



A RARE CASE REPORT: CAESAREAN SCAR ECTOPIC PREGNANCY - MEDICAL MANAGEMENT.

Medical Science

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ABSTRACT

Caesarean section scar ectopic pregnancy (SEP) is a rarest form of ectopic pregnancy. If not diagnosed and adequately treated in early pregnancy leads to considerable maternal morbidity and mortality. With the increasing rate of caesarean section there is a substantial increase in this condition with better understanding of this disease. Caesarean scar ectopic is the implantation of a gestational sac in the myometrium and fibrous tissues at the site of a previous uterine scar (mostly cesarean section scar). We describe the presentation, workup including radiology studies and management of a caesarean scar ectopic pregnancy in a 23 yrs. old gravida 4 para 1 living 1 with 2 abortions with previous one caesarean section. The mean gestational age at the time of diagnosis was 7w 5d. The majority of the women presented with either pain or bleeding, but few cases were asymptomatic and were diagnosed with scar ectopic pregnancy during routine obstetric ultrasonography. We were successful in treating this rare form of ectopic pregnancy without any maternal morbidity and with medical management.

KEYWORDS

Caesarean Scar Ectopic Pregnancy, Medical Management.

INTRODUCTION:

Cesarean scar ectopic pregnancy, a rare type of ectopic pregnancy, is the implantation of a gestational sac in the myometrium and fibrous tissues at the site of a previous uterine scar (mostly cesarean section scar) ^[1]. The incidence of scar ectopic pregnancies (SEP) is about 0.15% in women with previous cesarean section ^[2]. The probable explanation may be the rising trend in a number of procedures that could potentially damage the endometrium like cesarean section, dilatation and evacuation, myomectomy, metroplasty, operative hysteroscopy ^[3]. There may be associated complications like placenta accreta and uterine rupture if the pregnancy continues to a higher gestational period.

A Case Report:

A 23 yrs. old gravida 4 para 1 living 1 abortion 2 with previous one caesarean section and history of curettage came with complaints of traids, amenorrhea since 2 months, pain in abdomen and per vaginal spotting since one day. Patient was admitted. General physical examination was unremarkable. On admission urine pregnancy test was positive, beta human chorionic gonadotropin (β -hcg) was 3175 mIU/ml. Ultrasonography was suggestive of gestational sac corresponding to 7wk containing yolk sac, fetal pole with cardiac activity, endometrial thickness 8 mm, findings were consistent with cesarean scar ectopic pregnancy. After confirmation of the diagnosis, plan of management was discussed with patient. Conservative management, medical management with systemic or local methotrexate injection, and surgical management including hysteroscopic suction evacuation/resection or laparoscopic wedge resection, if needed laparotomy were discussed with the patient. After departmental discussion, it was planned to proceed with intralesional methotrexate injection, under ultrasound guidance.

Procedure has been explained to the patient, with informed consent under ultrasonography scar ectopic site has been localized, lignocaine 2% injected locally, reddish fluid 3 cc aspirated from scar ectopic site, injection methotrexate injected intralesional in anterior wall of uterus. Patient tolerated the procedure well. Repeat beta hcg was sent after 48 after procedure and found to be 1135 mIU/ml, in decreasing trends, ultrasonography suggestive of irregular gestational like structure noted with heterogenous area adjacent to it. Patient had been followed up after one month and beta hcg was repeated which was found to be normal. We were successful in treating this rare form of ectopic pregnancy without any maternal morbidity and with medical management.

DISCUSSION:

Scar Ectopic pregnancy (SEP) is a life-threatening obstetrics emergency in the early trimester, associated with high morbidity and mortality if not intervened timely ^[4]. Among all types of ectopic pregnancies, scar ectopic pregnancy is one of the rarest types. The first case of SEP was reported in 1978 in English medical literature ^[5]. SEP is defined as a gestation completely surrounded by myometrium and

fibrous tissue of the previous uterine scar separated from the endometrial cavity and endocervical canal ^[6]. SEP can be broadly divided into two types. Type I is endogenic variety, caused by the implantation of the gestational sac within the prior scar with progression towards the cervico-isthmus space or the uterine cavity. It may result in a viable pregnancy but has a very high risk of bleeding at the placental site.

Type II is the exogenic variety and is caused by deep implantation of the pregnancy within the scar defect with further growth infiltrating into the uterine myometrium followed by uterine serosal surface and may finally end up in uterine rupture and massive hemorrhage. Type II is a more dangerous and life-threatening condition ^[7]. The clinical symptoms may vary from being asymptomatic to painless or painful vaginal bleeding. Sometimes the patient remains asymptomatic. So, every woman with a history of uterine surgery should be screened early in the first trimester of pregnancy ^[8]. Transvaginal ultrasonography and color flow doppler are essential for the early diagnosis of SEP. Color flow doppler can be used to demonstrate the peri-trophoblastic flow around the gestational sac and its relationship to the uterine scar and nearby viscera.

The various treatment options carried out all over the world are expectant management, systemic methotrexate, local methotrexate, dilatation and evacuation, uterine artery embolization, hysteroscopy, laparoscopy, laparotomy with wedge resection, and finally hysterectomy for massive hemorrhage or uterine rupture. Conservative medical management can be opted for SEP patients who are hemodynamically stable. Methotrexate has been the most widely accepted treatment accepted for SEP. It stops cells from dividing. It can be given as intrasac or local injection, systemic or intramuscular, or a combination of both. The standard single-dose regimen for methotrexate is 50 mg/m², whereas the multidose protocol includes four doses of methotrexate 1 mg/kg given on Days 1, 3, 5, and 7 with alternating days of Folic Acid 0.1 mg/kg ^[9]. Other agents like potassium chloride, hyperosmolar glucose, etoposide, and crystalline trichosanthin have also been used for local injection in SEP. Medical management has the advantage of preserving the uterus.

CONCLUSIONS:

Intramural pregnancy with implantation in a previous cesarean section scar is probably the rarest location for ectopic pregnancy. Accurate early diagnosis and effective management are important to reduce maternal morbidity and mortality. Early diagnosis of cesarean scar ectopic gestation using sonography combined with doppler flow imaging is of paramount importance, termination of such a pregnancy once the correct diagnosis is made and also decreases surgical intervention. Effective treatment of scar ectopic pregnancy should be carried out in first trimester to achieve the optimal treatment objectives, including termination of pregnancy before rupture, and life-threatening hemorrhage which will preserve future fertility and prevent recurrence.



Fig 1. Ultrasonography image of scar ectopic pregnancy



Fig 2. Showing injection methotrexate injected under ultrasonographic guidance.

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