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

Benedetta Guani , V Balaya, JM Ayoubi, Anis Feki, Fabrice R Lecuru, Patrice Mathevet

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.

The European Society of Gynaecological Oncology (ESGO) 2018 and National Comprehensive Cancer Network (NCCN) Guidelines, radical trachelectomy type B is indicated for patients with cervical cancer stage 1B1.

The prospective ConCerv study 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) 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 era.

**Author affiliations**

1Department of Gynecology and Obstetrics, HFR, Fribourg, Switzerland
2Département de Gynecologie-obstétrique et Genetique Medicale, Centre Hospitalier Universitaire Vaudois, Lausanne, Switzerland
3Faculty of Science and Medicine, University of Fribourg, Fribourg, Switzerland
4Department of Gynecology, Foch Hospital, Suresnes, France
5Breast, Gynecology and Reconstructive Surgery Unit, Institute Curie, Paris, France
6Faculty of Biology and Medicine, University of Lausanne, UNIL, Lausanne, Switzerland

**Twitter** Benedetta Guani @BenedettaGuani

**Collaborators** SENTICOL Group.

**Contributors** BG made the video, PM supervised and performed the surgery, BG wrote the manuscript, VB FRL, AF and JMA corrected and approved the video article. BG is the author responsible for the overall content as the guarantor.

**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** Consent obtained directly from patient(s)

**Ethics approval** This study involves human participants and was approved by the ethics committee: cantonal committee CER-VD project ID: 2019-01574. Participants gave informed consent to participate in the study before taking part.

**Provenance and peer review** Not commissioned; externally peer reviewed.

**Data availability statement** There are no data in this work.

**Supplemental material** This content has been supplied by the author(s). It has not been vetted by BMJ Publishing Group Limited (BMJ) and may not have been peer-reviewed. Any opinions or recommendations discussed are solely those of the author(s) and are not endorsed by BMJ. BMJ disclaims all liability and responsibility arising from any reliance placed on the content. Where the content includes any translated material, BMJ does not warrant the accuracy and reliability of the translations (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages), and is not responsible for any error and/or omissions arising from translation and adaptation or otherwise.

**ORCID iD**

Benedetta Guani http://orcid.org/0000-0003-4498-3734

**REFERENCES**