



CASE REPORT- CAESREAN SCAR SITE ECTOPIC PREGNANCY

Obstetrics & Gynaecology

Dr Rani Daruwale

(MBBS, DNB OBGYN, Fellowship in Assisted reproductive techniques, Fellowship in minimal access surgeries in Gynaecology) Assistant professor, Department Of Obstetrics and Gynaecology, Seth GS Medical College and KEM Hospital.

Dr Priya R Kathawate

(MBBS), Third year resident, Department Of Obstetrics and Gynaecology, Seth GS Medical College and KEM Hospital.

ABSTRACT

An ectopic pregnancy occurs when fetal tissue implants outside the uterus or attaches to an abnormal or scarred portion of the uterus. Caesarean section scar ectopic pregnancy is a rather rare complication of pregnancy that may occur in a scarred uterus (following previous hysterotomy, uterine manipulation and in vitro fertilization). The first case of caesarean scar ectopic pregnancy was reported in 1978 in English medical literature. There are 2 recognized types of hysterotomy scar ectopic pregnancies. One- endogenous type develops in the myometrium and grows towards the uterine cavity has potential risk of developing placenta accreta and major obstetric hemorrhage, whereas type two progresses exophytically towards uterine serosa. The second type has ominous prognosis as there is high risk of spontaneous uterine rupture, massive hemorrhage which might necessitate a hysterectomy leading to loss of fertility or maternal death. Early detection is of utmost importance to prevent these complications. First trimester ultrasound imaging has led to correct diagnosis and initiating prompt management and thus preventing the complications. We report a case of caesarean scar ectopic pregnancy in a 30 year old woman with previous one caesarean section who was diagnosed with scar ectopic pregnancy on ultrasound imaging.

KEYWORDS

CASE REPORT:

30-year-old woman (P1L1MTP1) with one previous cesarean section, diagnosed to be pregnant one month prior which was medically terminated followed by dilatation and curettage.

Patient presented to the outpatient department 4 days after dilatation and curettage with history of fever with chills and associated myalgia, bleeding per vaginum and hypotension. The patient had a history of lower segment caesarean section done 1.5 years ago in view of cephalopelvic disproportion.

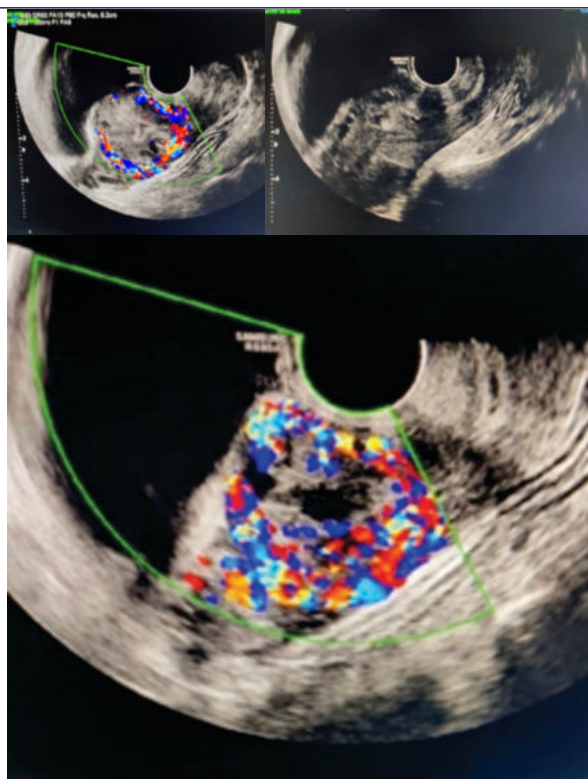
Transvaginal ultrasound at an outside obstetrics appointment suggested a sonographic diagnosis of retained products of conception with scar dehiscence.

At presentation, her vital parameters were within normal limits. General physical examination was normal. Physical examination was only notable for moderate clear-white vaginal discharge. On per speculum, cervix was closed, normal, no discharge or bleeding per vaginum was seen. On bimanual examination, cervix pointed upward, uterus was normal size, anteverted and bilateral fornices were free with no tenderness. On admission B-HCG level was 45000IU/L. Transabdominal ultrasonography demonstrated adherent scar ectopic pregnancy measuring approximately 4.7cm* 3cm in the region of previous caesarean scar with no myometrium visualised between the pregnancy and bladder serosa. This was followed by embolization of left uterine artery via minimal vascular access to minimise intraoperative blood loss.

