

Recurrent Placenta Percreta in Patients Who Underwent Previous Uterus Sparing Surgery for Placenta Percreta: An Unusual Case Report

Daha Önce Plasenta Perkreta Nedeniyle Uterus Koruyucu Cerrahi Geçirilmiş Hastalarda Tekrarlayan Plasenta Perkreta: Alışılmadık Bir Olgu Sunumu

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Makale Tarihleri/Article Dates:

Geliş Tarihi/Received: 06 Mart 2023

Kabul Tarihi/Accepted: 01 Ağustos 2023

Yayın Tarihi/Published Online:

12 Aralık 2023

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Açıklama/Disclosure: Yazarların hiçbiri, bu makalede bahsedilen herhangi bir ürün, aygıt veya ilaç ile ilgili maddi çıkar ilişkisine sahip değildir. Araştırma, herhangi bir dış organizasyon tarafından desteklenmedi. Yazarlar çalışmanın birincil verilerine tam erişim izni vermek ve derginin talep ettiği takdirde verileri incelemesine izin vermeyi kabul etmektedirler.

ÖZET

Plasenta perkreta (PP) acil, yaşamı tehdit eden bir obstetrik patolojidir. Tedavide altın standart peripartum histerektomi iken son zamanlarda uterus koruyucu tedavi yaklaşımları öne çıkmaktadır. Literatürde PP için uterus koruyucu tedavi uygulanan hastalarda sonraki gebelikler ve PP nöksleri ile ilgili az sayıda makale bulunmaktadır. Önceki gebeliğinde PP nedeniyle uterus koruyucu cerrahi uygulanan ve mevcut gebeliğinde PP'ye bağlı uterus rüptürü sonucu akut karın ağrısı ile hastaneye başvuran bir hastayı sunuyoruz.

Anahtar Kelimeler: Plasenta perkreta, tekrarlayan, uterusun korunması

ABSTRACT

Placenta percreta (PP) is an urgent, life-threatening obstetric pathology. While the gold standard for treatment has been peripartum hysterectomy, recently uterus-sparing treatment approaches have become prominent. There are few articles in the literature about subsequent pregnancies and PP recurrences in patients who underwent uterine-sparing treatment for PP. We present the case of a patient who underwent uterus-sparing surgery for PP in a previous pregnancy and was admitted to hospital with acute abdominal pain as a result of uterine rupture related to PP in her present pregnancy.

Key words: Placenta percreta, recurrent placenta percreta, uterus preservation



Atıf yapmak için/ Cite this article as: Incebiyik A, Polat M, Tammo O. Recurrent Placenta Percreta in Patients Who Underwent Previous Uterus Sparing Surgery for Placenta Percreta: An Unusual Case Report. Mev Med Sci. 2023;3(3): 140-142

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INTRODUCTION

As one of the types of abnormal placenta accreta, placenta percreta (PP) is a serious pregnancy complication characterized by the invasion of chorionic villus to the myometrium, uterine serosa and nearby organs. Notably, in parallel with the increase in the rate of caesarean delivery, the prevalence of PP has increased and its incidence is reported as 0.03 in 1,000 deliveries (1). Although it is rarely seen, the disease may cause many complications such as life-threatening postpartum haemorrhage, massive blood transfusion, caesarean hysterectomy, genito-urinary tract injuries and coagulopathy (2). While the commonly applied method of treatment has been total hysterectomy, including the placenta, uterus sparing surgical (USS) procedures have recently become prominent (2, 3).

In literature, there are many articles that report cases of USS for PP. However, the notable difference between this study and previous studies is the existence of recurrent PP in the current pregnancy of a patient who underwent USS for PP in a previous pregnancy. Interestingly, the recurrent PP was treated again by USS.

CASE REPORT

The patient, a 35-year-old woman with a history of three normal and two caesarean deliveries was admitted to our hospital with abdominal pain that had been increasing for the previous three hours and was accompanied by nausea and vomiting. The patient interview revealed that she had 33 weeks of pregnancy, based on the last menstruation period, and there had not been any problems during her routine obstetrical care. A review of medical records showed that the patient had undergone USS during caesarean section in a previous pregnancy because of placenta percreta. In hospital records, the abdominal cavity was opened by median abdominal incision under the level of umbilicus and fetus is removed fundal incision due to observed placenta percreta in the lower uterine segment. It was stated that following the dissecting the bladder, placenta percreta area was removed partially along with uterus myometrial tissue.

In the clinical examination, it was determined that the patient was pale, afebrile, her blood pressure was 60/40 mm/Hg and her pulsation was tachycardic (105 pulse/min). In addition, she had abdominal tenderness, particularly in her lower abdomen. A viable fetus in the 32nd week, a fundal placement of the placenta and plenty of intraabdominal free fluid were seen in the abdominal ultrasonography. However, the loss of continuity of uterine serosal tissue was interpreted as uterine perforation. Laboratory analyses revealed normal results for most measures, except haemoglobin (6.2 mg/dl), haematocrit (25.1%) and leukocyte ($22420/\text{mm}^3$).

