Laparoscopic vaginal radical trachelectomy in the post-LACC era: step-by-step surgical procedure

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Therapeutic management of early-stage cervical cancer is mainly based on surgery.

Radical trachelectomy is a strategy to preserve the fertility of young patients with cervical cancer.

In the European Society of Gynaecological Oncology (ESGO) 20181 and National Comprehensive Cancer Network (NCCN) Guidelines,2 radical trachelectomy type B is indicated for patients with cervical cancer stage 1B1. The prospective ConCerv study3 shows the safety of simple conization in early-stage cervical cancer, <2 cm in cases of stromal invasion <10 mm and no lymph vascular space invasion.

The indication for radical trachelectomy remains:

► Cervical cancer <2 cm;
► Negative lymph node;
► Positive lymph vascular space invasion.

The oncological safety of the minimally invasive approach has recently questioned by the international randomized Laparoscopic Approach to Cervical Cancer (LACC trial)4 and several retrospective studies.

Video 1 In this video we describe the radical trachelectomy by the laparoscopic vaginal approach in 10 steps: step 1: tracer injection in the four cardinal points of the cervix; step 2: sentinel lymph node biopsy by laparoscopy; step 3: vaginal cuff creation; step 4: ventrolateral space opening: 4a. vesicovaginal space opening; 4b. bilateral paravesical space opening; 4c. bilateral bladder pillar treatment; 4d. bilateral ureter dissection; step 5: Douglas pouch opening; step 6: parametrial bilateral section and bilateral ligation of cervicovaginal vessels; step 7: isthmus section; step 8: Douglas pouch closure; step 9: isthmic cerclage; step 10: vaginal reanastomosis.
These results have therefore renewed interest in the vaginal approach, associated with lymph node staging by laparoscopy.

In this video-article, we describe the indication and the step-by-step technique of radical trachelectomy by the combined laparoscopic vaginal approach. Instruments are described in Online Supplemental File 1.

This technique is a safe oncological procedure in the post-LACC\textsuperscript{4} era.

**References**


INSTRUMENTS FOR VAGINAL RADICAL TRACHELECTOMY:

- Long medical tweezers
- 6 Kocher clamps
- Syringe with long needle for adrenaline serum injection
- Scalpel
- 6 Krobach tissue clamps
- Fine scissors for dissection
- 2 Jean Louis Faure forceps
- Bipolar coagulation forcep
- Lane tissue forceps
- 2 Haeney forceps
- Ligature-clamp dissector
Cervical dilator Hegar 4

Needle port

Cerclage: Mersilene 6/0

Threads: Vicryl 2/0 (Douglas pouch) and Vicryl 1/0 (vaginal closure)