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Case Report

Caesarean scar pregnancy: a rare case report

Vardhani Varadhan, Ushadevi Gopalan*, Karthika Mayilvahanan

Department of Obstetrics and Gynaecology, Shri Sathya Sai Medical College and Research Institute, SBV University, Ammapettai, Chengalpattu District, Tamil Nadu, India

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***Correspondence:**

Dr. Ushadevi Gopalan,

E-mail: ushag7@hotmail.com

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ABSTRACT

Cesarean scar pregnancy (CSP) is a rare and potentially dangerous form of ectopic pregnancy occurring when a blastocyst implants in the cesarean section scar, leading to abnormal gestational development between the myometrium and the scar tissue. Incidence ranges from 1/1800 to 1/2500 pregnancies and is increasing with rising cesarean delivery rates. CSP commonly presents with abdominal pain and vaginal bleeding. Diagnosis is facilitated by transvaginal sonography, and MRI is valuable when sonography results are inconclusive. A case of a 27-year-old woman with a previous cesarean section is reported, presenting with elevated beta-hCG and an ultrasound revealing a fetal pole in the lower uterine segment with minimal myometrium between the scar and the gestational sac. The patient underwent laparotomy and excision of the scar pregnancy, with histopathological examination confirming chorionic villi invasion through the myometrium. CSP is categorized into three types based on myometrial thickness and location, each with varying risks and management strategies including medical treatment, surgical intervention, and a combination of methods. Early diagnosis and management are crucial to avoid severe complications, with decision-making guided by the patient's future fertility desires.

Keywords: Cesarean scar pregnancy, Ectopic pregnancy, Transvaginal sonography, MRI, Management

INTRODUCTION

Cesarean scar pregnancy is the rarest form of ectopic pregnancy. CSP incidence ranges from 1/1800 to 1/2500 pregnancies and incidence increasing because of a rising number of cesarean sections.¹ Common presentation is pain abdomen, bleeding per vagina. Transvaginal ultrasonography is a highly useful in diagnosing CSP. MRI has important role when sonography is equivocal or inconclusive before therapy and to rule out placental implantation on bladder wall.

CASE REPORT

A 27-year-old women G2 P1L1, previous Cesarean Section was referred to our institute from a clinic

suspecting CSP in USG. She was asymptomatic at the time of presentation. Her vital signs and physical exam were unremarkable. Hb was 11.6 gm/dl and β -hCG – 6.072 mIU/ml.

On ultrasound fetal pole measuring 7 weeks 5 days and with fetal cardiac activity in lower uterine segment (LUS) at the level of previous CS scar with <3 mm myometrium visualized between bladder and the gestational sac. Patient underwent laparotomy and excision of scar pregnancy. HPE showed - chorionic villi invading the myometrium to uterine serosal surface involving the region of previous uterine scar.

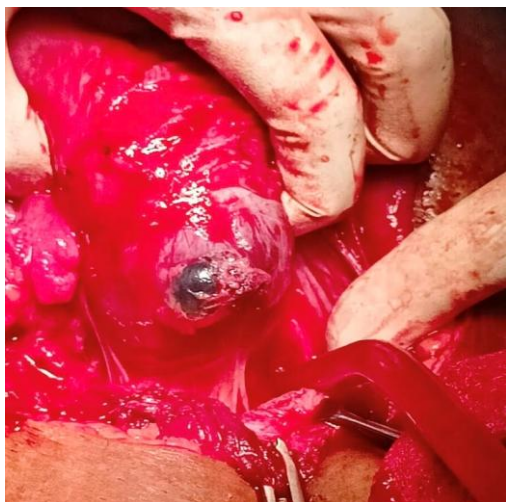


Figure 1: Scar site pregnancy.



Figure 2: After excision of scar pregnancy.

DISCUSSION

CSP occurs when the blastocyst implantation abnormally locates between the fibrous scar tissue of a cesarean section and the myometrium, which is a rare and dangerous condition. The probability of recurrent ectopic pregnancy in general was 16.6% while the probability of a recurrent CSP (RCSP) was 15.3%.

Type I / endogenic type

Gestational sac progressing toward uterine cavity from implantation point in the scar with myometrial thickness more than 3 mm and has potential to reach viability but has high risk of haemorrhage and placenta accreta spectrum complicating Pregnancy.²

Type II CSP

Gestational sac is partially located in previous uterine scar with myometrial thickness less than 3mm.²

Type III / exogenic type

Gestational sac located completely within the scar with myometrial thickness less than 3 mm. GS grow towards the abdominal cavity/uterine serosa and associated with deeper implantation and early uterine rupture.

Criteria for diagnosis CSP by RCOG using transvaginal ultrasonography.³

Uterine cavity and endocervical canal being empty.

Caesarean scar site shows gestational sac /solid mass of trophoblast being embedded.

Yolk sac, Fetal pole or both with absence or presence of fetal cardiac activity.

Thin (1-3mm) or myometrium layer absent between gestational sac and anterior uterine wall or bladder.

Doppler examination shows evidence of prominent circulation.

Management

Many methods have been described to manage CSP including systemic or intra gestational sac methotrexate, uterine artery embolization (UAE), dilation and curettage (D and C), hysteroscopic resection or suction (Myo Sure), wedge resection and uterine repair, hysterectomy, and different combinations of the above.⁴ UAE is rarely used to treat CSP alone and it is often used in combination with curettage or hysteroscopy.⁵ Surgical treatment of CSP may affect the integrity of anterior uterine wall and may sometimes end up in unplanned hysterectomy affecting the future fertility of women. Conversely, non-surgical treatment may lead to the incomplete removal of the CSP and the persistence of the cesarean scar, thus predisposing to a recurrent CSP.⁶

CONCLUSION

Diagnosis of CSP needs high index of suspicion. Early and prompt diagnosis is needed to avoid catastrophic events in CSP and it is sometimes misdiagnosed as low implanted Intrauterine pregnancy or cervical pregnancy. Although conservative treatment carries high failure risk, shared decision-making incorporating future fertility desires should be considered when determining mode of management.

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Ethical approval: Not required

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