Considering the patient's acute abdominal pain, an urgent

laparotomy was decided. The abdomen was entered with a subumbilical midline. Following the evacuation of about 2,000 ml of fresh blood and clotting in the abdomen, it was seen hemorrhagic lesion that 95x30 mm of appearance compatible with PP in the uterine anterior-fundal region. Approximately 40x30 mm of the PP area in the uterus anterior region was ruptured (active bleeding) (Figures 1A, 1B, 1C). The lower uterine segment was found to be normal (Figure 1D). Then, a baby boy (1.620 g) was delivered with a uterine lower segment incision following the bladder was rejected. The PP area was removed by uterine wedge resection and the uterus was closed primarily (Figure 1E). We apply tubal ligation to patient because a subsequent severe complicated pregnancy may occur (i.e. life-threatening haemoperitoneum due to uterine rupture)(Figure 1 F). Due to the presence of preoperative anemia, the patient was given two units of erythrocyte suspension. There were no postoperative complications, and the patient was discharged with full recovery in the 72nd hour. Full-thickness penetrating chorionic villus (percreta) was observed in the histopathologic examination of the material.

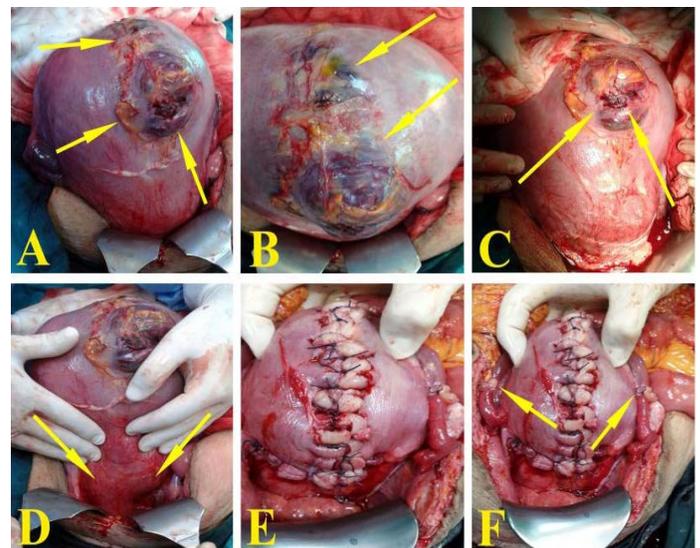


Figure 1.

- A. Placenta percreta area in uterus anterior
- B. Placenta percreta area in uterus fundal region
- C. Ruptured placenta percreta area in uterus anterior region
- D. Uterine lower segment with normal appearance
- E. Uterine restoration following resection of placenta percreta area
- F. Bilateral Pomeroy tubal ligation (yellow arrows)

DISCUSSION

PP is an important and catastrophic obstetric pathology based on severe haemorrhage, infection, visceral organ damage and uterine perforation. It is an important cause of maternal morbidity (60%) and mortality (7%) (3-6). Related to the increasing number of caesarean births, the incidence of PP is also increasing. Therefore, early diagnosis is vitally important to ensure the proper form of treatment in cases that carry the risk of PP such as caesarean delivery, curettage and placenta previa (2).

Caesarean hysterectomy is accepted as a conventional treatment method in the treatment of PP (4, 5, 7). However, peripartum hysterectomy is not an innocent surgical intervention; it has potential disadvantages such as massive haemorrhaging, genito-urinary tract injury, febrile postoperative complications, requirement of re-laparotomy to stop bleeding and for the treatment of operative injuries, and lengthy hospitalization (2). Therefore, today, more conservative treatment methods have increasingly gained popularity to prevent these disadvantages.

In our case The patient and her husband were offered hysterectomy, but the patient and her husband took all the risks and requested conservative surgery.

Uterus-sparing approaches can be applied in PP with the purpose of both reducing peripartum hysterectomy complications and protecting fertility and menstrual functions for the future (2, 3, 5, 8). In addition, the use of USS has positive effects such as improving psychological side effects compared to full hysterectomy, a source of energy and vitality, protecting the integrity of future sexual functioning and maintaining or improving quality of life (7).

Other treatment methods include pelvic devascularisation, uterine artery embolization, methotrexate treatment, uterine packing, balloon tamponade application, angiographic embolization and overswing the placental bed (2-4). However, these treatment methods may have adverse effects such as severe postpartum haemorrhage, disseminated intravascular coagulopathy, infection, septic shock, post-embolization syndrome, pancytopenia, nephrotoxicity, re-laparotomy, urethral injury, blood transfusion, uterine necrosis, secondary hysterectomy and maternal death (2, 3, 5).

However, recently, removing the uterine wall by wedge resection and then primary closure of the uterine defect have been suggested in order to prevent these complications (2, 7, 8). In this case, uterus-sparing surgery was applied due to a ruptured percreta region that was suitable for resection and primary closure despite the development of PP for the second time.

CONCLUSION

In recent decades, while the basic form of treatment for

PP was hysterectomy, USS approaches have begun to be implemented more frequently in order to avoid the potential complications of peripartum hysterectomy and to protect fertility. However, the USS procedure may cause formation of new scar tissue in the uterus and the possibility of recurrent PP in future pregnancies. Therefore, patients who undergo USS due to PP must be given detailed information about the situation. Moreover, regardless of the location of the placenta, such patients must certainly be analyzed in terms of PP in their future pregnancies. This approach is vital for the prevention of potential complications.

Disclosure

All authors have no conflicts of interest related to this article. Consent to publish this image was obtained from the patient and the patient's husband. The patient has seen the manuscript and consented to its publication.

Çıkar Çatışması: Çalışmada herhangi bir çıkar çatışması yoktur.

Finansal Çıkar Çatışması: Çalışmada herhangi bir finansal çıkar çatışması yoktur.

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