

Case Report

Caesarean scar pregnancy-a rare case report

Shuchi Sharma, Poojan Dogra*, Reena Sharma

Department of Obstetrics and Gynaecology, SLBS Government Medical College, Ner Chowk, Mandi, HP, India

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***Correspondence:**

Dr. Poojan Dogra,

E-mail: poojandogramarwaha@gmail.com

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ABSTRACT

Caesarean scar pregnancy is defined as implantation into the myometrial defect at the site of the previous uterine scar of the caesarean delivery. Here in, we report a case caesarean scar pregnancy in a 28 years old woman. The patient underwent laparotomy for removal of products of conception and resuturing of scar done. Overall prevalence is 1 in 2000 pregnancies. Caesarean scar ectopic pregnancy is rare, but its incidence is increasing with rise in trend of caesarean sections. It is important to have early and accurate diagnosis of caesarean scar pregnancy to avoid life threatening complications.

Keywords: Hysterectomy, Ectopic pregnancy, Caesarean scar pregnancy

INTRODUCTION

Caesarean scar pregnancy is defined as implantation into the myometrial defect at the site of the previous uterine scar of the caesarean delivery misdiagnosing a low intrauterine chorionic sac as a CSP, or a true scar pregnancy as an intrauterine pregnancy (IUP), may lead to adverse outcomes including hysterectomy.¹ It is important to have a high clinical suspicion for a caesarean scar ectopic in a patient who presents with first trimester bleeding and multiple previous cesarean deliveries.³ The diagnostic criteria for a caesarean scar ectopic pregnancy include: (a) gestational sac embedded eccentrically in the lower uterine segment, (b) implantation in the location of a prior cesarean delivery scar, (c) empty uterine cavity and cervical canal, (d) attenuated myometrium over the scar, and (e) extensive Doppler vascular flow in the area of the cesarean delivery scar.² Uterine artery embolization and expectant management are options for stable patients but require close follow-up to avoid potential disastrous consequences such as uterine rupture.⁷ Hysterectomy is recommended in multiparous woman. In young woman desirous of child bearing the resection and suturing of scar may be considered. But there is increased risk of

repeat scar ectopic pregnancy, scar rupture and placenta accrete in subsequent pregnancy.⁴ Here in, we report a case caesarean scar pregnancy in a 28 years old woman.

CASE REPORT

A 28 -year-old female presented to outpatient department of obstetrics and gynaecology with chief complaint of two-month amenorrhea with bleeding per vaginum off and on for 12-14 days. She already had dilatation and curettage in some other hospital in present pregnancy in view of incomplete abortion. In obstetric history, she was G2P1 with previous caesarean delivery. Her previous caesarean section was due to placenta previa. General physical examination was normal. On per speculum examination, slight bleeding through cervical OS was seen. On bimanual examination, cervix was upwards, uterus bulky, retroverted and bilateral fornices were free with no tenderness. On investigation, routine blood and urine investigations were normal. Trans vaginal ultrasound (Figure 1) followed by colour Doppler revealed gestational sac like structure with surrounding hypo-echogenicity with prominent vascularity in lower segment of uterus with possibility of caesarean scar ectopic pregnancy. Beta-hCG level was 26850 m IU/L,

and after 48 hours beta-hCG value was 28,108 mIU/L, which showed less than doubling.



Figure 1: Trans vaginal ultrasound.

MRI-pelvis (Figure 2) showed an abnormal area of 26×29 mm seen in lower segment involving endometrial cavity and the myometrium appearing as hyperintense on T2/STIR with thinning of myometrium and obliteration of junctional zone. MRI report gave the possibility of caesarean scar pregnancy versus gestational trophoblastic disease. On laparotomy a soft vascular mass was seen at the site of previous scar. An incision was given over bulge and products of conception were removed and the edges of scar tissue were excised, freshened and resutured. The tissue obtained was sent for histopathological examination and diagnosis of caesarean scar ectopic pregnancy was confirmed. Patient was followed up with serum beta human chorionic gonadotropin (β -hCG) level, till B-hCG came to non-pregnant level.



Figure 2: MRI pelvis.

DISCUSSION

Caesarean scar pregnancy is defined as a gestation completely surrounded by myometrium and fibrous tissues of the cesarean section scar and separated from endometrium cavity and endocervical canal.⁸ The first case was reported in 1978 (Larsen and Solomon) as a post-abortal hemorrhage due to what the authors called it a uterine scar sacculus.¹⁰ Overall prevalence is 1 in 2000 pregnancies.² Although the incidence of cesarean scar ectopic pregnancy is less, its incidence is indeed increasing with the rise of cesarean deliveries.⁵ These pregnancies are life-threatening as they pose a great risk for maternal hemorrhage.⁶ Our patient had undergone one previous caesarean; this is consistent with one case series study which shows that most scar ectopic pregnancies occurred after only one caesarean section. Hence, the number of caesarean sections appear to have no impact as an independent risk.⁹ It is known that the presence of an intrauterine contraceptive device is a high-risk factor for ectopic pregnancies. But there is no data-based study on whether previous use of an intrauterine device is associated with a caesarean scar ectopic pregnancy. Our patient also had no history of IUCD contraception. As in our patient's case, uterine scar ectopic pregnancy posed difficulty in making diagnosis.

Our initial suspicion was raised at the time of transvaginal ultrasound. The differential diagnosis included cervical ectopic pregnancy, cervicoisthmic pregnancy, and inevitable miscarriage. Operative hysteroscopy would have been the first line of treatment modality for this patient. But as we are working in a newly set up medical college, hysteroscopy equipment was not available for the patient. So, open laparotomy and surgical excision was our treatment of choice. The benefit of surgery is less recurrence because of the resection of the old scar, with a new uterine closure. Other is a shorter follow-up period.^{12,13} Surgical treatments, successful in 96%, is the most definitive treatment option that removes the gestation and offers an opportunity to repair the uterine defect and a chance at future fertility.^{11,14}

CONCLUSION

Caesarean scar ectopic pregnancies pose a diagnostic challenge for clinicians and radiologists. These patients should be diagnosed with transvaginal ultrasound. A misdiagnosis may lead to uterine rupture, massive hemorrhage and maternal death. Thus, it is important to have early and accurate diagnosis of Caesarean scar pregnancy to avoid life threatening complications and to preserve fertility.

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