



Case Report

Case report -Cesarean scar ectopic pregnancy

Yashodhara Gaur^{1,*}, Renu Jain¹, Seema Gurjar¹

¹Dept. of Obstetrics and Gynaecology, G.R Medical College, Gwalior, Madhya Pradesh, India



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Beta HCG - Beta Human chorionic gonadotrophin

ABSTRACT

Cesarean scar ectopic pregnancy is one of the rarest of all ectopic pregnancy increase in number of cesarean section leads to increase in number of cesarean scar ectopic pregnancy. Early diagnosis and prompt management help in reducing mortality and morbidity occurring due to scar ectopic pregnancy. We are reporting a rare case of cesarean scar ectopic pregnancy G5P3L3D1 with period of gestation 7 weeks 3 days with previous all 4 deliveries by cesarean section. Cesarean scar ectopic pregnancy are life threatening as they pose a great risk of maternal hemorrhage as the patient vital are the stable patient managed medically with injection Methotrexate.

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1. Introduction

An ectopic pregnancy is pregnancy that occurs outside uterine cavity. Ectopic pregnancy occur in about 2% of all pregnancies. Ectopic pregnancy accounts for 6% of all pregnancy related deaths. 95% of total ectopic pregnancies are implanted in fallopian tubes various segments, rest 5% are implanted in ovary, peritoneal cavity or prior cesarean scar. Classical triad of ectopic pregnancy includes amenorrhea followed by pain in abdomen and bleeding pervaginal. Risk factor for an ectopic pregnancy includes a prior extrauterine pregnancy, use of assisted reproductive technology, increasing maternal age, intrauterine device placement, progesterone only pills, history of tubal ligation, active sexually transmitted infection and increase in number of cesarean deliveries. Risk for cesarean scar ectopic pregnancy not necessarily increases with the increase in number of cesarean deliveries. Transvaginal sonography and serum b hCG made diagnosis easier and more accurate. Although ultrasound pelvis remain the primary imaging modality for diagnosing scar ectopic pregnancy, MRI pelvis

aid in the detection of possible placental implantation or bladder wall invasion.¹⁻⁴

2. Case Report

A 32 years old female with G5P3L3D1 presented at our hospital in routine/emergency as her first visit with episodes of painless vaginal bleeding since 8 days on and off with USG report showing scar ectopic pregnancy. All previous birth were by LSCS with last cesarean section was 2½ years back. She had no other significant surgical and medical history and had no history of sexually transmitted infections. USG of patient suggest single live scar region pregnancy with very thin myometrium of 3.4 mm in scar region in lower uterine segment.

On admission her vitals were within normal limits and stable. On per abdomen examination transverse scar of previous cesarean section present, abdomen was soft, non tender. On per speculum examination cervical os was closed slight bleeding through os present. On per vaginum examination uterus was 6 weeks size. Cervical os was closed. The patients hemoglobin, random blood sugar, liver function test, kidney function test were within normal limits.

* Corresponding author.

E-mail address: dryashodharagaur1@gmail.com (Y. Gaur).

PT - WNL, INR - WNL, ECG and Chest x-ray were within normal limits. Quantitative b hCG was 55721 IU/L at presentation. MRI whole abdomen and pelvis suggestive of cystic lesion of 25×28×29 mm centered in anteroinferior myometrium at site of cesarean scar in lower uterine segment suggestive of cesarean scar pregnancy. A fetal pole was noted with the presence of fetal cardiac activity with thinning of myometrium < 5 mm between lesion and posterosupero wall of uterus.

As vitals of patients were stable and she was not anemic medical management for scar ectopic started with the help of radiologist after written and informed consent taken from patient and her relative. USG guided methotrexate injection was injected into scar ectopic under with all aseptic precautions. Patient vitals and bleeding PV were monitor 4 hourly. Repeat USG after 3 days of procedure done which was suggestive of a single embryo of CRL 0.9 cm corresponding to mean gestational age 7 wks 3 days in anterior part of lower uterine segment with no evidence of fetal cardiac activity on mode and color Doppler suggestive of fetal death. Patient kept on close observation, patient had slight bleeding per vaginum. Tab. Misoprostol 200 µg kept per vaginum repeat b hCG done on 5th day was 7819 IU/ml. Repeat USG showed regression of gestational sac with mean sac diameter of 18 mm. Repeat b hCG level after 48 hrs next 48 hours was 2892 IU/ml again. Repeat USG on day 7 was done suggestive of RPOC of 21×7 mm. Patient was discharged with advise of followup in OPD.



