Laparoscopic complete resection of bulky precaval nodes by extraperitoneal approach in a patient with advanced endometrial cancer

Ibon Jaunarena, Mikel Gorostidi, Ruben Ruiz, Cecilia Villalain, Paloma Cobas, Arantza Lekuona

In advanced endometrial cancers, the benefit in survival of cytoreductive surgery, imitating advanced ovarian cancer, has been suggested (Havrilesky 2015). In stage IIIC the size of the lymph nodes dictate the possibility of resection and this challenging surgical effort is often performed by laparotomy, which is still the standard of care.

This video describes step-by-step the complete removal of precaval bulky nodes by the extraperitoneal laparoscopic approach. It shows the benefits and feasibility of this technique, given its high definition and technical accuracy.

This technique allows horizontal access to the cleavage plane, minimizing the risk of injury to the great vessels and bleeding, whereas a transperitoneal access requires a more vertical approach to the dissection plane, and therefore poses a greater risk of injury.

A 49-year-old woman was referred for incidental endometrial cancer after hysterectomy. A computed tomography scan revealed a 3.5×2.5 cm sized endometrioid carcinoma invading >50% of the myometrium with lymphovascular invasion and suspicion of metastasis in the pelvic and para-aortic lymph nodes. Thus, following the European Society of Gynaecological Oncology (ESGO) guidelines, surgical staging and debulking was planned using a minimally invasive technique.

After extraperitoneal para-aortic space exposure, enlarged pelvic, left aortic and precaval lymph nodes were confirmed. A primary complete laparoscopic lymphadenectomy was performed up to the left renal vein using a harmonic sealing device. The right ureter was firmly attached to the inframesenteric precaval vein using a harmonic sealing device. The right ureter was released, and the resection of the bulky nodes was accomplished by careful blunt dissection.

The surgery also comprised other transperitoneal procedures, which are not included in this video (pelvic lymph node debulking and oophorectomy) and lasted 465 min. Povidone-iodine was applied to the trocars. The surgery was carried out in Donostia Hospital (Spain) by a senior oncological surgeon and a fellow. The final lymph node biopsy confirmed macrometastasis in the pelvic and para-aortic nodes (International Federation of Gynecology and Obstetrics (FIGO) IIIC2). All oncological security measures have since been carried out to prevent tumor spread.

Complete laparoscopic resection of bulky precaval nodes in advanced endometrial cancer is feasible and provides excellent accuracy in trained hands.

**Video 1** Bulky nodes above the vena cava and right ureter.

© IGCS and ESGO 2020. No commercial re-use. See rights and permissions. Published by BMJ.

Funding  The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests  None declared.

Patient consent for publication  Not required.

Ethics approval  The study was approved by our Institutional Review Board.

Provenance and peer review  Not commissioned; externally peer reviewed.

Data availability statement  All data relevant to the study are included in the article

ORCID IDs
Ibon Jaunarena  http://orcid.org/0000-0003-2081-7862
Mikel Gorostidi  http://orcid.org/0000-0001-5150-2797
Cecilia Villalain  http://orcid.org/0000-0002-9456-4100

REFERENCE
1 Havrilesky LJ, Cragun JM, Calingaert B, et al. Resection of lymph node metastases influences survival in stage IIIC endometrial cancer.  