

# Deep endometriosis with severe rectal involvement

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## INTRODUCTION

Deep infiltrating endometriosis is a severe form of endometriosis that affects 1–2% of women of reproductive age. It is characterized by the presence of endometrial tissue that penetrates 5 mm or more below the peritoneum. This condition is often associated with severe pelvic pain and infertility. It frequently presents as a solitary nodule measuring over 1 centimeter, and in 5–12% of cases, it involves the intestine, predominantly the rectum and sigmoid colon (90%).<sup>1</sup> Up to 80% of infertile women exhibit some degree of endometriosis.<sup>2,3</sup> In certain cases, surgical intervention can lead to substantial improvements in fertility outcomes. Approximately one-third of patients achieve pregnancy within the first year, with two-thirds achieving pregnancy within three years following surgery.<sup>4,5</sup>

## CASE DESCRIPTION

A 25-year-old patient with a medical history of laparoscopic ovarian cystectomy for hemorrhagic cysts was seeking pregnancy. The patient presented with dyspareunia and chronic pelvic pain in the left iliac fossa. These symptoms were unresponsive to oral contraceptives and exacerbated during defecation. A physical examination revealed a tender nodule in the pouch of Douglas, as detected during the bimanual examination. Due to the incomplete nature of the colonoscopy, specifically the presence of angulation at the rectosigmoid junction, a virtual colonoscopy was performed. This subsequent examination revealed the aforementioned narrowing, accompanied by indications of local inflammation, with no additional proximal lesions detected. A pelvic magnetic resonance imaging scan revealed the presence of bilateral endometriomas, hematosalpinx, and retrocervical fibrous tissue with a cystic-hemorrhagic component. This component was found to be infiltrating both uterosacral ligaments, the posterior vaginal fornix, and the rectum, affecting 40% of the rectal circumference in at least two segments. Additionally, fibrous thickening of the vesicouterine peritoneum was observed. A laparoscopic approach with a uterine mobilizer was performed to achieve adequate exposure of the posterior compartment, which was improved by initially addressing the endometriomas. During the

dissection of the rectovaginal endometriotic nodules, both ureters were identified and lateralized to avoid injury. The uterosacral ligaments were resected, the rectovaginal space was entered, the rectum was released, and the anatomy was restored. This allowed for evaluation of colorectal involvement and definition of the surgical approach. In light of the two lesions with transmural involvement, a non-organ-sparing segmental resection was deemed the optimal surgical intervention. A comprehensive mechanical anastomosis was executed, ensuring the preservation of the mesorectum. The patient demonstrated a positive progression and was discharged on the fourth day.

## CONCLUSION

Determining the degree of colorectal involvement is essential for defining treatment which may entail non-resective surgery (e.g., shaving and/or discoid resection of the rectum) or organ resection. The latter is recommended for multifocal lesions or involvement of more than 50% of the circumference, as in this case. This is a safe laparoscopic procedure, and given the benign nature of the disease, the mesorectum can be preserved. The vast majority of patients demonstrate substantial improvement in pain and quality of life, accompanied by low rates of recurrence.

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The authors declare no conflict of interest. **Joaquín Tognelli:** [tognelli.joaquin@gmail.com](mailto:tognelli.joaquin@gmail.com)  
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