

Laparoscopic cervical cerclage at 10 weeks gestation in a patient with an adverse obstetric history following fertility-sparing surgery for cervical cancer

Stefano Ferla^{1,2}, Valeria De Gobbi^{1,2}, Renato Seracchioli^{1,2}, Diego Raimondo¹

¹Department of Gynaecology and Human Reproduction Physiopathology, IRCCS Azienda Ospedaliero - Universitaria di Bologna, Bologna, Italy

²Department of Medical and Surgical Sciences (DIMEC), University of Bologna, Bologna, Italy

ABSTRACT

Background: For women who undergo fertility-sparing treatment for early cervical cancer, transabdominal cerclage (TAC) may be considered to prevent adverse obstetric outcomes due to cervical insufficiency. Laparoscopic-TAC (LPS-TAC) is now preferred over conventional transabdominal approaches because of decreased pain and bleeding, shorter hospitalisation and quicker recovery. However, a systematic, precise approach to performing LPS-TAC during pregnancy is necessary to overcome the lack of uterine manipulation and minimise complications such as bleeding and pregnancy loss.

Objectives: To demonstrate the surgical technique of post-conceptual LPS-TAC.

Participant: A 33-year-old woman with a history of FIGO stage IA1 squamous cervical cancer treated with fertility-sparing surgery. She had suffered a foetal loss after an emergency Caesarean section at 28 weeks because of uterine rupture. In her next pregnancy she presented at 10 weeks gestation with an ultrasound diagnosis of cervical shortening (14mm).

Intervention: The patient underwent LPS-TAC at a tertiary referral center. The operating time was 51 minutes, and blood loss was minimal. Intraoperative transvaginal ultrasound was used to guide the cerclage placement. No perioperative complications occurred; the hospital stay was two days. Elective C-section was performed at 34+6 weeks with hysterotomy above the tape, which was left *in situ*.

Conclusions: LPS-TAC during pregnancy represents a feasible minimally invasive option for selected patients with cervical insufficiency, particularly those with a history of prior cervical surgery. Intraoperative ultrasound may assist in identifying the internal cervical os, facilitating safe tape placement and minimising the risk of membrane injury during pregnancy.

What is New? Intraoperative ultrasound guidance may support safe identification of the internal cervical os and optimal tape placement when performing LPS-TAC during pregnancy in patients with previous fertility-sparing treatment for cervical cancer.

Keywords: Cervical cancer, cervical cerclage, hysterotomy, laparoscopic, pregnancy, uterine rupture

Corresponding Author: Valeria De Gobbi, MD, Department of Gynaecology and Human Reproduction Physiopathology, IRCCS Azienda Ospedaliero - Universitaria di Bologna; Department of Medical and Surgical Sciences (DIMEC), University of Bologna, Bologna, Italy

E-mail: valeria.degobbi@studio.unibo.it **ORCID ID:** orcid.org/0009-0001-9687-3847

Received: 26.12.2025 **Accepted:** 02.05.2026 **Epub:** 01.06.2026

Cite this article as: Ferla S, De Gobbi V, Seracchioli R, Raimondo D. Laparoscopic cervical cerclage at 10 weeks gestation in a patient with an adverse obstetric history following fertility-sparing surgery for cervical cancer. Facts Views Vis Obgyn. [Epub Ahead of Print].



Acknowledgments: The authors acknowledge the surgical team, nursing staff, and anaesthesiologist for their support during the laparoscopic procedure, and our institution for providing the resources for the successful completion of this work.

Contributors: Surgical and Medical Practices: S.F., R.D., Concept: S.F., V.D.G., R.S., R.D., Design: S.F., R.D., Data Collection or Processing: S.F., V.D.G., R.S., R.D., Analysis or Interpretation: S.F., V.D.G., R.S., R.D., Literature Search: S.F., V.D.G., Writing: S.F., V.D.G., R.S., R.D.

Funding: This work was conducted without external funding.

Competing interests: Diego Raimondo, MD, serves as Associate Editor for Facts, Views and Vision in ObGyn. He had no involvement in the peer review of this article and had no access to information regarding its peer review. The other authors declared that there is no conflict of interest.

Informed consent: Written informed consent for publication of video and images was provided by the patient.

Ethical approval: Given the study design (i.e. video presentation of the surgical treatment), IRB approval was not necessary.

Data sharing: All the video tapes are available at the Division of Gynecology and Human Reproduction Physiopathology, IRCCS Azienda Ospedaliero-Universitaria di Bologna, Bologna, Italy. Data will be made available to the editors of the journal for review or query upon request.

Transparency: The lead author affirms that the content of the article is honest, accurate, and transparent.



Video 1. Laparoscopic cervical cerclage at 10 weeks gestation in a patient with an adverse obstetric history following fertility-sparing surgery for cervical cancer: <https://youtu.be/se8ZEwOXheE>
