

Laparoscopic Operation Under Hysteroscopic Guidance in Management of Cesarean Scar Defect

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OBJECTIVE

To demonstrate how to optimally combine laparoscopy and hysteroscopy in isthmocele repair.

DESIGN

Step-by-step illustration of the technique with a narrated high-resolution video.

SETTING

The progressive increase in the rate of cesarean sections has led to rapid growth in the proportion of cesarean scar defect (CSD) recently, which creates an enormous burden for the healthcare systems in the world.^[1] In this case, the patient she is a 35-year-old woman, G1P1 with postmenstrual bleeding and secondary infertility (repeated embryo transfer failure) which are caused by large CSD.

INTERVENTIONS

The combination of laparoscopy and hysteroscopic guidance with several key strategies to optimize isthmoplasty involves following steps:^[1-4]

1. Identification of isthmocele throughout hysteroscopy
2. Meticulous dissection uterovesical adhesion and bladder is pushed down at least 2 cm apart from the inferior edge of CSD
3. Utility of “Halloween sign” to determine frontier of CSD by hysteroscopic guidance
4. Cold scissor resection of all scar tissue until marginally

rich blood supply boundary improves vascularization in the healing process

5. Re-approximation of low segment cesarean scar with two-layer myometrial suture under uterine manipulator support
6. Closure of uterovesical fold combined with shortening round ligaments aims to prevent recurrent CSD and intra-abdominal adhesion [Figure 1]
7. Re-examination the continuity of anterior uterine wall guarantees the efficacy of the operation.

Endoscopic operation ended without any complications and within 90 min at a private hospital. Then, the patient was

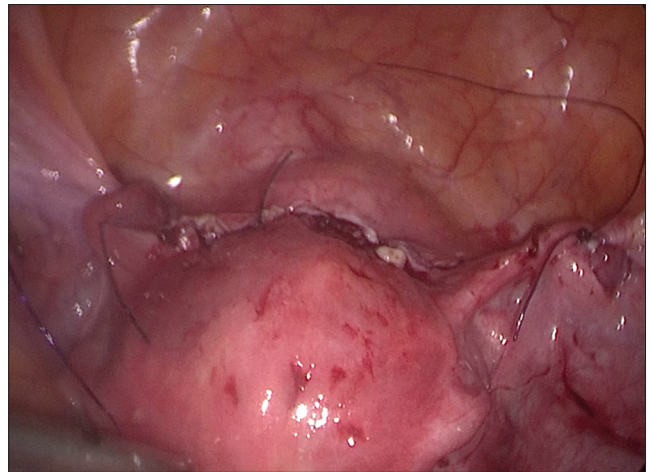


Figure 1: Closure of uterine myometrium and uterovesical fold following by shortening round ligaments.

<http://www.apagemit.com/page/video/show.aspx?num=277>

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discharged 3 days later, and the embryo transfer was performed 6 months after surgery. At the moment, she is pregnant at 16 weeks of gestation.

CONCLUSION

Laparoscopic operation under hysteroscopic illumination in managing CSD is safely effective in skillful surgeons.

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Conflicts of interest

There are no conflicts of interest.

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