

CASE REPORT

doi: 10.5455/medarch.2019.73.58-60

MED ARCH. 2019 FEB; 73(1): 58-60

RECEIVED: NOV 25, 2018 | ACCEPTED: JAN 22, 2019

Cesarean Scar Pregnancy Complicated with Placenta Percreta

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ABSTRACT

Introduction: Cesarean scar pregnancy is potentially life-threatening condition because of heavy complications and includes adherent placenta: accreta, increta or percreta as a result of deep placental invasion. **Aim:** To present a rare case of ectopic cesarean scar pregnancy combined with placenta percreta in 38-year old woman who undergone previous cesarean section delivery. **Case report:** A multiparous woman aged 38 years with prior cesarean section delivery, admitted first time to the Clinic in 7th week of gestation, due to her medical record (light bleeding). Diagnosis was: graviditas hbd 7, gemellar pregnancy, blighted ovum gemellus I, graviditas isthmico-cervicalis gemellus II. Due to diagnosis it was performed vacuum aspiration et curettage and woman leaved hospital same day. One month later same woman was admitted again to the Clinic due to bleeding and ultrasound finding suspicious to residual trophoblastic tissue. Beta human chorionic gonadotropin serum concentration at the day of admittance was 8,419 IU/ml. Ultrasound finding showed inhomogeneous supracervical formation with dimension 2,73x1,89 cm with increased vascularity and resistant index 0.36 and suspicious placenta increta. We made decision to surgery, and performed hysterectomy in view of heavy intraoperative haemorrhage. Woman was discharged at fifth day after surgery in good condition. Histological finding showed cervical pregnancy complicated with placenta percreta parietis isthmocervicalis of the uterus. **Conclusion:** We showed the importance of early and opportune diagnosis of cervical pregnancy specially complicated with one of kind of throphoblastic disease, to prevent life-threatening complication.

Keywords: ectopic pregnancy, cesarean scar pregnancy, Placenta percreta.

1. INTRODUCTION

Despite to the fact that Cesarean section is not a benign procedure, over the last few decades the number of cesarean delivery rapidly rise (1), with increased maternal and fetal complications. A rare, late complication of cesarean delivery is cesarean scar pregnancy (2), with estimated incidence in range from 1:1,800 to 1:2,500 (3-6). Cesarean scar pregnancy is potentially life-threatening condition because of heavy complications, such are uterine rupture or uncontrolled haemorrhage. One of most dangerous complication of cesarean scar pregnancy includes morbidly adherent placenta: accreta, increta or percreta (7), as a result of deep placental invasion because of compromised decidua basalis, which normally is a barrier to trophoblastic invasion of myometrium.

Diagnosis of cesarean scar pregnancy is based on clinical symptoms, ultrasonography, and MRI. The main modality of diagnostic procedures is ultrasonographic examination (8). Unfortunately, cesarean scar pregnancy is often misdiagnosed with ec-

topic pregnancy, cervical pregnancy or miscarriage in progress.

2. AIM

The aim of the study was to present a rare case of ectopic cesarean scar pregnancy combined with placenta percreta in 38-year old woman who undergone previous cesarean section delivery.

3. CASE REPORT

A 38-year-old multiparous woman with previous cesarean delivery at 7th week of gestation was admitted at clinic, due to her medical record, vaginal bleeding. Obstetric history was significant for a one cesarean delivery three years ago. Transvaginal ultrasound was performed and showed two gestational sacks, one was positioned low in uterus (supracervical location) and alive embryo with CRL 11mm. The other one gestational sack was positioned in fundal region of uterus, but with absence of the embryo. According to sonographic finding, the patient underwent dilatation, vacuum aspi-

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Figure 1. Cesarean scar pregnancy complicated with placenta percreta and curettage as a management option. Patient leaved hospital at the same day.

One month after curettage, same women admitted at hospital again due to her medical record, haemorrhage and suspicious residual placental tissue. At the time of admittance performed transvaginal ultrasound showed mixed echogenicity formation in isthmico-cervical region, with marked thinning of the anterior and side myometrium. There was high velocity with low resistant index- RI 0,36 suspicious to placenta increta. The value of beta-human chorionic gonadotropin serum concentration was 8,418 mU/ml. MRI images was notable to residual trophoblastic tissue suspicious to myomatral invasion located in previous cesarean delivery scar.

Because of bleeding, low positioned sonographically formation, high value of beta-human chorionic gonadotropin serum concentration and MRI images patient was taken to laparotomy. During the surgery decision was made for hysterectomy, bilateral salpingectomy and bilateral ovarian conservation in view of local findings of uterus - placenta implanting and penetrating the lower uterine segment, and intraoperative haemorrhage. At the second day after surgery value of beta human chorionic gonadotropin serum concentration dropped to 76,4 mU/ml, patient was well. Fifth day of surgery patient was discharged in good condition.

Histopathological examination of the uterus showed placenta percreta positioned in isthmico-cervical region and region of previous hysterotomy proper cesarean delivery.

4. DISCUSSION

The increasing rate of cesarean deliveries implicates rising number of complication, some of them are very rare. One of them is cesarean scar pregnancy which is defined as gestation surrounded by myometrium and fibrous tissue of the previous cesarean scar. It is the rarest form of ectopic pregnancy with increasing incidence. If it is combined with any form of morbidly adherent placenta (accreta, increta or percreta) it can be very dangerous condition for mother and child (9). Well known complication from cesarean scar pregnancy are: morbidly adherent placenta, uterine rupture, massive haemorrhage, fetal loss, even more maternal death (6, 8, 9).

The prompt diagnosis is very important, because it can be life-threatening condition (6). Transvaginal ultrasonography is the main modality, with Color Doppler imaging, flow, resistance and pulsatility index. Adjuvant diagnostic modality is MRI as an improved imaging. Today, there is no unique approach of the management and treatment of cesarean scar pregnancy. As a treatment approach we can use systemic or local Methotrexat administration (10, 11), uterine artery embolization (12, 13), hysteroscopic treatment (14), dilatation and curettage as an not rarely successful approach (6), laparoscopic removal of gestational sac (15), and hysterectomy in the most severe cases.

If cesarean scar pregnancy is complicated with morbidly adherent placenta, most frequent therapeutic approach is removal of uterus (16).

In our case, at first admittance at hospital, the pathology of lower uterine segment was not successfully diagnosed. At second admittance, with help of MRI as an additional diagnostic procedure, final diagnosis was established.

Despite to ultrasonography as a „gold standard“ in diagnostics of cervical scar pregnancy complicated with placenta percreta, diagnosis was established with help of MRI.

5. CONCLUSION

The most important in diagnostics of cesarean scar pregnancy is the prompt diagnosis, particularly if cesarean scar pregnancy is complicated with morbidly adherent placenta, because it may lead to serious morbidity and mortality. Because of no clear management guidelines and recommendation exist, we need to make an universal management principles.

- **Author's contribution:** J.F., I.H., B.H. gave substantial contribution to the conception or design of the work and in the acquisition, analysis and interpretation of data for the work. J.F., I.H and A.Z.M. had role in drafting the work and revising it critically for important intellectual content. Each author gave final approval of the version to be published and they are agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.
- **Declaration of patient consent:** The authors certify that they have obtained all appropriate patient consent forms.
- **Financial support and sponsorship:** None.
- **Conflicts of interest:** There are no conflicts of interest.

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