Transrectal ultrasound-guided endoscopic drainage and vacuum therapy of pelvic abscesses: an alternative to (computed tomography-guided) percutaneous drainage

A 43-year-old, otherwise healthy man had increasing abdominal pain in the lower abdomen without a fever. His leukocyte count was $20.0 \times 10^9/L$ (normal range: $4-9 \times 10^9/L$) and the C-reactive protein level was $155.5 \text{mg/L}$ (normal $<5 \text{mg/L}$). Abdominal computed tomography (CT) confirmed the suspected diagnosis of diverticulitis and revealed a large pelvic abscess (Fig. 1). The intended CT-guided drainage [1] carried a high risk of injury to the iliac vessels in a translumbar approach and of damaging the sciatic nerve for access through the obturator foramen. The overlying small bowel forbade a ventral approach. The patient underwent transrectal endosonography (Fig. 2) for localization of the abscess. Using an endoscopic cystoenterostomy device (Cysto-tome, Cook Medical, Winston-Salem, North Carolina, USA), originally developed for transgastric puncturing of pancreatic pseudocysts, the abscess was punctured under ultrasonographic guidance. After the puncture site was emptied of pus and dilated with a standard balloon (Fig. 3), the abscess cavity was flushed and a vacuum therapy sponge (Endo-SPONGE, B. Braun, Melsungen, Germany) was inserted into it (Fig. 4). The patient received antibiotics and parenteral feed for the first week. No ostomy was placed. The vacuum therapy sponge was changed endoscopically on every third day until day 17, when the patient was discharged. Laparoscopic sigmoid resection was performed 1 month later without complications. The abscess should be punctured as far orally as possible because the sigmoid resection must include the fistula created by the puncture. Otherwise, the resection line will unnecessarily be pushed further aborally. Transrectal one-time abscess puncture [2], and temporary transrectal...
drain placement are feasible options [3]. However, in case of complicated diverticulitis, transrectal ultrasound-guided endoscopic drainage followed by vacuum sponge therapy similar to that for an anastomotic leak in the same region [4, 5] is a safe alternative in the hands of an experienced endoscopist and might spare the patient an ostomy.

Endoscopy_UCTN_Code_TTT_1AS_2AZ

Competing interests: None

J. Knuth1, B. Krakamp2, M. M. Heiss1, D. R. Bulian1

1 Department of Abdominal, Vascular and Transplant Surgery, Merheim Medical Center, Witten/Herdecke University, Cologne
2 Department of Internal Medicine I, Merheim Medical Center, Witten/Herdecke University, Cologne

References
3 Hovsepian DM. Transrectal and transvaginal abscess drainage. J Vasc Interv Radiol 1997; 8: 501 –515

Bibliography
DOI http://dx.doi.org/10.1055/s-0032-1326123
Endoscopy 2013; 45: E3–E4 © Georg Thieme Verlag KG Stuttgart · New York ISSN 0013-726X

Corresponding author
J. Knuth
Department of Abdominal, Vascular and Transplant Surgery
Merheim Medical Center
Witten/Herdecke University
Cologne
Fax: +49-(0)221-89078561
jurgen.knuth@gmx.net