Tips and Tricks: Preconceptional Laparoscopic Cervical Cerclage Made Easier and Safer With the Titiz Uterovaginal Manipulator

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ABSTRACT Study Objective: To demonstrate safe and easy surgical steps to facilitate preconceptional laparoscopic cervical cerclage with the Titiz uterovaginal manipulator.


Setting: Cervical incompetence or cervical insufficiency is 1 of the causes of preterm birth. Incidence is 0.1% to 1% of all pregnancies. Traditionally, cervical cerclage is placed vaginally, but sometimes it is not possible to perform this procedure vaginally. When this occurs, cerclage needs to be inserted abdominally either by laparotomy or by laparoscopy. Laparoscopic cervical cerclage is indicated when vaginal cerclage has failed or is not possible due to a deficient or a short cervix caused by previous cervical surgery. Although laparoscopic cervical cerclage has a good success rate (90%–100% live births), there is a risk of injury to the bladder, sigmoid colon, and the uterine vessels. It is also important to put the suture in the right place, which is at the internal cervical os (cervico-isthmic junction) and medial to the uterine vessels. Therefore, it can be a challenging operation, especially when the uterus is bulky and more vascular due to adenomyosis or fibroids.

Intervention: A 32-year-old woman, G0P0, with the surgical history of cone biopsy presented with a history of infertility. On vaginal examination, there was no vaginal portion of the anterior cervix, and there was only 0.5 cm of the vaginal portion of the posterior cervix. After extensive counseling, the decision was made to perform a preconceptional laparoscopic abdominal cerclage. This video demonstrates the Titiz uterovaginal manipulator components and how to insert the manipulator. It also shows tips and tricks on laparoscopic cervical cerclage: (1) how to determine the anatomic relationships among the bladder, uterine vessels, cervico-vaginal junction and cervico-isthmic part of uterus; (2) how the Titiz uterovaginal manipulator helps to dissect the bladder and uterine arteries and veins safely; and (3) how to determine where and how to pass the sutures.

Measurement and Main Results: The patient was discharged the same day and did not have any postoperative complications. The patient had transvaginal ultrasound 1 week after the operation. Tape was shown to be at the internal cervical os level.

Conclusions: The Titiz uterovaginal manipulator can make preconceptional laparoscopic abdominal cerclage safer and easier. Journal of Minimally Invasive Gynecology (2015) 22, 932–933 © 2015 AAGL. All rights reserved.

Keywords: Cervical cerclage; Laparoscopy; Preconceptional; Uterine manipulator

DISCUSS You can discuss this article with its authors and with other AAGL members at http://www.AAGL.org/jmig-22-5-JMIG-D-15-00068.

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Supplementary Data

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