

Prikaz primera: Ohranitev maternice kljub žariščni prirasli posteljici pri pacientki s številnimi predhodnimi operacijami maternice

Uterus preservation despite focal placenta accreta in a patient with multiple previous uterine surgeries: A case report

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Izvleček

Namen: Več kot polovica primerov vraščene posteljice, nenormalne trofoblastne invazije v maternični miometriju, ostaja v nosečnosti neodkritih. Kljub povečani pogostnosti vraščene posteljice v zadnjih letih v literaturi še vedno ni strinjania o njenem optimalnem obvladovanju. Opisujemo primer vraščene posteljice, pri katerem je konservativni pristop k zdravljenju rešil maternico.

Poročilo o primeru: V tretji nosečnosti prvorodnice, ki se je v preteklosti srečala z neplodnostjo, dvema zadržanima splavoma ter s številnimi predhodnimi operacijami maternice, je bil razvoj vraščene posteljice kljub negativnim sonografskim ugotovitvam pričakovan. Med planiranim carskim rezom smo potrdili vraščeno posteljico in obvladali krvavitev z namestitvijo hemostatskih šivov. Pooperativno obdobje je potekalo brez posebnosti, odpuščena je bila četrti

Abstract

Purpose: More than 50% of the cases of placenta accreta spectrum (PAS), which is defined as abnormal trophoblastic invasion into the uterine myometrium, are prenatally undiagnosed. Despite the increased frequency of PAS in recent years, there is still no consensus regarding its optimal management in the literature. Here, we describe a case of PAS, where a conservative treatment approach was used to preserve a woman's uterus.

Case report: In the third pregnancy of a primiparous woman with multiple previous uterine surgeries, who also had a history of infertility and two missed abortions, a plausible PAS was anticipated despite negative sonographic findings. During elective caesarean delivery, PAS was confirmed, and uterine bleeding was controlled with haemostatic suture placement. The postoperative

dan po operaciji.

Zaključek: Velika pripravljenost na pojav vraščene posteljice pri nosečnicah z dejavniki tveganja kljub odsotnosti ultrazvočnih znakov za vraščeno posteljico pomaga pri načrtovanju ustreznih kirurških in podpornih posegov ter zmanjšuje poporodno krvavitev in obolevnost mater.

period was uneventful, and she was discharged on the fourth postoperative day.

Conclusion: A high level of suspicion of PAS in patients with predisposing factors but without confirmatory ultrasound findings helps in planning adequate surgical and supportive interventions, thereby reducing postpartum haemorrhage and maternal morbidity.

INTRODUCTION

Placenta accreta spectrum (PAS) is defined as abnormal trophoblastic invasion into the uterine myometrium (1). Its incidence is rising in recent years and varies between 1 in 300 and 1 in 2000 pregnancies; the incidence is much higher in patients with previous uterine surgeries (1–3). PAS is a potentially life-threatening obstetric condition with high maternal morbidity and mortality (1, 2). As there is yet no consensus regarding the optimal treatment, we describe here a conservative approach to treat PAS that preserved a woman's uterus.

CASE PRESENTATION

A 41-year-old primipara woman with history of infertility, ovarian endometriosis and multiple uterine surgeries attended our high risk pregnancy outpatient clinic. Over the last 8 years, she had undergone four hysteroscopic procedures due to submucosal fibroma and a septum. In this period, two pregnancies were achieved by assisted reproductive techniques (ART), but both pregnancies resulted in missed miscarriage (MM). The first MM was managed medically with subsequent hysteroscopic removal of retained products of conception. The second MM required uterine curettage due to heavy bleeding. Her third pregnancy was successful. Despite several ultrasound examinations, no specific sonographic findings for PAS were detected. Still, because of the patient's history, a plausible PAS was anticipated. Elective caesarean delivery was performed at 39+2 weeks because of previous uterine surgeries. A healthy babyboy was delivered, weighing 3,830 g. Subsequently,

we had difficulties during placenta removal. Certain placental parts were firmly attached to the posterior uterine wall, but we managed to remove them. These parts presented with diffuse bleeding, which was controlled with single haemostatic sutures of the placental site. Intravenous and intramural uterotonics were administered to aid the surgical intervention. The estimated blood loss was 1,000 mL.

Postoperatively, the patient received prophylactic broad-spectrum antibiotics and uterotonics. There was no excessive postoperative bleeding, and haemoglobin levels decreased from 129 g/L before surgery to 121 g/L on the first and 94 g/L on the second postoperative day. She was discharged on the fourth postoperative day.

DISCUSSION

Our patient had undergone several uterine procedures and had endometrial-myometrial interface damage, an important risk factor for PAS, but without any suspicious sonographic features. Other reported predisposing factors were previous caesarean delivery, high parity, ART, previous uterine surgeries (myomectomy, uterine curettage, etc.) and endometritis (Table 1) (1–4). Existence of any of these predisposing factors is a sufficient reason for high level of suspicion for PAS, even without sonographic features such as absent or interrupted hypoechoic boundary between the placenta and the myometrium or placental invasion of the myometrium or the bladder wall. These features can also be accompanied

Table 1. Risk factors for placenta accreta spectrum.

| history of 1 or more previous cesarean sections or other prior uterine surgery |
|--|
| placenta previa or low lying placenta |
| maternal age (>35 years) |
| multiparity |
| prior uterine curettage |
| uterine irradiation |
| endometrial ablation |
| Asherman syndrome |
| uterine leiomyomata |
| uterine anomalies |
| hypertensive disorders of pregnancy |
| smoking |
| taking acetylsalicylic acid (Aspirin) during pregnancy |
| endometritis |

by placental sonolucent spaces adjacent to the uterine wall or persistent blood flow between the basal placenta and the myometrium on colour Doppler (1, 3). The diagnosis is usually made in the second or third trimester (1). Despite the knowledge of these ultrasound features, more than 50% cases of PAS remain undiagnosed until delivery (3).

Recently, the contribution of magnetic resonance imaging (MRI) in the diagnosis of PAS has been evaluated. Despite the comparable sensitivity and specificity to ultrasound, MRI is more reliable to assess PAS in the presence of posterior placenta by equivocal ultrasound findings or to assess the depth of placental invasion (1). In our case, the placenta was attached posteriorly, making it difficult to evaluate by

ultrasound; this was a potential indication for the use of MRI.

Frequently, PAS is complicated by severe postpartum haemorrhage, thus requiring extensive life-saving surgical interventions such as caesarean hysterectomy or ligation of the major pelvic vessels with prompt transfusions (1–3, 5). There is still no consensus regarding the optimal treatment protocol. However, fertility sparing can be achieved in women without massive postpartum haemorrhage, as observed in our case. We were able to control the bleeding by placing haemostatic sutures, which are well recognized in the literature (5–7). For example, Hwu et al described the parallel vertical compression suture technique to compress the anterior and posterior walls of the lower uterine segment (5). Kelekci et al published a case series on the combined approach consisting of bilateral hypogastric vessel ligation and square-shaped suturing of the placental bed (7). However, the optimal surgical technique among the available ones is still not determined.

Radiological interventions (e.g., uterine artery embolization or prophylactic placement of internal iliac artery balloon catheters) or fibrin sealant patch placement to the placental bed have also been developed (8–10), but seldom used in a haemodynamically unstable patient with massive blood loss and unresponsive to conservative measures.

CONCLUSIONS

On the basis of the findings of the present case, it is critical to be prepared for complications in high risk patients and to use the most suitable technique for placenta removal and possibly preserve fertility.

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