



CAESAREAN SCAR PREGNANCY -A CHALLENGE

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ABSTRACT **Background:** Ectopic is defined as one in which the fertilised ovum is implanted outside the normal endometrial cavity. Most common sites of ectopic pregnancy is ampullary mid position of fallopian tube, whereas least common being uterine scar (<1%). Incidence of scar ectopic pregnancy is 1:531 women. It is classified into 2 different types based on location as exogenous CSP & endogenous CSP. Management involves both medical & surgical.

Case Presentation: We report a case of 34 years old G3P1L1A1 Who Had Previous one C-section and one d & c. She presented to us with UPT positive and TVS scan showed no Gestational Sac. Serial BETA HCG monitoring was done and repeat scan revealed scar ectopic pregnancy which was successfully managed.

Conclusion: It is important for both Obstetrician and Radiologist in diagnosing and managing the women with the risk for scar ectopic pregnancy and to have a regular follow up during pregnancy. Failure to diagnose and prompt treatment may lead to uterine rupture massive haemorrhage and even maternal death.

KEYWORDS : Caesarean Scar Ectopic Pregnancy, Methotrexate, Dilatation and Curettage

INTRODUCTION:

Caesarean Scar Ectopic Pregnancy is rare form of ectopic pregnancy. It is incidence ranges from 1/1800 – 1/2500 of all pregnancies (1,2). It is one of the life threatening condition. This condition is increasing due to increased C section rates worldwide. Main pathophysiology involves the myometrial defects, inadequate collagen formation, post operative wound infection and improper closure of uterine incision, IVF, manual removal of placenta (4). There are two types of scar ectopic pregnancy.

Type 1 Develops In Myometrium And Then Grows Towards The Uterine Cavity,**Type 2 – Exogenously Grows Towards The Uterine Serosa (4)**

Type 2 is more dangerous, and result in uterine rupture, haemorrhage and maternal death. Symptoms of scar ectopic pregnancy include pain & vaginal bleeding during first trimester, many may remain asymptomatic during the time of diagnosis. Investigation of choice TVUS & TAS along with BETA HCG. Treatment options includes conservative management with methotrexate along with surgical curettage, hysteroscopy or laprotomy. Caesarean scar ectopic pregnancy is a rare condition which is often very difficult to diagnose and management option is very hard to choose.

Case Report

We report a case of G3P1L1A1 34/F presented to OPD with urine pregnancy test positive. Patient presented to OPD for regular antenatal checkup and dating scan. No h/o fever, spotting, vomiting. Her past obstetric history was girl baby / LSCS / full term (indication: failed induction). 2nd pregnancy conceived spontaneously after 2 years of previous pregnancy (unplanned pregnancy) D&C done at 2nd month of gestation age. 3rd pregnancy conceived spontaneously after 6 years. Confirmed by urine pregnancy test. She presented to opd for dating scan and routine antenatal checkup. Patient is not a known case of DM, SHTN, TB, epilepsy. NO history of surgery in the past.

On examination, she had a normal blood pressure of 113/70 mmHg and a pulse rate of 98 beats/min. Her body temperature was 37.5 °C. Patient cardiorespiratory and neurological systems were normal. Her abdomen was soft and not tender. The result of her pelvic examination was normal. USG dating scan done which did not reveal an intra uterine gestational sac, Hence beta HCG was advised and was found to be 6314 mIU/ml, and repeat beta HCG after 48 hours was 14400 mIU/ml. Repeat ultrasonogram revealed scar ectopic pregnancy and since the vitals of the patient was stable, patient counselled regarding the medical management with Inj METHOTREXATE 75 mg according to her body weight. Serial fall in BETA HCG noted but the repeat transvaginal ultrasound revealed the persistence of gestational sac, so we decided to proceed with suction and evacuation under ultrasound guidance. Preoperative assessment was done. Anaesthetic fitness obtained. she underwent suction and evacuation under SA on 13/10/20. Intra operative and post operative period was uneventful.

Patient condition improved and discharged. Repeat beta HCG was done after 48 hrs 3136 mIU/ml. Serial repeat beta HCG monitoring done till the value of 1.31 mIU/ml on 1/11/20.

DISCUSSION:

The increasing rate of cesarean sections in the two last decades has brought into light a set of complications that were not so frequent in the past, including Cesarean scar pregnancy. This condition is defined as a gestation completely surrounded by myometrium and fibrous tissues of the cesarean section scar and separated from endometrium cavity and endocervical canal. The first case was reported in 1978 (Larsen and Solomon) as a postabortal haemorrhage due to what the authors called a uterine scar sacculus [8]. The possible incidence of this type of ectopic pregnancy ranges from 1/1800 to 1/2200 pregnancies [9]. The pathophysiology of scar ectopic still remains unclear, but it is possible for the conceptus to penetrate the myometrium through a fistulus tract or may be due to defect in the endometrium during previous procedures. Most common symptom of this condition includes painless vaginal bleeding. This condition is mainly diagnosed using the ultrasound.

The sonographic criteria for diagnosis [12, 13] are

- (i) empty uterus and empty cervical canal;
- (ii) development of the sac in the anterior wall of the isthmic portion;
- (iii) a discontinuity on the anterior wall of the uterus demonstrated on a sagittal plane of the uterus running through the amniotic sac;
- (iv) absent or diminished healthy myometrium between the bladder and the sac;
- (v) high velocity with low impedance peri-trophoblastic vascular flow clearly surrounding the sac is proposed in Doppler examination.

Differential diagnosis include cervical ectopic pregnancy, placenta accreta. Treatment options may be either surgical or medical. Surgery option involves both radical and conservative. radical option involves hysterectomy in cases where the bleeding is uncontrollable. Conservative options include suction and evacuation, dilatation and curettage by excising the trophoblastic tissue through laprotomy or laproscopy. Medical management options involves methotrexate either administer locally or systemically.

Disadvantages of the medical management involves prolonged follow up and increased chances of rupture and also cost factor. Another modality of treatment option for cervical pregnancy includes uterine artery embolisation which helps in prevent the excessive bleeding during dilatation and curettage. But this method is not considered as the primary approach. The risk of recurrent scar ectopic pregnancies pose a diagnostic challenge that calls both the physician as well as radiologist in managing the women with associated risk, and to maintain regular follow up. The risk of recurrence in cesarean scar ectopic is very low and its about 3.2 to 5%. Women during the future pregnancies must be informed about the risk and recurrence of scar pregnancy.

CONCLUSION

Ectopic pregnancy presenting with in the scar, Can lead on to uterine

rupture as well as intraperitoneal hemorrhage , which in most common during the first trimester of pregnancy. It is a rarest entity. But an obstetrician can encounter during the life time. In a women with the history of scar pregnancy in the previous pregnancies, early ultrasound should be done to establish the location of implantation. Treatment is mainly based on gestation age, HCG levels, presents of fetal cardiac activity and desire to future fertility .

Abbreviations:

B HCG: BETA human chorionic gonadotrophin
TVUS: Transvaginal ultrasound
TAS: Transabdominal ultrasound

Consent:

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