



Para-aortic Lymphadenectomy for Gynecologic Cancers: Introducing the “Trans-Retro-Peritoneal (TRP) Single-Port Access”

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ABSTRACT

Background. In gynecological surgery to date, two distinct types of endoscopic accesses have been used to perform para-aortic lymphadenectomies: transperitoneal and extraperitoneal, each with advantages and disadvantages.¹ We propose to develop a new mini-invasive access to perform an endoscopic extraperitoneal para-aortic lymphadenectomy via a single-port umbilical device that, to our knowledge, has never been described.

Methods. This innovative approach combines both an extraperitoneal and intraperitoneal procedure via the same umbilical incision using one single trocar. A 3–4 cm trans-umbilical incision is performed and a three-channel single-port device (Gelpoint Mini^o; Applied Medical, Rancho Santa Margarita, CA, USA) is introduced in the peritoneal cavity. After peritoneal exploration, the peritoneum overlying the aorta bifurcation is grabbed, raised to the umbilicus, opened, and the single-port device is then reintroduced into the retroperitoneal space.

Results. The intervention has been successful in three patients with locally advanced cervical cancer (two Inter-

national Federation of Gynecology and Obstetrics [FIGO] stage IB2, and one FIGO stage IVA) scheduled for concomitant radiochemotherapy after exclusion of any suspicious lymph nodes by 18F-fluorodeoxyglucose-positron emission tomography (FDG-PET), according to our standards of practice based on the European Society of Gynaecological Oncology (ESGO) and National Comprehensive Cancer Network (NCCN) guidelines.^{2,3} Due to the type of cancer, lymphadenectomy was limited to the infra-mesenteric nodes,^{2,4} although the dissection went up to the left renal vein in each case. We retrieved 13, 20, and 25 lymph nodes. No complications occurred.

Conclusions. We describe a promising technique that combines all the advantages of the two previously described accesses without their disadvantages, and with the cosmetic benefit of one almost invisible single trans-umbilical scar.

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