Fig. 1:

3. Discussion

Here, we reported a case of patient G5P3L3D1 with prior 4 cesarean deliveries, who presented with a cesarean scar ectopic pregnancy. Diagnosis was made by obstetric USG and pelvic MRI and she underwent medical management with Inj. Methotrexate.

Cesarean scar ectopic pregnancy is a high clinical suspicion when a patient with prior multiple cesarean deliveries presents with first trimester bleeding PV. Although cesarean scar ectopic pregnancy is uncommon, its incidence indeed increasing due to the rise of cesarean deliveries (7.15, 16.5). Cesarean scar ectopic pregnancy are life threatening as they pose a great risk for maternal hemorrhage. So, it is very important to identify and treat cesarean scar ectopic pregnancies to avoid significant maternal morbidity and mortality.⁵

Cesarean scar ectopic pregnancy is diagnosed when USG shows an enlarged uterine segment with thin myometrium at the implantation site in previous cesarean scar region. Trophoblast is located between bladder and anterior uterine wall with foetal pole and cardiac activity. Uterine cavity is empty. On implantation, cesarean scar ectopic pregnancy can either extend into the cervico isthmic space and into uterine cavity or extend deeper into myometrium toward serosal surface of uterus.

Although there are no specific diagnostic criteria for cesarean scar ectopic pregnancies. Suggested criteria for scar ectopic pregnancy includes (a) gestational sac embedded eccentrically in myometrium in lower uterine segment (b) Implantation at the site of prior cesarean delivery scar (c) Empty uterine cavity, (d) Prior cesarean scar site shows extensive blood flow on colour Doppler. Additionally, Kaelin Atgen et al distinguished implantation of placenta “into” prior cesarean scar compared to attached “onto” the prior scar in first trimester among continuing cesarean scar pregnancies. MRT is helpful in distinguishing cervical ectopic from scar ectopic pregnancy or consideration for expectant management of cesarean scar ectopic pregnancy.⁶

Here, the case highlights the importance of early diagnosis and management of cesarean scar ectopic pregnancy. This patients presentation was similar to other case reports found in literature. Patient presented with painters first trimester vaginal bleeding on and off since 7-8 days. Gestational age of 7 weeks 3 days at presentation is also consistent with previous studies indicating presentation between 5-12 weeks of gestational age. Patient have prior 4 cesarean deliveries. Early diagnosis and timely management of patient done with USG guided intraembryo methotrexate injection. Management of scar ectopic pregnancy depends on pregnancy viability, gestational age, maternal health, desire for future fertility, physician skills and available resources.

Patient requiring permanent sterilization, hysterectomy is a method for management. Patient desiring fertility, more conservative management includes uterine wedge resection, systemic methotrexate with or without intrasac methotrexate which can be used in patients with gestational sac of less than 8 weeks without fetal cardiac activity. However, medical management alone may leave the cesarean scar defect unrepaired and susceptible to complication in subsequent pregnancies. Other modalities of treatment includes uterine ovarian and internal iliac arteries embolization. We managed patient successfully with USG guided intraembryonic methotrexate injection.^{7,8}

In summary, to reduce maternal mortality and morbidity there should remain high clinical suspicion of cesarean scar ectopic pregnancy in a patient with history of previous cesarean delivery present with first trimester bleeding PV. Patient should be diagnosed using TVS with confirmation with MRI. Patient should undergo prompt treatment depending on her clinical status and reproductive preferences. Medical management should be considered if patient general condition is stable and she can come for followup.

4. Conflict of Interest

None.

5. Source of Funding

None.

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Author biography

Yashodhara Gaur, Professor

Renu Jain, Associate Professor

Seema Gurjar, 3rd Year Post Graduate

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