



## CAESAREAN SCAR ECTOPIC PREGNANCY -OPERATIVE V/S CONSERVATIVE MANAGEMENT CONUNDRUM

### Obstetrics & Gynaecology

**Dr. Shreya M. Gupta\***

Department of Obstetrics & Gynaecology, Mumbai \*Corresponding Author

**Dr. Priyanka G. Kasar**

Department of Obstetrics & Gynaecology, Mumbai

### ABSTRACT

**Background:** Caesarean scar ectopic pregnancy (CSEP) is a rare but potentially life-threatening form of ectopic pregnancy, with rising incidence paralleling increasing caesarean section rates. Early diagnosis is challenging due to nonspecific symptoms, yet delay may result in catastrophic maternal morbidity. **Cases:** We report two cases of caesarean scar ectopic pregnancy, the first case was a 28-year-old gravida 3, presenting with prolonged vaginal bleeding. Imaging revealed a large type III scar ectopic pregnancy with loss of myometrial integrity and bladder interface, confirmed on MRI. She was successfully managed surgically with evacuation and repair of the myometrial defect. The second case involved a 32-year-old gravida 4 with severe anemia and persistent bleeding following check curettage. Imaging demonstrated a highly vascular grade III scar ectopic pregnancy with serosal breach of bladder. Given hemodynamic stability, she was managed conservatively with close monitoring and serial  $\beta$ -hCG follow-up, resulting in complete resolution. **Conclusion:** These cases highlight the diagnostic and therapeutic challenges posed by caesarean scar ectopic pregnancies. A high index of suspicion, early diagnosis using transvaginal ultrasonography with Doppler, supplemented by MRI when indicated, is crucial. Individualized management based on clinical stability, imaging findings, and fertility desires is essential to prevent severe complications and preserve reproductive potential.

### KEYWORDS

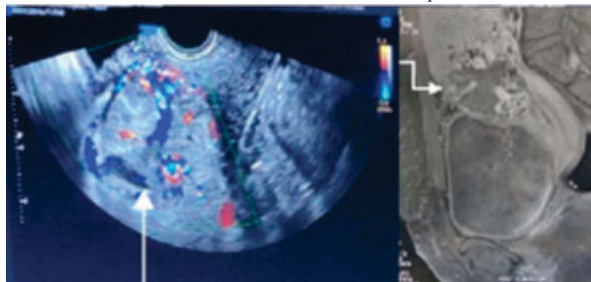
Cesarean Scar Ectopic, Ectopic Pregnancy, Operative v/s Conservative Management.

### INTRODUCTION

Cesarean scar ectopic pregnancy is one of the rarest ectopic pregnancies. Its incidence is rising in parallel with the increase in Caesarean section (1). There are two different kinds, type 1 develops in the myometrium and grows towards uterine cavity whereas type 2 progresses exophytically towards uterine serosa (2). Although it has not been delineated, the most accepted theory is that impaired wound healing following previous trauma which could be due to uterine surgery, manual removal of placenta or procedures like IVF, creates a myometrial defect and subsequent scar in which the blastocyst implants (3). Patients can be asymptomatic or present with vaginal bleeding or mild abdominal pain. There are no pathognomonic signs or symptoms. Transvaginal ultrasound can be supplemented with transabdominal ultrasound as the main modality for diagnosis and MRI can be used for confirmation in cases of suspicion (4). This case report aims to expose the diagnostic and management challenge such cases poses, and if not diagnosed and treated in early pregnancy, it may lead to considerable maternal morbidity or mortality.

#### Case 1

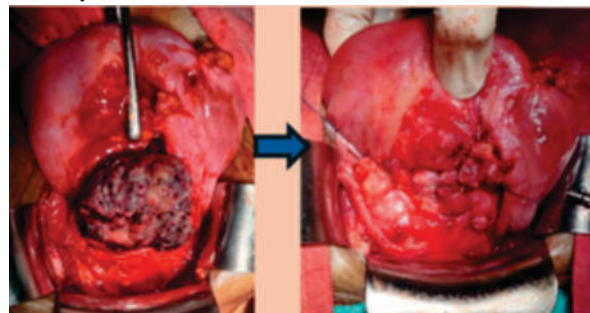
**Presentation:** A 28 year G3P2L2 (Previous 2 LSCS) was referred with complaints of bleeding per vaginum since 1 month, which increased since last 1 week and outside USG showing AV malformation. Her last section was 1.5 years back for previous LSCS with a second marriage and couple was desirous of a second child. She gave history of self MTP pill consumption at 6+1 weeks. On examination she was vitally stable, per abdominal examination was soft with no tenderness. Per speculum examination revealed cervix high up and altered discharge from it and on per vaginum uterus was 10 weeks size with clear non tender fornix. B-HCG level was 71 IU/L and rest reports were normal.



