Surgical principles of segmental rectosigmoid resection and reanastomosis for deep infiltrating endometriosis

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Video Article

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Keywords

Endometriosis; surgery; laparoscopy

Disclosure statement

The authors declare that they have no conflicts of interest and nothing to disclose

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ABSTRACT

Objective: To show the surgical steps used to perform segmental rectosigmoid resection and reanastomosis in a deep infiltrating endometriosis (DIE) setting.

Design: Step-by-step video demonstration of the technique.

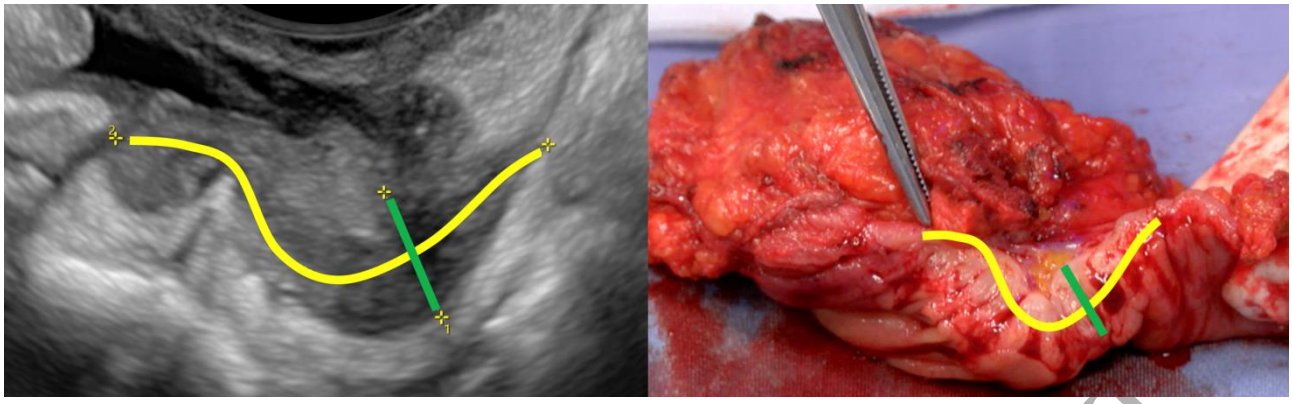
Setting: In spite of the efforts made to identify criteria able to reliably predict which patients would be more likely to benefit from segmental bowel resection, such predictability remains an area of controversy and ambiguity. Furthermore, a standardized surgical technique has not yet been defined. Based on our experience, DIE patients with colorectal involvement should be considered for segmental resection followed by anastomosis if they present with lesions not suitable for shaving/nodulectomy (i.e. large, deeply infiltrating nodules with extensive circumferential involvement). In our practice, a careful patient selection together with the adoption of a standardized surgical technique allowed us to minimize the complications potentially derivable from a segmental bowel resection.

Patient: A 27-year-old woman diagnosed by ultrasonography as having a bowel endometriotic nodule of 33 x 8 x 14 mm infiltrating the inner layer of the muscularis propria at the recto-sigmoid junction, with a distance from the anal verge of approximately 12 cm and an estimated stenosis of 50%.

Interventions: A 3D laparoscopic segmental rectosigmoid resection was performed and indocyanine green-enhanced fluorescent angiography was used to assess the perfusion of the bowel before the completion of the anastomosis.

Main results: The overall operative time was 135 minutes, and no intraoperative complication occurred. Complete excision of endometriosis was achieved. The estimated blood loss was 30 mL. Intra-abdominal drain was not placed and urinary catheter was removed at the end of surgery. The patient was discharged 6 days after surgery and did not experience post-operative complications. Diameters of bowel endometriotic nodule, measuring on fresh specimen, were 34 x 8 x 13 mm.

Conclusions: Advanced laparoscopic surgical skills are needed to appropriately perform a segmental rectosigmoid resection. Sub-specialization and an adequate pretreatment evaluation are crucial to ensure the correct decision making process within a complex algorithm for surgical management of bowel endometriosis.



VIDEO LEGEND

Laparoscopic segmental rectosigmoid resection for deep infiltrating endometriosis