

CAESAREAN SCAR ECTOPIC PREGNANCY: CLINICAL PERSPECTIVE OF DIAGNOSIS , MANAGEMENT AND OUTCOME OF A RARE CASE OF CAESAREAN SCAR ECTOPIC PREGNANCY

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Abstract

A caesarean scar ectopic may create havoc as making a diagnosis of scar ectopic is very difficult. The increasing rates of caesarean deliveries has lead to the emergence of problems in both obstetrics (such as placenta previa, Placenta accrete, scar ectopic and scar rupture in subsequent pregnancies) and gynecological complications (such as AUB, Pelvic pain, Caesarean niche and secondary infertility). Caesarean scar ectopic is a rare form of ectopic pregnancy with its incidence being 0.05% of all pregnancies. Management of a peculiar case of caesarean scar ectopic pregnancy has been discussed below.

INTRODUCTION

An Ectopic pregnancy is defined as any pregnancy that gets implanted outside the endometrial cavity. After fertilization is complete, the blastocyst that reaches the endometrial cavity, usually implants on the endometrial lining of the endometrial cavity, but when the implantation of the blastocyst occurs within the myometrium of the previous caesarean scar it is called Caesarean Scar ectopic Pregnancy (CSP).

Caesarean scar ectopic pregnancy poses great challenges in diagnosis and management. The availability of High resolution Ultrasound for pelvic organs imaging has enabled early diagnosis of scar ectopic, thereby reducing the mortality and morbidity it poses significantly.

Two types of scar ectopic pregnancies have been described by Vial.et all.

Type 1 Scar ectopic pregnancy is described as implantation of the pregnancy on the myometrium of the previous scar, where the pregnancy begins to grow towards the endometrial cavity, known as ENDOGENOUS CSP. This type of CSP has the potential to reach viability, but carries the risk of development of placenta previa sequale and major obstetric hemorrhages.

Type 2 Scar ectopic pregnancy is described as implantation of the embryo on the Previous scar where the pregnancy grows towards the uterine serosa. This type of scar ectopic is called

EXOGENOUS CSP. This type of CSP carries the potential risk of Scar rupture and intra-abdominal hemorrhage.

CASE STUDY

A 36year old G4P2L2A1 with previous history of two caesarean sections with 3 months of amenorrhea Presented to OPD with Severe lower abdominal pain and vomiting. She had done a urine pregnancy test 1 week back and it was found to be positive. Ultrasound imaging done two days before presenting to OPD was suggestive of a Gravid uterus with Intra-uterine pregnancy of 8 weeks 4 days gestational age. Gestational sac was found to be located in the lower uterine segment.



Physical examination of the patient was carried out, patient was found to be moderately pale, with severe tenderness over caesarean scar. Pulse, BP and saturation was normal. Further Pelvic examination

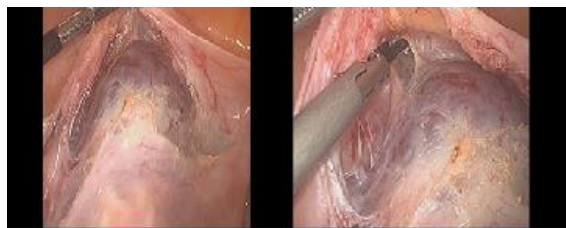
revealed Cervical motion tenderness. Forniceal fullness and tenderness felt on the anterior fornix. Trans vaginal ultrasound performed was suggestive of A) A gestational sac with yolk sac and fetal pole noted with CRL measured 28mm corresponding to 9 weeks 4 days gestation. Fetal heart rate recorded. B) Gestational sac noted in the myometrium at the level of the previous caesarean scar. C) Myometrial layer between the bladder and Gestational sac appears thinned out. D) Endometrial cavity and cervical canal appear empty.

A diagnosis of caesarean scar ectopic pregnancy (growing exogenously) was made and patient was taken up for emergency laparoscopic scar ectopic resection with bilateral salpingectomy.