**Figure 1:** Left Image-Ultrasonography was suggestive of a empty uterus and cervix and large scar ectopic pregnancy measuring 5.1\*6.9\*4.7cm (80 cc) with increased vascularity (PSV 80 cm/sec) and no overlying myometrium. There was loss of serosal interface focally with the bladder and interpretation was of type III Caesarean scar

ectopic pregnancy. Right Image- MRI revealed thinning of myometrium and a focal bulge in the right anterolateral aspect without overlying myometrium.

Intraoperatively dense adhesions were present between omentum and adhesiolysis was done.



**Figure 2:** Left Image- Retained Products of Conception visualized with focal loss of myometrium, evacuated. Right Image- Ends of myometrium closed with vicryl 1.

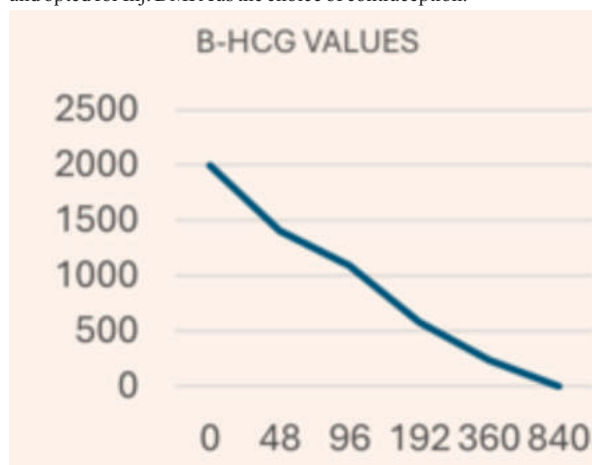
The post operative period was uneventful and patient discharged on day 5. Histopathology report was suggestive of chorionic villi lined by cytotrophoblast and syncytiotrophoblast with areas of hemorrhage within consistent with scar ectopic pregnancy. Patient followed up on day 14 with no complaints and complications.

#### Case 2

**Presentation:** 32 year G4P2L2A1 (Previous 2 LSCS) history of self MTP pill consumption at 7+4 weeks, followed by complaints of bleeding per vaginum and an emergency check curettage was done at the private hospital and discharged on day 2. Patient arrived 2 weeks later with similar complaints of bleeding PV since 1 day and hence referred for higher center management. Patient was vitally stable but pale. Per abdominally she was soft with no tenderness. On per speculum minimal bleeding was seen. And uterus was 6-8 weeks size with clear and non-tender fornices.

**Investigation:** The hemoglobin was 6.9 gm/dl and B-HCG was 1996.5 IU/L with rest all blood reports normal. The USG revealed 4.9\*4.4\*4.8 cm hypo-echoic mass at scar site, with high vascularity (PSV 13 cm/sec) and bulging into the serosa of uterus. MRI confirmed the diagnosis with focal breach of uterine serosa, suggestive of Grade 3 scar ectopic pregnancy with adherence to urinary bladder serosa.

**Management:** Due to hemodynamically stable condition, plan of conservative management with emergency operative intervention if needed was taken with close monitoring. 2 pint PCV transfusion given, and Urology assessment and standby arrangements were made. After 48 hours B-HCG fell to 1404 IU/L. Patient had no complaints of bleeding and serial B-HCG monitoring done and it fell to 235 IU/L in two weeks. Patient was discharged hereafter with weekly B-HCG follow up and it came to non-detectable level in five weeks. Ultrasound was repeated which showed hyper-echoic mass of 3.8\*3.3cm with significant decrease in vascularity (PSV 4.5 cm/sec). Patient was followed up till regular menses achieved after 2 months and opted for Inj. DMPA as the choice of contraception.



**Figure 3: B-HCG Value Trend (Declining)**

## CONCLUSION

A missed diagnosis with delayed management of Caesarean scar ectopic pregnancies can have very fatal and poor outcomes including uterine rupture, massive hemorrhage and maternal death. Hence, high index of suspicion by clinician, early and accurate diagnosis using sonography combined with Doppler flow imaging, followed by confirmation with MRI if and when indicated, is of paramount importance and prompt management is the key to avoid complications and preserve fertility in such cases. Management options include conservative management or surgical options like hysteroscopic suction evacuation and curettage, laparoscopic or open removal of scar along with pregnancy and definitive management like hysterectomy, but tailored management plan according to the individual patient's condition and needs is essential.

## REFERENCES

1. Cesarean scar ectopic pregnancies: etiology, diagnosis, and management. Rotas MA, Haberman S, Levigur M. *Obstet Gynecol.* 2006;107:1373-1381. [PubMed] [Google Scholar]
2. Pregnancy in a cesarean scar. Vial Y, Petignat P, Hohlfield P. <https://doi.org/10.1046/j>
3. Ectopic pregnancies in caesarean section scars: the 8 year experience of one medical centre. Maymon R, Halperin R, Mendlovi
4. Cunningham FG, Leveno KJ, Bloom SL, Spong CY, Dashe JS, Hoffman BL, et al. *Williams Obstetrics*. 26th ed. New York (NY): McGraw-Hill; 2024. Chapter "Ectopic Pregnancy: Diagnosis and Management".