient continued to have a high fever with elevated C-reactive protein. Computed tomography revealed a 5-cm omental bursa abscess adjacent to the stomach (• Fig. 1). The decision to perform EUS-guided drainage was made to avoid further open surgery. The abscess was visualized with a curvilinear echoendoscope (GF UC 2000P, Olympus Co., Tokyo, Japan) before being punctured with a 19-gauge Echotip Ultra needle (Cook Endoscopy, Winston-Salem, North Carolina, USA) (Fig. 2). A 480-cm-long, 0.035-inch guide wire (Cook Endoscopy) was inserted into the abscess before the needle was removed, followed by placement of a 7 Fr naso-abscess Teflon catheter (Cook Endoscopy). A 5-cm-long 10 Fr double pigtail Teflon stent (Cook Endoscopy) was also inserted adjacent to the naso-abscess catheter to enable irrigation (Fig. 3). There were no procedure-related complications. The catheter was removed after 1 week, when purulent material had ceased to drain from the catheter. The stent was removed 4 weeks later when CT showed complete abscess resolution. The patient was asymptomatic without any evidence of abscess recurrence at 2 months follow-up.

EUS-guided drainage of omental bursa abscess complicating appendicitis with diffuse peritonitis is safe and effective and could be an alternative therapy to surgery and percutaneous drainage.

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