

Severe vaginal bleeding secondary to cesarean scar dehiscence following incomplete abortion management

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ABSTRACT

من النادر حدوث نزف حاد بسبب فتق في جرح القيصرية السابق خلال الثلث الأول من الحمل. نقدم حالة سيدة تبلغ من العمر 41 عام تعرضت لنزيف حاد ناتج عن فتق في جرح القيصرية السابق والذي كان في الغالب بسبب استخدام الأدوية المقلصة للرحم (مثورجين) لمعالجة إجهاض غير مكتمل. كما يجب استخدامها بحذر مع المرضى الذين لديهم جرح سابق في الرحم.

Severe uterine bleeding is not a common presentation of cesarean section scar dehiscence in the first trimester. We present a 41-year-old lady with uterine scar dehiscence that was probably secondary to uterotonic medication used for the management of first trimester incomplete abortion. The use of uterotonic medications (Methergine) may be a contributing factor in this case. It should be used with caution in patients with previous uterine scar.

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Cesarean scar dehiscence occurs in 0.3-1.9% of cases.^{1,2} Most cases usually occur during labor. Most of the reported early uterine scar dehiscence and rupture causing severe bleeding occurs during the second trimester termination of pregnancy.³ Uterine scar dehiscence in the first trimester is rare and usually asymptomatic. In our case, the bleeding was severe and is likely secondary to the uterotonic medication that was used to treat an incomplete abortion in a patient who had previous cesarean section. This case was presented to consider this unusual complication in patients with similar presentation.

Case Report. A 41-year-old lady, para 6 abortion 4 presented to our emergency room complaining of heavy

vaginal bleeding with multiple clots and minimal pain. The bleeding occurred twice in the past 24 hours prior to her presentation. The previous pregnancies were all vaginal deliveries except for the last one, which was an uncomplicated lower cesarean section for fetal distress 3 years earlier; her previous abortions were uncomplicated spontaneous abortions. She had a spontaneous abortion 4 weeks prior to her presentation in another medical center, and that pregnancy was confirmed by ultrasound and a pregnancy test. She was diagnosed to have an incomplete abortion at 7 weeks of gestation, and was given Methergine (methylergonovine) tablets of 0.25 mg 3 times a day for 7 days, since the ultrasound confirmed possible retained product of conception. Initially, the bleeding stopped for almost one month, then she had recurrent episodes of severe vaginal bleeding. At presentation in our emergency room she was stable, but her hemoglobin dropped from 11.4 - 9.7 gm/dl (normal range; 12 - 16 gm/dl). The pregnancy test was negative. Examination revealed that the vital signs were stable, abdomen was soft with mild suprapubic tenderness, and vaginal exam was unremarkable, except for heavy bleeding. The transvaginal ultrasonography performed at admission showed elongated irregular cystic sac like lucency in the uterine isthmus area continuing towards the upper cervical area at the site of the previous scar area. Pelvic MRI showed a mass over the previous scar area (Figures 1a & 1b). The differential diagnosis by the radiologist was degenerating fibroid, or scar dehiscence with hematoma. Our clinical diagnosis was most likely scar dehiscence post abortion caused by the uterotonic medication. She was observed and her condition remained to be stable with no vaginal bleeding. She was discharged home with outpatient ultrasound and clinic follow-up. The follow-up ultrasound showed that the hematoma was more echogenic and getting smaller in size. Clinically, she remained asymptomatic and was prescribed oral contraceptive pills. As she desired to have another pregnancy, our decision was to repair the old scar. Intraoperatively, there was a 2 cm defect in the lower uterine anterior wall that was closed by a double layer closure technique. Total blood loss was minimal and there were no postoperative complications.

During follow up visits, she was asymptomatic with no more abnormal vaginal bleeding and she had normal ultrasound scan. Two years later, she had another pregnancy which was uneventful, and she delivered by elective cesarean section at 38 weeks of gestation, during the cesarean section the previous scar was intact.

Discussion. Abnormal vaginal bleeding caused by scar dehiscence was previously reported.^{1,4} The patient in our study had no pre-pregnancy symptoms suggesting uterine scar dehiscence, her severe bleeding was most likely due to acute wound separation. This was probably secondary to the use of Methergine. Methergin is a homolog of ergonovine. It acts directly on the smooth muscle of the uterus and increases the tone, rate, and amplitude of rhythmic contractions through binding and resultant antagonism of the dopamine D1 receptor. The other most likely differential diagnosis in this case would have been ectopic pregnancy within a cesarean section scar. A negative pregnancy test and normal early ultrasound excluded these life threatening conditions.⁵ The use of methylergonovine in managing incomplete

abortion is not an uncommon practice. In this case, it could have been a contributing factor in the scar dehiscence. There is no evidence in the literature to support or exclude this possibility. Ultrasound is an important diagnostic tool in any case presenting with abnormal bleeding.⁶ However, MRI has been shown to be the best imaging modality to evaluate uterine incision healing.^{7,8} There are no standard recommendations in managing scar dehiscence in the first trimester. In cases of severe bleeding, surgical management is mandatory. In this patient, the bleeding stopped spontaneously and the scar hematoma was getting smaller. Therefore, conservative management was carried out. Since the patient was interested in future childbearing, leaving the defect could lead to early uterine rupture, abnormal placental insertion, or ectopic pregnancy at a dehiscence site. The closure of the defect was carried out by 2 layer suturing technique, as it has been suggested by some authors that this technique may lower the risk of uterine rupture in future pregnancies.⁹ In the following pregnancy, elective cesarean section seemed to be the safest approach, as spontaneous contractions may cause another dehiscence.

In conclusion, patients with previous uterine scar should receive uterotonic medications with caution. Scar dehiscence, a rare finding, should be suspected in any patient who had previous uterine incision, and presents with severe, or abnormal uterine bleeding after the use of uterotonic medications.

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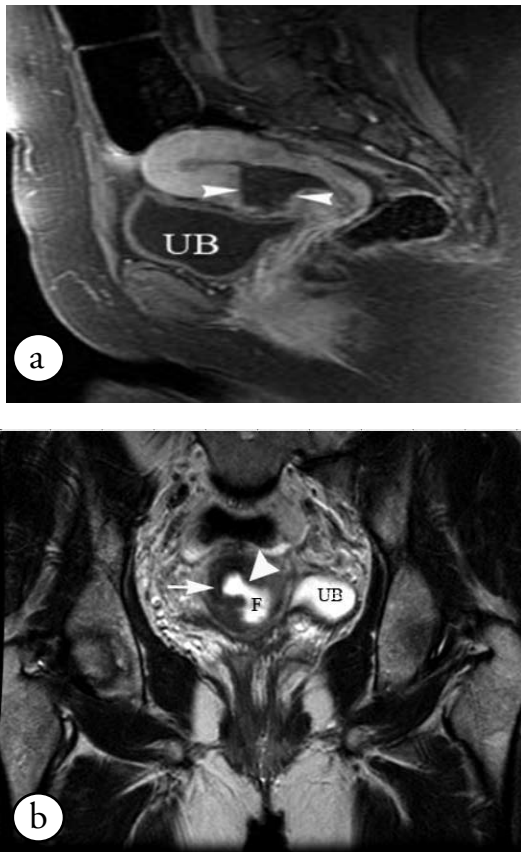


Figure 1 - Patient MRI showing the urinary bladder (UB). a) Arrows point to the defect in the old scar with the formation of a hematoma. b) Arrows point to the defect in the uterine wall that is communicating with the endometrium. F - fluid collection