



## EUS-guided drainage of a pelvic abscess

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Pelvic abscesses are often the last stage in the progression of an abdominal infectious condition. Because of their resistance to antibiotic therapy, pelvic abscesses are usually drained by surgery or by CT-guided or US-guided interventions.<sup>1-3</sup> EUS-guided drainage of pelvic abscesses also has been demonstrated to be feasible, efficient, and safe.<sup>4</sup> However, emerging approaches such as lumen-apposing metal stents (LAMSS) open a new era in the management of these lesions.<sup>5,6</sup> We present the case of a 50-year-old

woman with hypogastric pain, low-grade fever, diarrhea, and weight loss. Colonoscopy revealed signs of diverticulitis, and empiric antibiotic therapy was initiated; an abdominal CT scan was performed (Fig. 1), and an 8-cm pelvic abscess was found. Owing to the difficulty of percutaneous drainage, EUS-guided drainage was performed (Video 1, available online at [www.VideoGIE.org](http://www.VideoGIE.org)). The abscess was very close to the colonic wall (<10 mm) (Fig. 2), and no bulge in the rectum was observed



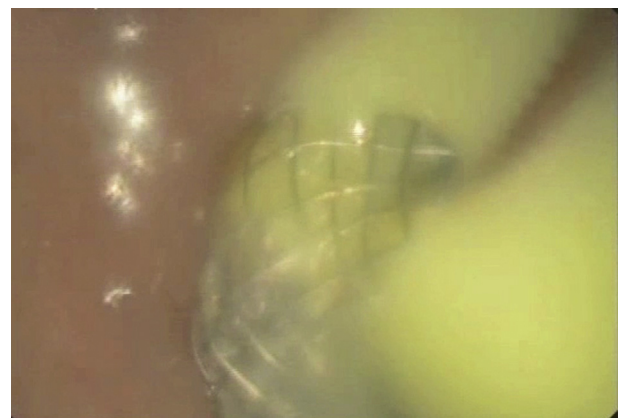
**Figure 1.** Initial CT scan showing pelvic abscess (asterisks).



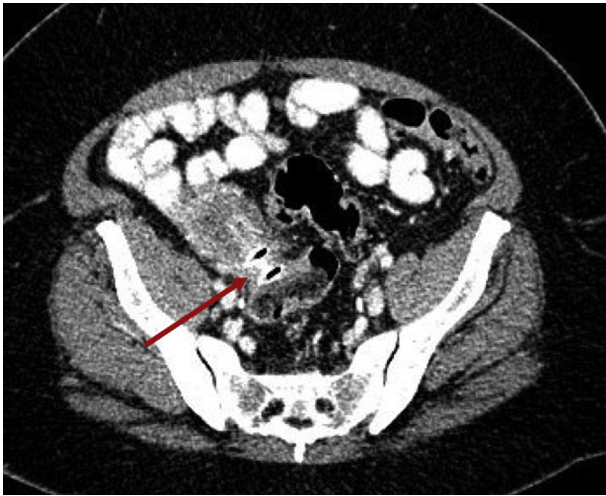
**Figure 3.** EUS view showing deployment of lumen-apposing metal stent distal flange.



**Figure 2.** EUS view showing pelvic abscess.



**Figure 4.** Endoscopic view showing successful drainage.



**Figure 5.** CT scan 3 weeks later, showing resolution of abscess. *Red arrow*, lumen-apposing metal stent.

endoscopically. It was initially punctured at 20 cm from the anal verge with a 19-gauge needle, and 5 mL of purulent material was obtained and sent for culture. Then, an 8-mm × 8-mm LAMS (Hot Axios; Boston Scientific, Marlborough, Mass, USA) was deployed, the distal flange being placed inside the collection (Fig. 3) and the proximal flange being released in the colonic lumen (Fig. 4). Immediately after LAMS placement, a large amount of purulent material started to flow into the colon. *Escherichia coli*, *Bacteroides vulgatus*, and *Enterococcus avium* were isolated in the cultures. Therefore, antibiotic treatment was completed with piperacillin-tazobactam 4/0.5 mg every 6 hours. The patient became asymptomatic during the first 48 hours, and a follow-up CT scan at week 3 (Fig. 5) showed complete resolution of the abscess. A programmed surgical sigmoidectomy was then performed because of the presence of a small colovesical fistula. After surgery, the patient recovered well, and no relapse of symptoms was observed at the 6-month follow-up visit. EUS-guided drainage of a pelvic abscess is

a safe and minimally invasive technique with excellent clinical outcomes.<sup>4</sup> LAMSs should be considered in this clinical scenario because of their special characteristics and excellent performance, and should be considered as an intermediate step to put the patient into an optimal condition for surgery, if needed.<sup>5,6</sup>

## DISCLOSURE

*All authors disclosed no financial relationships relevant to this publication.*

*Abbreviation: LAMS, lumen-apposing metal stent.*

## REFERENCES

1. Ballard DH, Mokkarala M, D'Agostino HB. Percutaneous drainage and management of fluid collections associated with necrotic or cystic tumors in the abdomen and pelvis. *Abdom Radiol (NY)* 2019;44:1562-6.
2. Akinci D, Ergun O, Topel Ç, et al. Pelvic abscess drainage: outcome with factors affecting the clinical success. *Diagn Interv Radiol* 2018;24:146-52.
3. Rigas DA, Brook OR. Image-guided treatment of abdominal and pelvic abscesses. *Semin Roentgenol* 2017;52:95-100.
4. Fernandez-Urien I, Vila JJ, Jimenez FJ. Endoscopic ultrasound-guided drainage of pelvic collections and abscesses. *World J Gastrointest Endosc* 2010;2:223-7.
5. Poincloux L, Caillol F, Allimant C, et al. Long-term outcome of endoscopic ultrasound-guided pelvic abscess drainage: a two-center series. *Endoscopy* 2017;49:484-90.
6. Mudireddy PR, Sethi A, Siddiqui AA, et al. EUS-guided drainage of post-surgical fluid collections using lumen-apposing metal stents: a multi-center study. *Gastrointest Endosc* 2018;87:1256-62.

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