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Standardisation of the procedure

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Abstract

Study Objective:
To demonstrate the application of the so called reverse technique to approach deep infiltrating endometriosis nodules affecting the retrocervical area, the posterior vaginal fornix and the anterior rectal wall. In this video the authors describe the complete procedure in 10 steps in order to standardise it and facilitate the comprehension and the reproduction of such procedure in a simple and safe way.

Design
Case report.

Setting:
Private hospital in Curitiba, Paraná, Brazil.

Patient:
A 32-year-old woman was referred to our service complaining about cyclic dysmenorrhea, dyspareunia, chronic pelvic pain, and cyclic dyschezia. Transvaginal ultrasound with bowel preparation showed a 2.4-cm endometriotic nodule at the retrocervical area, uterosacral ligaments, posterior vaginal fornix, and anterior rectal wall, infiltrating up to the muscularis, 10 cm far from the anal verge.

Interventions
Not Aplicable

Measurements and Main Results
Under general anesthesia, the patient was placed in the dorsal decubitus position with her arms alongside her body and her lower limbs in abduction. Pneumoperitoneum was achieved using a Veress needle placed at the umbilicus. Four trocars were placed according to the French technique: a 10-mm trocar at the umbilicus for

the zero-degree laparoscope; a 5-mm trocar at the right anterosuperior iliac spine; a 5-mm trocar in the midline between the umbilicus and the pubic symphysis, approximately 8 to 10 cm inferior to the umbilical trocar; and a 5-mm trocar at the left anterosuperior iliac spine. The entire pelvis was inspected for endometriotic lesions (step 1). The implants located at the ovarian fossae were completely removed. (step 2). The ureters were identified bilaterally, and both para-rectal fossae were dissected, preserving the hypogastric nerves (step 3). The lesion was separated from the retrocervical area, and the posterior vaginal fornix was resected (reverse technique) leaving the disease attached to the anterior surface of the rectum (step 4). The lesion was shaved off the anterior rectal wall using a harmonic scalpel (step 5). The anterior rectal wall was closed using X-shaped stitches of 3-0 PDS (polydioxanone) suture, in two layers (step 6). The specimen is extracted through the vagina (step 7). The posterior vaginal fornix is reattached to the retrocervical area using X-shaped sutures of zero poliglecaprone 25 (step 8). Pneumatic test was performed to check the integrity of the suture (step 9). At the end of the procedure, hemostasis is controlled and the abdominal cavity is irrigated using lactate ringer solution (step10).

Conclusion

Laparoscopic reverse technique is an alternative approach to face retrocervical or rectovaginal nodules infiltrating the anterior rectal wall. In this technique, the separation of the nodule from the rectal wall is performed at the end of the surgery and not at the beginning as performed within the traditional technique. This enables the surgeon to perform a more precise dissection of the endometriotic nodule from the rectal wall because of the increased mobility of the bowel. The wider range of movements serves as an ergonomic advantage for the subsequent dissection of the lesion from the rectum, allowing the surgeon to decide the best technique to apply for the treatment of the bowel disease, either rectal shaving, discoid or segmental resection.