



Contents lists available at ScienceDirect

Taiwanese Journal of Obstetrics & Gynecology

journal homepage: www.tjog-online.com

Research Letter

Laparoscopic management of uterine cesarean scar dehiscence during mid-trimester misoprostol-induced termination of pregnancy

Michał Ciebiała*, Kornelia Zaręba, Grzegorz Jakiel

First Department of Obstetrics and Gynecology, Centre of Postgraduate Medical Education, Warsaw, Poland

ARTICLE INFO

Article history:

Accepted 16 January 2018

Dear Editor,

We present a unique case of uterine scar dehiscence during mid-trimester abortion after vaginally administered misoprostol managed laparoscopically with a good result.

Termination of pregnancy is a common medical procedure, performed surgically or by pharmacological induction. Termination of mid-trimester pregnancy constitutes 10–15% of all abortions worldwide [1]. Indications for the procedure may be either maternal or fetal. The decision is based on the abortion laws in a given country.

Uterine rupture is a rare complication of second-trimester termination in patients with a history of cesarean section. Uterine rupture can occur in 0.28% of patients with cesarean scar and 0.04% patients without history of hysterotomy [2]. Other forms of uterine surgery that result in full-thickness incisions (such as a myomectomy), dysfunctional labor, labor augmentation by oxytocin or prostaglandins, and high parity may also set the stage for uterine rupture [3]. Uterine rupture may present as abdominal pain, loss of fetal station, severe vaginal bleeding or hemorrhagic shock, thus being a potentially life-threatening complication. The use of misoprostol is believed to increase the risk for uterine rupture as compared to other induction methods [4,5].

A 38-year-old secundipara, with a history of cesarean section five years previously, was referred to our clinic at 20 weeks of gestation for an elective termination of pregnancy due to fetal chromosomal aberration (trisomy 18). The previous cesarean

section was conducted at 39 weeks of pregnancy. The medical history was otherwise unremarkable (no additional risk factors for uterine rupture). The patient decided to proceed with pharmacological abortion.

The procedure was performed using misoprostol (200 µg vaginally every 3 h; half a dose, as recommended by FIGO) [6]. Signs of acute abdominal pain in the scar area were observed during labor induction. Vaginal bleeding was also observed. In the absence of a misoprostol induction effect and in light of the observed symptoms, an ultrasound scan was performed but the result proved to be ambiguous. The lower segment of the uterus appeared extremely thin on ultrasound. As uterine scar dehiscence was suspected, the clinical team decided to perform an emergency diagnostic laparoscopy. Laparoscopy revealed no signs of blood in the abdominal cavity. The peritoneum was the only layer covering the uterine wall dehiscence and it was cut to expose the defect (Fig. 1A). The scar dehiscence had the length of approximately 5–6 cm (whole uterine scar). Curettage was performed under direct laparoscopic visualization and the fetus, the placenta and all remains were extracted (Fig. 1B). The uterine dehiscence was managed laparoscopically and sutured with the use of polyglactin 910 2/0 sutures. Five separate sutures were placed in the repaired area (Fig. 1C and D). Hemostasis was complete and blood loss was estimated as 400 ml. Control cystoscopy was performed to visualize the ureter outflows. Urine “jets” were present on both sides during the examination. Empiric antibiotic therapy was administered due to raised acute phase markers and leukocytosis. The patient was discharged four days later in good overall condition. Hospitalization was prolonged due to the need for psychological consultation and observation of the inflammatory parameters. The patient was lost to follow-up after about several months. On the last visit, the patient reported no complaints.

In our opinion, minimally invasive surgery following a second-trimester uterine muscle dehiscence can be performed safely in

* Corresponding author. First Department of Obstetrics and Gynecology, Centre of Postgraduate Medical Education, ul. Czerniakowska 231, 00-416, Warszawa, Poland.
E-mail address: michal.ciebiała@gmail.com (M. Ciebiała).

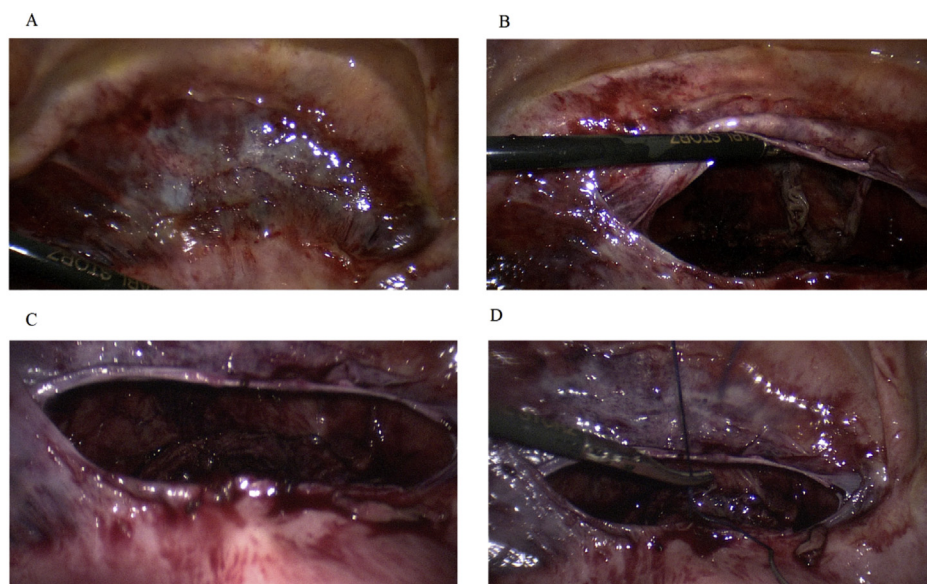


Fig. 1. A. Peritoneum covering uterine scar dehiscence. B. View on the defect during the curettage (uterine cavity). C. Laparoscopic uterine wall suturing (muscle). D. Laparoscopic uterine wall suturing (muscle) next step.

stable patients. It should be considered for the management of complications following elective second-trimester abortion.

Conflict of interest statement

All authors declare that there is no conflict of interest.

References

- [1] Harris LH, Grossman D. Confronting the challenge of unsafe second-trimester abortion. *Int J Gynaecol Obstet* 2011;115:77–9. <https://doi.org/10.1016/j.ijgo.2011.05.018>.
- [2] Goyal V. Uterine rupture in second-trimester misoprostol-induced abortion after cesarean delivery: a systematic review. *Obstet Gynecol* 2009;113:1117–23. <https://doi.org/10.1097/AOG.0b013e31819dbfe2>.
- [3] Chibber R, El-Saleh E, Fadhli RA, Jassar WA, Harmi JA. Uterine rupture and subsequent pregnancy outcome - how safe is it? A 25-year study. *J Matern Fetal Neonatal Med* 2010;23(5):421–4. <https://doi.org/10.3109/14767050903440489>.
- [4] West HM, Jozwiak M, Dodd JM. Methods of term labour induction for women with a previous caesarean section. *Cochrane Database Syst Rev* 2017 Jun 9;6: CD009792. <https://doi.org/10.1002/14651858.CD009792.pub3>.
- [5] Tang J, Kapp N, Dragoman M, de Souza JP. WHO recommendations for misoprostol use for obstetric and gynecologic indications. *Int J Gynaecol Obstet* 2013;121:186–9. <https://doi.org/10.1016/j.ijgo.2012.12.009>.
- [6] http://www.figo.org/sites/default/files/uploads/project-publications/Miso/FIGO_Dosage_Chart%20EN_0.pdf (online 06.12.2017).