Uterine Rupture in Second-Trimester Mifepristone-Misoprostol-Induced Abortion with two previous cesarean sections

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Adelina Dalipi, Igor Aluloski, Irena Todorovska, Ivo Kjaev, Ana Daneva Markova, Arta Bina, Pajtim Asani, Igor Samardziski, Mile Tanturovski, Romir Kadriu, Majlinda Azemi

University Clinic for Gynecology and Obstetrics-Skopje, Medical Faculty-Skopje

Abstract

Uterine rupture is a very rare complication following second trimester medical termination of pregnancy.
We report a 26-year-old woman with two previous cesarean.In the second trimester screening occipito-encephalocela was.She opted for TOP with medical abortion regimens consisting of mifepristone followed misoprostol.
Uterine rupture with the use of misoprostol has been reported more frequently in multiparous women and in women with uterine scars. It is more often observed at term than in the second trimester complication.
Key words:uterine rupture, the use of mifepristone-misoprostol induced abortion.

Introduction

Uterine rupture is a very rare complication, but described on the literature following second trimester medical termination of pregnancy especially on scarred uterus. The occurrence is about 0.2% in the intact uterus and 3.8 to 4.3% in the scarred uterus.

Case report

We report a 26-year-old woman with two previous cesarean deliveries,she had undergone a caesarean delivery three years before the current pregnancy. She had no other comorbidities. In the second trimester screening was diagnostified occipito-encephalocela. The patient was counselled for termination of pregnancy; the methods, side effects, and complications were explained. Alternative options were also discussed. She opted for TOP. According to her last normal menstruation and ultrasound measurements, she was 19 weeks and 5 days. According to the clinic's protocol,after signed confirmed consent from the patient , first day mifepristone 200mg was given orally. In the following day misoprostol 400 mcg (2 tabs) given to be used sublingually 400 mcg and vaginal route at the same time and every three hour intervals repeated with 400 mcg s.l. in total 1200 mcg.
Physical examination was performed from the physician who was on duty during that nightshift. On physical examination, blood pressure was 106/63, and pulse was 74 beats per minute. During speculum examination, a continuous blood trickling was noted. Furthermore, on vaginal examination, she presented with a minor bleeding and the cervix appeared uneffaced and ostium uterinum externum was only 2cm dilated. On ultrasound scan is visualized cavum uteri empty (*figure 2*), the placental tissue above the uterus (*figure 2*) and the parts of the fetus localized in the isthmical part between uterus and the bladder which indicates rupture of the uterus (*figure 1).*
The patient remained haemodynamically stable but immediate exploratory laparotomy was done under general anaesthesia.
During the procedure, there was a full-length scar rupture (*figure 3*) and sutured in two layers without complications. Intraoperatively, about 500mL of haemoperitoneum was noted with large clots in the pelvic cavity.The fetus and the placenta were in the abdominal cavity, same as seen on ultrasonography before the intervention. Also there was a small lesion of the bladder which was noticed just before the operation started when the Foley catheter was being inserted in which showed haematuria. So this lesion was sutured and the methylen blue test was performed, which was negative.
The patient was given antibiotics as per protocol (Ceftriaxone and Methronidazole), thromboprophilactic and substitutional therapy. She had a good postoperative recovery.The patient's clinical condition improved completely and she was discharged from the hospital on the seventh postoperative day.

Ultrasound images showing:

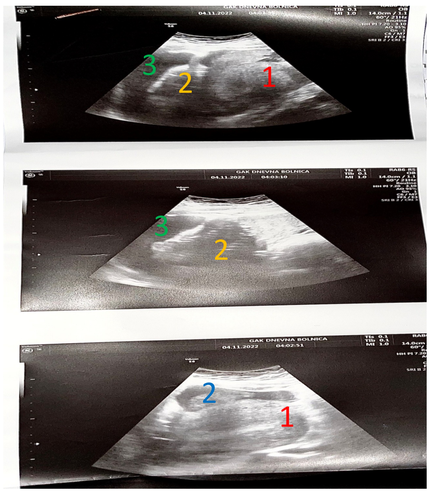


Figure 1:
1- The uterus
2-The fetus *between the isthmical part of the uterus and the bladder*
3- The bladder

Figure 2:
1-empty cavum uteri
2-placental tissue *above the uterus*

Intraoperative images

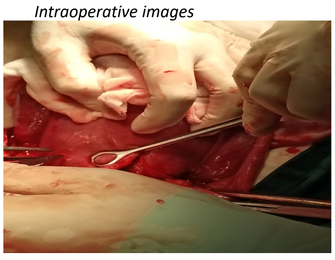
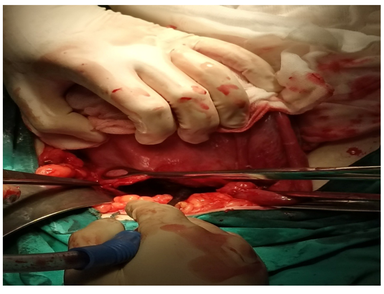


Figure 3



Conclusions

Despite the rare complication, with awareness of the possibility of having uterine rupture, medical abortion still remain a very safe method for pregnancy termination even at those patients with a previous uterine scar.
In University Clinic of Gynecology and Obstetrics- Skopje, North Macedonia medical abortion was started two years ago and it is about one thousand per year including early termination of pregnancy.
Medical abortion was started in the late eighties, becoming more widely used in the late nineties with the mifepristone and misoprostol being the most used. It came as an alternative for the dilation and curettage which caused more complications, increasing maternal deaths every year. Misoprostol has been used for TOP in different ways, vaginal, oral, and in combination of the two routes in the first and second trimester. The mortality and morbidity of the second trimester is greater than that of the first trimester termination. There are studies that shows that second trimester misoprostol termination appears safe among women with one prior low transverse caesarean birth, as it is associated with incidences of uterine rupture of 0.4%. There are insufficient data on risk with more than one prior caesarean birth or with prior classical caesarean birth. Abortion-related morbidity and mortality increase significantly as pregnancy advances with a sharp rise in the rate of severe complications in induced abortion after 14 weeks of pregnancy. Uterine rupture with the use of misoprostol has been reported more frequently in multiparous women and in women with uterine scars. It is more often observed at term than in the second trimester complication.

Key words: uterine rupture, the use of mifepristone-misoprostol induced abortion.

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