

Laparoscopic Total Colectomy With Transvaginal Specimen Extraction

Mirian L. Torales Villalba, Florencia Balmaceda, María Belén Dening, María Agustina Casas, Mariano Laporte

Section of Colorectal Surgery, Division of Surgery, Sanatorio Güemes, Buenos Aires, Argentina

To cite:

Torales Villalba M, Balmaceda F, Dening MB, et al. Laparoscopic Total Colectomy With Transvaginal Specimen Extraction. *Rev Argent Coloproctol*. 2026;37(1):29–30. doi: 10.46768/p2b1rc32.

► Additional supplemental material, when applicable, is published online only. To view, please visit the journal online: <https://doi.org/10.46768/p2b1rc32>

Received: 11-15-2025
Accepted: 12-2-2025

LINK

https://youtu.be/flhUq_Fh6sk

Keywords: *Familial Adenomatous Polyposis; Transvaginal specimen extraction; Total colectomy*

INTRODUCTION

Transvaginal specimen extraction in laparoscopic colectomies is a safe alternative in selected patients. By utilizing natural orifices, a minilaparotomy, often used for specimen removal, is avoided. Consequently, recovery parameters such as postoperative pain and wound-related complications are improved, positively impacting both aesthetic and functional outcomes.

DESCRIPTION

We present the case of a 45-year-old female patient with a family history of colorectal cancer. Colonoscopy revealed multiple colonic polyps (>100), with fewer than 20 polyps in the rectum. A diagnosis of familial adenomatous polyposis was established, and the patient underwent laparoscopic total colectomy with transvaginal specimen extraction.

The patient was placed in a modified Lloyd-Davies position. Access to the abdominal cavity was obtained using four trocars: three 12-mm trocars in the right lower quadrant, right upper quadrant, and supraumbilical region, and one 5-mm trocar in the left lower quadrant. Medial mobilization of the right colon was performed, dissecting the retroperitoneal structures. The ileocolic vessels were identified, ligated, and divided using a harmonic scalpel. The middle colic artery was identified and ligated. Lateral mobilization of the right colon along the parietocolic gutter was completed. The transverse colon was then mobilized by dividing the gastrocolic ligament and the transverse mesocolon, achieving complete mobilization of the colon up to the splenic flexure. Medial mobilization of the left colon was subsequently performed with division of the inferior mesenteric artery. This was followed by lateral mobilization along the left parietocolic gutter. The upper rectum was transected using a 60-mm laparoscopic linear stapler. The specimen was extracted transvaginally via a posterior colpotomy,

protected with a retractor and a wound protector. A colorectal anastomosis was performed using a 29-mm circular stapler, and its integrity was confirmed with an air leak test. The colpotomy was closed with absorbable sutures.

The patient recovered uneventfully and was discharged on postoperative day 3. Final pathology revealed over 100 polyps measuring 5-10 mm, including tubular and tubulovillous adenomas with low-grade dysplasia.

CONCLUSIONS

Laparoscopic total colectomy with transvaginal specimen extraction is a feasible alternative to standard techniques in carefully selected patients.

Contributions: MLTV: Conceptualization; Formal analysis; Investigation; Writing – original draft; Writing – review and editing

FB: investigation. MBD: investigation, writing original draft. MAC: conceptualization, methodology, formal analysis, supervision, writing, review and editing. ML: conceptualization, methodology, supervision, writing, review and editing.

Conflict of interest: None.

Funding: None.

Data availability: Data are of public access.

ORCIDiDs:

Torales Villalba M: <https://orcid.org/0009-0009-3162-9534>

Balmaceda F: <https://orcid.org/0009-0008-5296-6268>

Dening B: <https://orcid.org/0009-0008-7052-3380>

Casas MA: <https://orcid.org/0000-0003-1043-3865>

Laporte M: <https://orcid.org/0000-0002-6395-4325>

REFERENCES

- Franklin ME Jr, Kelley H, Kelley M, Brestan L, Portillo G, Torres J. Transvaginal extraction of the specimen after total laparoscopic right hemicolectomy with intracorporeal anastomosis. *Surg Laparosc Endosc Percutan Tech*. 2008;18(3):294-8.
- Chang JHE, Xu H, Zhao Y. et al. Transvaginal versus transabdominal specimen extraction in minimally invasive surgery: a systematic review and meta-analysis. *Langenbecks Arch Surg*. 2024;409:172.

© 2026 Los autores. Publicado por Revista Argentina de Coloproctología. Este artículo se distribuye bajo licencia Creative Commons Atribución-NoComercial-SinDerivadas 4.0 Internacional (CC BY-NC-ND 4.0).
<https://creativecommons.org/licenses/by-nc-nd/4.0/>



Correspondence to
Mirian Torales Villalba
lilimpark753@gmail.com