Patient was planned for exploratory laparotomy. Intraoperative findings; soft, vascular mass seen at the site of previous scar, incision was given over bulge and products of conception were gently removed. It was communicating with uterine cavity; edges of scar tissue were excised and gentle uterine curettage was done. Tissue was sent for histopathological examination and diagnosis of caesarean scar ectopic pregnancy was confirmed. Uterine defect was closed in single layer.



Intra-operative: Caesarean scar pregnancy



Ultrasound images: Caesarean scar pregnancy

Intra-operatively the patient received one unit of blood. Post operative course was uneventful and she was discharged on post operative day seven.

DISCUSSION

In ectopic pregnancy fertilized ovum is implanted and develops outside the normal endometrial cavity. Uterine scar ectopic pregnancy occurs when the conceptus implants in the myometrium at the site of caesarean section scar. Misdiagnosis of this rare kind of ectopic pregnancy leads to significant patient morbidity and mortality.

Caesarean scar pregnancy is a rare presentation and accounts for 6% of

all ectopic pregnancies. Due to the increasing number of caesarean deliveries its incidence has been rising to be about 1/2000 normal pregnancy.¹

There are various theories which explain the aetiology and mechanism of Caesarean ectopic pregnancy, the most accepted one being blastocyst invasion into the myometrium through a microscopic dehiscence tract, which may be due to previous uterine surgery like Caesarean section, manual removal of placenta, myomectomy or dilatation and curettage etc.² The most common clinical presentation is painless vaginal bleeding with or without pain, may range to uterine rupture and hypovolemic shock.³ Establishing a diagnosis of caesarean section scar ectopic is challenging and the preferred method is by transvaginal ultrasound with power doppler imaging.⁴ MRI and diagnostic laparoscopy may also be used.

Conservative management carries a significant risk of bleeding and is generally not recommended. However, USG guided intralesional methotrexate injection either by abdominal or transvaginal route is quite successful, but normalisation of Bhcg and sac shrinkage needs longer time. Patients presenting with exogenously located scar ectopic are ideal candidates for laproscopic intervention. Various case reports of patients with Caesarean scar ectopic pregnancy even in the absence of bleeding, supports our management as the surgical option.⁵ This includes elective laparotomy and excision of the gestational mass. The benefit of surgery is less recurrence because of the resection of the old scar, with a new uterine closure. The availability of Uterine Artery Embolization (UAE) in cases of Caesarean ectopic pregnancies treated has contributed to successful management without any haemorrhage.⁶ In summary, there should remain a high clinical suspicion for a caesarean scar ectopic in a patient with a history of caesarean deliveries presenting with first trimester bleeding. An early and timely diagnosis decreases complications to a considerable extent. For the management of caesarean scar ectopic the following should be considered: size of pregnancy, continuity with uterine cavity, B hcg level, hemodynamic state and fertility preservation. These patients should be diagnosed with transvaginal ultrasound with confirmation with MRI if diagnosis cannot be confirmed via ultrasound. To prevent maternal haemorrhage, a patient presenting with a caesarean scar ectopic pregnancy should undergo prompt treatment.

Aknowledgements

The authors had no conflicts of interest to declare and maintained ethical adherence.

REFERENCES

- 1) M. A. Rotas, S. Haberman, and M. Levigur, "Caesarean scar ectopic pregnancies: etiology, diagnosis, and management," *Obstetrics and Gynecology*, vol. 107, no. 6, pp. 1373–1381, 2006.
- 2) Cignini P, Giorlandino M, Caserta L, Dominici L, Giorlandino C. The importance of early diagnosis in Caesarean scar pregnancy. *J Prenat Med*. 2007;1(2):29–31.
- 3) S. Ginath, G. Malinger, A. Golan, M. Shahmurov, and M. Glezerman, "Successful laparoscopic treatment of a ruptured primary abdominal pregnancy," *Fertility and Sterility*, vol. 74, no. 3, pp. 601–602, 2000.
- 4) Fylstra DL, Pound-Chang T, Miller MG, Cooper A, Miller KM. Ectopic pregnancy within a Caesarean delivery scar: a case report. *American Journal of Obstetrics and Gynecology*. 2002;187(2):302–04.
- 5) Aich R, Solanki N, Kakadiya K, Bansal A, Joshi M, Nawale A. Ectopic Pregnancy in caesarean section scar: A case report. *Radiology Case Reports*. 2015;10(4):68–71.
- 6) Timor-Tritsch IE, Monteagudo A, Santos R. The diagnosis, treatment, and follow-up of Caesarean scar pregnancy. *Am J Obstet Gynecol*. 2012;207:44.e1–13.