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Research Article

A Rare Case Report of Cesarean Scar Ectopic Pregnancy

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Abstract
Cesarean scar ectopic is one of the rarest of all ectopic pregnancies. It is defined as when a blastocyst implants on a previous Cesarean scar. The incidence of Cesarean scar ectopic has increased due to increase number of Cesarean deliveries. Early diagnosis of this can be done by using sonography. It is very important because a delay can lead to increased maternal morbidity and mortality. Early diagnosis leads to prompt management and improves the outcome by allowing preservation of future fertility. Magnetic resonance imaging (MRI) has important role when sonography is equivocal or inconclusive before therapy or intervention. We are reporting a rare case of P2L2A3 with previous two cesarean deliveries with Rh negative blood group which was referred to Northern Railway Central Hospital Delhi from AIIMS Rishikesh in view of retained products of conception at scar site after D&E and medical management with injection methotrexate and patient had persistent heavy bleeding per vagina.

Case Report of Scar Ectopic Pregnancy

A 36yrs P2L2A3 previous 2 LSCS Rh negative pregnancy presented in emergency department of Northern Railway Central Hospital with chief complaints of persistent bleeding per vagina for 2 months. There was history of pregnancy of around 5 weeks (confirmed on ultrasound) followed by induced abortion from a private clinic. Patient passed clots but bleeding persisted. Repeat ultrasound showed scar pregnancy RPOCsfor which D&E was done. Despite this bleeding continued. Repeat ultrasound showed an ill-defined heteroechoic lesion 3*2.2 cm with cystic area showing moving echoes and color flow on doppler suggestive of RPOCs with secondary AV malformations for which injection methotrexate 50 mg/m^2 was given and patient was referred to AIIMS Rishikesh for further management. At AIIMS Rishikesh MRI was done which suggested of RPOCs /GTN as Beta Human Chorionic Gonadotropic was very high i.e., 22,423 mIU/ml. Second dose of Inj. methotrexate 81.8 mg/m^2I.M was given and Anti- D 300 mcg given and patient was discharged. SerialBeta Human Chorionic Gonadotropin levels decreased to 7062, 2405,628 and 212 miu/ml within 15 days. But patient developed heavy bleeding per vagina after 15 days of discharge. She was readmitted in AIIMS Rishikesh. Ultrasound was done which showed a hyperechoic lesion of 4.8*4.6*4.5 cm at scar site. There was no evidence of significant vascularity within the lesion. Patient was referred to Northern Railway central hospital for further management. On admission her vitals and general condition was stable. Per abdomen was soft and there was no tenderness. On per speculum examination minimal bleeding per vagina was seen. On bimanual examination cervix pointed backwards, uterus was anteverted bulky soft, mobile with mild fullness and tenderness in anterior fornix, bilateral fornixes were normal and nontender. Her routine investigations were normal and Beta Human Chorionic Gonadotropin was 65.78 mIU/ml. MRI was done here which showed well circumscribed lobulated predominantly low signal intensity lesion in mid/lower uterine cavity extending more towards serosa suggestive of retained products of conception at the Cesarean scar. Patient was vitally stable and was planned for laparoscopic surgery after all investigations and PAC fitness. On the day of surgery patient developed severe anaphylactic reaction to iv antibiotic injection Ceftriaxone test dose. Patient was immediately resuscitated and shifted to ICU, after 3-4 days of stabilization plan was changed to laparotomy (in view of recent ICU admission). Hysteroscopic resection of scar ectopic pregnancy was not possible due to products of conception extending more towards serosa of uterus. Intraoperativelyincision was given over the bulge seen at the previous scar and products of conception were gently removed, edges of the scar tissue were excised and freshened, gentle uterine curettage was done {Fig. 1, 2, 3}. During surgery bleeding was less due to

previous administration of two doses of injection methotrexate. Tissue was sent for histopathological examination and diagnosis of Cesarean scar ectopic pregnancy was confirmed. Bilateral salpingectomy (in view of bilateral hydrosalpinx) was also done as she already had two live issues. Her postoperative period was uneventful and patient was discharged in satisfactory condition. Her Beta Human Chorionic gonadotropin level on discharge was normal (nonpregnant levels).

Figure 1. Ectopic Pregnancy at the Cesarian Scar

Figure 2. Retained Products of Conception Seen at the Scar Site

Figure 3. Suction of Uterine Cavity

DISCUSSION

A Cesarean scarectopic pregnancy occurs when a pregnancy implants on a cesarean scar. It is rarest of all ectopic pregnancies. Incidence estimated in overall cesarean delivery is 1/1800-1/2500. It is a life-threatening condition, causes excessive hemorrhage and risk of uterine rupture. The diagnosis of this type of ectopic pregnancy is very difficult and false negative diagnosis can lead to major complications.

The pregnancies with previous caesarean section have increased the risk of placenta previa, placental abruption, placenta accreta, percreta as well as ectopic pregnancies in future. There are various theories which explain the etiology and mechanism of Caesarean ectopic pregnancy, the most accepted one is blastocyst invade into the myometrium through a microscopic dehiscent tract, which may be due to previous uterine surgery like Caesarean section, manual removal of placenta etc. As per another theory in absence of previous uterine surgery, Caesarean ectopic pregnancy can occur due to trauma done in assisted reproduction techniques.

The most common clinical presentation of Caesarean ectopic pregnancy is painless vaginal

bleeding without any specific clinical signs. For its diagnosis endovaginal ultrasonography and color flow Doppler are very helpful. MRI has important role when sonography is equivocal or inconclusive before therapy or intervention. There should be differentiation of Caesarean scar pregnancy from cervical pregnancy. To differentiate from a cervical pregnancy, in Trans vaginal sonography no myometrium between the gestational sac and bladder must be seen, because the gestational sac grows into the anterior portion of the isthmus. To determine whether a Cesarean Scar Pregnancy (CSP) has occurred, USG in the sagittal position can be used to indicate a clear uterine cavity and an empty cervical canal.

With the use of transvaginal sonography and saline infusion sonography, even in nonpregnant female it is possible to assess post caesarean section uterine wall integrity. Caesarean section scar defect is identified by the presence of fluid within the incision site or filling defect at the presumed site of the scar.

Recently, a study of 26 patient, out of which suspected 19 Caesarean ectopic pregnancies treated with intra muscular and intragestational methotrexate given with successful outcome. After the treatment, typically, there was an initial increase in the human chorionic gonadotropin serum concentrations as well as in the volume of the gestational sac and their vascularization. After a variable time period the values of serum human chorionic gonadotropin decreased, as expected.

Various case reports of patients with Caesarean scar ectopic pregnancy even in the absence of bleeding, supports our management as the surgical option. This includes elective laparotomy/laproscopy 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. Other is a shorter follow-up period. In another study with Caesarean scar pregnancy cases, surgical excision of scar is considered as a key management and helpful to prevent recurrence. It was also observed and recommended that use of injection methotrexate prior to surgery results in decrease in the blood loss intraoperatively thus reducing maternal morbidity and mortality.

The availability of Uterine Artery Embolization (UAE) in cases of Caesarean ectopic pregnancies treated has contributed to successful management without any hemorrhage.

CONCLUSION

Cesarean scar ectopic pregnancies can have very fatal and poor outcomes, including uterine rupture, massive hemorrhage and maternal death. Thus, it is important that early and accurate diagnosis of cesarean scar pregnancy is obtained in order to avoid complications and preserve fertility.

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