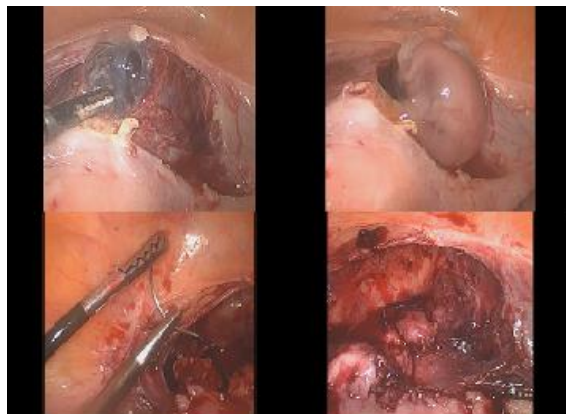
Intra-operative findings: Once pneumoperitoneum was created and scope was introduced into the peritoneal cavity, the following were seen

1. Uterine corpus and cornua appeared normal.
2. Bilateral tubes and ovaries appeared normal.
3. A visible bulge at the level of the UV fold seen.

Once the UV fold of peritoneum was separated and bladder was pushed down, a gestational sac seen bulging through a thin layer of myometrium.



Diluted Vasopressin was injected into the myometrium around the gestational sac. A transverse incision was made on the gestational sac and products of conception were evacuated completely. Edges of the previous thinned out scar was trimmed.



After giving a thorough wash the myometrium was sutured using absorbable suture material. The scar was reinforced. Clear urine was drained throughout the procedure.

Post operatively the Patient was discharged on her 2nd post-operative day. Post op period was uneventful.

Patient was followed up with serum beta HCG levels after 1 week and after 2 weeks which was in decreasing trend.

Outcome and Follow-Up: The patient was followed up after two weeks of surgery and was in good health. Histopathology report of the product of conception excluded any other pathology.

DISCUSSION

Caesarean scar ectopic pregnancy represents an iatrogenic pathology which poses great challenges in diagnosis and management. Fewer theories have been described in the pathogenesis of caesarean scar pregnancy including implantation of the blastocyst on the myometrial layer at the level of the previous caesarean scar. Most of the caesarean scar ectopic pregnancies are asymptomatic, a few cases may present with Lower abdominal (scar) pain or light vaginal bleeding. Thorough knowledge about the caesarean scar ectopic pregnancy is very essential to raise a suspicion of caesarean scar ectopic even among experts. Scar ectopic pregnancy is associated with significant mortality and morbidity hence early diagnosis plays a pivotal role in management of CSP. Classically in transvaginal ultrasound the caesarean scar ectopic pregnancy should be differentiated from a cervical pregnancy and a normal intra – uterine pregnancy to make a diagnosis. In a trans vaginal ultrasound, a caesarean scar ectopic shows an empty uterine cavity upto the corpus and an empty cervical canal.

Management of caesarean scar ectopic pregnancy is either medical or surgical. Medical management is advocated for CSP less than 8 weeks gestation, symptom free, hemodynamically stable and unruptured pregnancies. Injection methotrexate can be given either locally into the sac or systemically. Surgical management is employed in cases where the gestational age is more than 8 weeks gestation or when the sac is ruptured.

Deciding on whether to approach the ectopic laparoscopically or to approach hysteroscopically depends on the myometrial thickness between the bladder and the sac. Use of blind curettage for evacuation of products of conception is contraindicated. Hysteroscopy guided evacuation of products of conception, following medical management has been found to have better results than Medical management done alone. Sterilization needs to be done with reinforcement of the scar because of the risk of CSP in subsequent pregnancies. But in cases of fertility desiring patients, Caesarean scar needs to be reinforced along with need to explain the risk of CSP in subsequent pregnancy and emphasis on the importance of spacing.

CONCLUSION

In conclusion the need to diagnose a caesarean scar ectopic precisely with the help of transvaginal

ultrasound in order to manage the scar ectopic promptly has been emphasised. Precise diagnosis to avoid over diagnosis of any intra uterine pregnancy or cervical pregnancy as CSP need to be done as no standard Diagnostic criteria is available at present nor does the patient present with any pathognomic symptoms or signs.

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