

A vaginal drain of a pelvic abscess due to colonic diverticulitis

Marco Milone, Miguel Emilio Sosa Fernandez, Piero Venetucci, Paola Maietta, Loredana Maria Sosa Fernandez, Caterina Taffuri, Francesco Milone

Marco Milone, Miguel Emilio Sosa Fernandez, Piero Venetucci, Paola Maietta, Loredana Maria Sosa Fernandez, Caterina Taffuri, Francesco Milone, Department of Advanced Biomedical Science, University "Federico II" of Naples, 80131 Naples, Italy

Author contributions: Milone M and Sosa Fernandez ME designed the report; Venetucci P performed image diagnosis; Maietta P, Sosa Fernandez LM and Taffuri C contributed to the acquisition, analysis and interpretation of data; Milone F made the final approval of the version to be published.

Correspondence to: Marco Milone, MD, Department of Advanced Biomedical Science, University "Federico II" of Naples, Via Pansini 5, 80131 Naples, Italy. milone.marco@alice.it
Telephone: +39-81-7463067 Fax: +39-81-7462896

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Core tip: Large diverticular abscesses (> 3 cm) should be treated by antibiotics and percutaneous drain. Abscess deep in the pelvis pose a unique problem because numerous intervening structures create obstacles to safe percutaneous access. Transvaginal drain of pelvic abscess could be an useful alternative, when percutaneous approach is not feasible.

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Abstract

Although well recognized for tubo-ovarian abscesses, we report, in our best knowledge, the first case of a vaginal drain of a pelvic abscess due to colonic diverticulitis. A 78-year-old patient presented with abdominal and pelvic pain, fever (39.3 °C) and an elevated white blood cell count (18500/mL). After abdominopelvic computed tomography the patient was presumed to have a pelvic abscess, which developed as a complication of the sigmoid diverticulitis. Due to the numerous intervening structures that create obstacles to safe percutaneous access, we planned a trans-vaginal drain. A rapid recovery was obtained within 2 d from the procedure and, at present, the follow-up was uneventful after 18 mo. We believe that transvaginal drain of pelvic abscess could be a useful alternative, when percutaneous approach is not feasible.

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Key words: Vaginal; Drain; Diverticulitis; Pelvic abscess; Echography

INTRODUCTION

Although well recognized for tubo-ovarian abscesses^[1,2], we report, in our best knowledge, the first case of a vaginal drain of a pelvic abscess due to colonic diverticulitis.

CASE REPORT

A 78-year-old patient presented with abdominal and pelvic pain. Physical examination demonstrated fever (39.3 °C) and mild tachycardia (120/min) with bilateral lower abdominal quadrant tenderness. Blood analysis revealed an elevated white blood cell count (18500/mL). The abdominopelvic computed tomography scan revealed a left sided collection with a prominent air-fluid level suggesting pelvic abscess, measuring 8 cm × 6 cm, close to the vagina. Multiple diverticula were identified and the sigmoid colon was lying around the collection with its borders that could not be distinguished from the abscess. The mesentery of the sigmoid colon was also found to be thickened due to inflammation (Figure 1).

The patient was presumed to have a pelvic abscess, which developed as a complication of the sigmoid di-

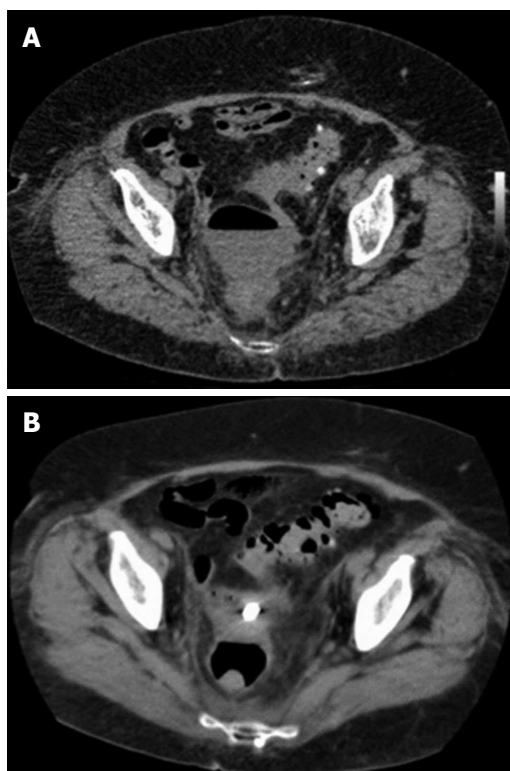


Figure 1 Abdominopelvic computed tomography. A: Before the procedure; B: After the procedure.

diverticulitis, and, according to guidelines, we planned the drainage of the lesion^[3]. However, due to the numerous intervening structures that create obstacles to safe percutaneous access, we planned a trans-vaginal drain.

The endovaginal ultrasound sonography (US) examination was performed using an end-fire endovaginal US probe with an attached needle guide. A puncture needle was introduced into the fluid collection under continuous US guidance and fluid from the cavity was aspirated with a syringe. A guidewire was introduced into the cavity *via* the puncture needle. Then a self-retaining pigtail catheter with a string lock was introduced over the guide wire into the cavity (Seldinger technique). The catheter was left *in situ* and irrigated three times per day.

A rapid recovery (normal temperature and leukocyte levels) was obtained within 2 d from the procedure (Figure 1). The catheter was removed after 2 wk, when the spontaneous output was clear and was less than 10 mL per day.

The short-term follow-up consisted of outpatient visits 7 to 10 d and 3 to 4 wk after operation. For long-term follow-up, a visit was scheduled and included an endovagi-

nal US every 3 mo. At present the follow-up was uneventful after 18 mo.

DISCUSSION

Large diverticular abscesses (> 3 cm) should be treated by antibiotics and percutaneous drain. Percutaneous drain is the standard therapy in the absence of indications for immediate surgery^[3]. However, abscess deep in the pelvis pose a unique problem because numerous intervening structures create obstacles for safe percutaneous access. These include pelvic bones, bowel, bladder, iliac vessels, and female reproductive organs. Alternative approaches to deep pelvic abscess include transvaginal, transrectal, transperineal and transgluteal punctures^[4,5]. Transvaginal drainage has been described in several reports^[1,2], but there has been no previous documentation of a vaginal drain of a pelvic abscess due to colonic diverticulitis.

In this case, rapid recovery was obtained with long-term disease-free survival, which is encouraging for its future use as an alternative drain of abscess due to diverticulitis.

Although further prospective studies evaluating the clinical usefulness of transvaginal drain of pelvic abscesses due to colonic diverticulitis are needed to give a definitive conclusion, we believe that transvaginal drain of pelvic abscess could be a useful alternative, when percutaneous approach is not feasible.

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