

Case Report

Cesarean scar dehiscence as an uncommon cause of intermenstrual bleeding

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Abstract

Cesarean scar dehiscence is an uncommon complication of cesarean section. We present a case of 33 year old women who admitted to hospital with the complaint of intermenstrual bleeding unresponsive to conventional medical treatment modalities. Magnetic resonance imaging studies revealed the diagnosis of cesarean scar dehiscence. Exploratory laparotomy confirmed the diagnosis and repair of myometrial defect was carried out. The woman was in good health status without menstrual bleeding disturbances following six months of surgery. In women with intractable intermenstrual bleeding to current medical treatment modalities, cesarean scar dehiscence should be kept in mind. MRI evaluation of uterus would clearly demonstrate such rare clinical condition.

Key words:

Intermenstrual bleeding, uterine scar dehiscence, cesarean section, uterine diverticulum.

Introduction

Abnormal uterine bleeding is a frequent symptom in gynecology practice, caused by functional, organic, anatomic genital tract abnormalities and systemic diseases in reproductive aged women. Menstrual disturbance related to cesarean delivery complication is very rare. In this clinical situation, the most common condition is cesarean scar dehiscence. Dehiscence of a cesarean scar is estimated to occur in 0.3–1.9% of cases, but bleeding disorders occur only in a minority of these cases. Magnetic resonance imaging has the opportunity to diagnose such rare condition in earliest convenience [1-3]. Surgery is the best way to relieve the cesarean scar dehiscence induced menstrual bleeding disorders. In this article, we report a case of intractable inter-

menstrual bleeding derived from cesarean scar dehiscence, which was successfully treated with surgery.

Case presentation

A 33-year-old (Gravida 1, Parity 1) woman admitted to hospital with the complaint of intermenstrual bleeding for two years. Her medical history was unremarkable. She had the history of elective cesarean delivery two years ago. She had intermenstrual bleeding lasting 3-5 days in every period since sixth weeks' of postpartum period. She had also taken oral contraceptive pills for 4 months, progesterone tablets in luteal phase of period for two months and oral tranexamic acid for two months without relieving intermenstrual bleeding symptom. Pelvic and physical examinations revealed normal findings. Initial blood hemoglobin level was 9.6 g/dl. Blood coagulation, thyroid, liver and renal functions tests and other hormone analysis were all within normal limits. Transvaginal sonography scan showed normal endometrial cavity, myo-

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metrium, both ovaries and suspicious myometrial defect on previous cesarean section scar site (Figure 1). Endometrial biopsy was reported as proliferative endometrium. Saline infusion sonography and hysteroscopy also confirmed the diagnosis of uterine scar dehiscence. Pelvic magnetic resonance imaging (MRI) identified intra cavitary blood reaching to the outer margins of the myometrium, consistent with a diagnosis of uterine scar dehiscence (Figure 2). Elective laparotomy was performed with previous phan-nestiel incision. The myometrial defect was repaired by using interlocking 1.0 polyglactin 910 sutures. Post-operative first two days was uneventful, on the third day the woman was discharged from the hospital. The woman was in good health status without menstrual bleeding disturbances following six months of surgery.

Figure 1.



Transvaginal sonography shows the myometrial defect on cesarean section incision site (arrow shows the myometrial defect).

Discussion

Cesarean scar dehiscence was very rare condition in the past gynecology practice. Since the incidence of cesarean delivery is increased in all over the world; every clinicians may have high opportunity to encounter with postcesarean delivery complications. One of such complication is menstrual bleeding disorder. Uterine scar dehiscence or uterine diverticulum was also previously reported as cause intermenstrual bleeding in a small number of cases in the literature [3]. A defect that can be seen on ultrasound at the site of the cesarean section scar has been also known as a ‘niche’. A niche is present in 64.5% of women 6–12 weeks after cesarean

section. It may be clearly demonstrated by sonohysterography. If the residual myometrial thickness is below 50%, abnormal menstrual bleeding is more commonly encountered [4]. Treatment of such cesarean derived complication may include hysteroscopic niche resection, laparoscopic repair, laparoscopic assisted vaginal repair, and oral contraceptives. Abnormal uterine bleeding may be improved in 87 to 100% of cases. The rate of complications was low and successful pregnancy may be possible following these therapies [5]. The main reasons for uterine scar dehiscence may be as a result of preexisting injury (such as history of previous myomectomy, sharp curettage following cesarean delivery, complicated uterine bleeding course in second pregnancy etc.) or an unexpected cause, such as delayed wound healing. Delayed wound healing may be derived form immediate uterine infection following cesarean delivery [2, 6, 7]. The reported woman had no history of such preexisting conditions or uterine infection. Uterine scar diverticuli was reported in women with a history of multiple caesarean sections presenting with intermenstrual bleeding, as well as in woman with the complaint of malodorous bloodstained vaginal discharge many years after one previous cesarean section. In the literature

Figure 2.



Pelvic magnetic resonance imaging shows the myometrial defect on cesarean section incision site (arrow shows the myometrial defect).

there was also a case of huge uterine scar diverticulum diagnosed after fifteen years of single cesarean delivery [8].

Our case also presented with intractable abnormal intermenstrual bleeding two years following cesarean section. The diagnosis of such rare condition may be suspected during transvaginal evaluation of uterine cavity in women with the complaint of abnormal uterine bleeding had the history of cesarean delivery. In the literature the diagnosis of this condition was mostly reached via saline infusion sonography, hysterosaphingography and transvaginal sonography. In women with suspicious findings MRI studies confirm the diagnosis [7]. In our case the diagnosis of cesarean scar dehiscence was confirmed via pelvic MRI. The main stain of therapy is surgery. Surgical repair of uterine

defect may yield successful treatment outcome. In women with recurrent menstrual bleeding disturbance and scar dehiscence sometimes hysterectomy may be required [2, 3, 7]. In conclusion, in women with intractable intermenstrual bleeding to current medical treatment modalities, clinicians should keep in mind the diagnosis of cesarean scar dehiscence. MRI evaluation of uterus would clearly demonstrate such rare clinical condition and surgery should be the best way to treat the uncommon myometrial defect.

Conflict of Interest

Authors declare no conflict of interest

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