

Intraoperative transvaginal ultrasound to standardize bowel endometriosis shaving

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Objective: To study the use of intraoperative transvaginal ultrasound after bowel endometriosis shaving.

Design: Stepwise demonstration with a narrated video footage of preoperative and intraoperative ultrasound to evaluate the extent of an endometriotic rectal nodule.

Setting: Lausanne University Hospital and Geneva University Hospital.

Patient(s): Two women with symptomatic endometriosis rectal lesion.

Intervention(s): Preoperative transvaginal ultrasound was performed to measure the rectal nodule. After completing bowel shaving, the surgeon conducted both clinical and sonographic evaluations of the rectal wall. Clinically, this was performed using laparoscopic grasping forceps and sonographically with a transvaginal probe after filling the pelvis with saline solution.

Main Outcome Measure(s): Assessment of the rectal wall for residual disease after bowel shaving and evaluation of the necessity for additional bowel resection.

Result(s): After sonographic evaluation of the rectal wall, the surgeon decided in both patients to perform a discoid resection because of the presence of a residual rectal disease despite thorough bowel shaving.

Conclusion(s): Intraoperative transvaginal ultrasound after bowel endometriosis shaving is a promising technique that is safe, reproducible, and efficient. It aids surgeons in accurately assessing the extent of excision of deep rectosigmoid infiltrating endometriosis and determining the necessity of additional bowel resection to reduce recurrence risk. Moreover, intraoperative ultrasound provides precise measurements of residual nodules, enabling differentiation between persistent, recurrent, or new lesions during follow-up.

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El resumen está disponible en Español al final del artículo.

Key Words: Rectum, endometriosis, bowel shaving, intraoperative ultrasound, discoid resection



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CRedit Authorship Contribution Statement

Milena Sophie Alec: Writing – original draft, Visualization, Conceptualization.

Jonas Jean Mathieu Vibert: Writing – review & editing, Validation. Fabian Grass: Visualization. Nicola Pluchino: Validation, Supervision, Conceptualization.

Declaration of Interests

M.S.A. has nothing to disclose. J.J.M.V. has nothing to disclose. F.G. has nothing to disclose. N.P. has nothing to disclose.

SUGGESTED READING

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Ethical statements: This study was considered as falling outside of the scope of the Swiss legislation regulating research on human subjects, so that the need for local ethics committee approval was waived. The patients included in this video gave consent for publication of the video and posting of the video online including social media, the journal website, scientific literature websites (such as PubMed, ScienceDirect, Scopus, etc.) and other applicable sites.

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Uso del Ultrasonido transvaginal intraoperatorio para estandarizar la resección de la endometriosis intestinal

Objetivo: Estudiar el uso del ultrasonido transvaginal intraoperatorio después de la resección de la endometriosis intestinal.

Diseño: Demostración paso a paso con un video narrado del uso preoperatorio e intraoperatorio del ultrasonido transvaginal en la evaluación de la extensión de un nódulo rectal endometriósico.

Lugar: Hospital Universitario de Lausana y Hospital Universitario de Ginebra.

Paciente(s): Dos pacientes con endometriosis intomática rectal.

Intervención(es): Se realizó ecografía transvaginal preoperatoria para medir el nódulo rectal. Después de completar la resección intestinal, el cirujano realizó evaluaciones clínicas y ecográficas de la pared rectal. Clínicamente, esto se realizó usando fórceps de agarre laparoscópico y ecográficamente con una sonda transvaginal después de llenar la pelvis con solución salina.

Principales medidas de resultado: Evaluación de la pared rectal después de la resección intestinal para detectar enfermedad residual y la necesidad de una resección intestinal adicional.

Resultado (s): Después de la evaluación ecográfica de la pared rectal, el cirujano decidió en ambas pacientes realizar una resección discoide adicional debido a la presencia de enfermedad rectal residual a pesar de la minuciosa cirugía previa del intestino.

Conclusión(es): La ecografía transvaginal intraoperatoria después de la resección de la endometriosis intestinal es una técnica prometedora y segura, reproducible y eficiente. Ayuda a los cirujanos a evaluar con precisión el alcance de la escisión de la endometriosis infiltrante rectosigmoidea profunda y a determinar la necesidad de una resección intestinal adicional para reducir el riesgo de recurrencia. Además, la ecografía intraoperatoria proporciona mediciones precisas de los nódulos residuales, lo que permite diferenciar entre lesiones persistentes, recurrentes o nuevas durante el seguimiento.