

# Laparoscopic laterally extended pelvic resection for gynecological malignancies

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Lateral isolated gynecological cancer infiltrating the pelvic side wall has been considered non-operable with a poor oncological outcome.<sup>1</sup> The development of the laterally extended endopelvic resection and surgical progress for disease, overcoming the endopelvic fascia infiltrating muscles and nerves, has allowed the possibility of treating these patients with curative intent.<sup>2</sup>

We describe for the first time the feasibility of laparoscopic laterally extended pelvic resection and a subsequent vascular bypass, with complete removal of disease in ovarian cancer recurrence. Laterally extended pelvic resection was defined as an en bloc lateral resection of a pelvic tumor involving the side-wall muscle, bone, major nerve, or major vascular structure.<sup>2-4</sup>

A 71-year-old patient was affected by isolated high grade serous ovarian cancer recurrence with involvement of the right external iliac vessels and ileo-psoas muscle on positron emission tomography/computed tomography. Laparoscopic laterally extended pelvic resection was performed with external iliac artery decompression and right obturator, genitofemoral nerve, and external iliac vein resection. A vascular bypass with bovine patch reconstruction was performed. Complete removal of the tumor recurrence was possible. Estimated blood loss was 700 mL and operative time was 385 min; hospital stay was 11 days.

Histology confirmed the isolated high grade serous nodal relapse with infiltration of the surrounding

tissue and free margins. After 30 days, an improvement in the swelling of the leg was observed despite deficiency in adduction and an obturator neuropathy. Re-evaluation at 6 months showed absence of recurrence [Video 1](#).

We have described for the first time laparoscopic laterally extended pelvic resection with a vascular bypass in ovarian cancer recurrence. Our experience shows that in a referral center, laparoscopic laterally extended pelvic resection can be safely offered in highly selected cases.

**Contributors** MCD: manuscript preparation, data collection, patient recruitment, participant at surgery, and video preparation. GS: manuscript preparation, data collection, patient recruitment, and video preparation. CC: manuscript preparation, video preparation, participant at surgery, and narrative voice. GV: manuscript preparation, data collection, data analysis and interpretation, and patient recruitment. GS: conception of the video, and data analysis and interpretation. VC: conception of the video, data analysis and interpretation, patient recruitment, and responsible surgeon.

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## REFERENCES

- Vizzielli G, Chiantera V, Tinelli G, *et al*. Out-of-the-box pelvic surgery including iliopsoas resection for recurrent gynecological malignancies: does that make sense? A single-institution case-series. *Eur J Surg Oncol* 2017;43:710–6.
- Vizzielli G, Naik R, Dostalek L, *et al*. Laterally extended pelvic resection for gynaecological malignancies: a multicentric experience with out-of-the-box surgery. *Ann Surg Oncol* 2019;26:523–30.
- Vizzielli G, Perrone E, Gioè A, *et al*. Inguino-abdominal combined approach for laterally extended pelvic resection: a step by step procedure. *Int J Gynecol Cancer* 2019;29:444–5.
- Bizzarri N, Chiantera V, Ercoli A, *et al*. Minimally invasive pelvic exenteration for gynecologic malignancies: a multi-institutional case series and review of the literature. *J Minim Invasive Gynecol* 2019;26:1316–26.



**Video 1.** Laparoscopic Laterally Extended Pelvic Resection for Gynecological Malignancies.



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