

## **SCAR ECTOPIC PREGNANCY- EARLY DIAGNOSIS FOR BETTER PROGNOSIS**

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### **ABSTRACT**

Normally, the blastocyst attaches to the uterine cavity's endometrial lining. Any other location for implantation is regarded as an ectopic pregnancy (WHO). Previous uterine scar ectopic pregnancy rates are <1%. Although, due to the increasing number of caesarean sections, the rate of scar ectopic pregnancy is also rising which is a major concern since it is a life threatening risk.

**Key words-** Scar ectopic pregnancy, LSCS, gestational sac, decidual reaction

### **Introduction**

In 1978, Larsen and Solomon first described in South Africa about the caesarean scar pregnancy. Off recent there is a substantial increase in the incidence of scar ectopic pregnancy as is the rate of caesarean sections.<sup>1</sup>

The expected prevalence of caesarean deliveries overall is 1/1800–1/2500.<sup>2</sup>

The scar pregnancies generally doesn't progress beyond the first trimester as the reports in the literature also quotes very few incidences.<sup>3</sup>

If the pregnancy continues to the second and third trimester substantially has a higher risk of uterine rupture with catastrophic haemorrhage, associated with high risk hysterectomy leading to maternal morbidity and very bad future fertility rate.<sup>4</sup>

A pregnancy could grow as a secondary abdominal pregnancy if the pregnancy protrudes through the sac and implants on other abdominal organs.

Sometimes, a life saving hysterectomy may be required if the case is complicated by massive haemorrhage and disseminated intravascular coagulation.

Injuries from various uterine procedures, such as myomectomy, curettage, and metroplasty, can also result in scar ectopic pregnancy.

Risk of recurrence in cases of scar ectopic pregnancy reported to be 3-5 per 100 women.<sup>5</sup>

### **Discussion**

If the pregnancy continues, there is a substantial higher risk of

- Uterine perforation
- Bladder invasion
- Placenta previa
- Placenta accreta
- Placenta percreta

- Long term complication of uterine AV malformation

In this case, a 27yr old female, G4P2L2A1 previous 2 LSCS, presented with h/o missed period, Gestational Age of 5.5 wks by ultrasound suggestive of scar ectopic pregnancy. She was managed medically with single dose Inj. Methotrexate 1mg/ kg body weight, Intramuscularly.

#### Ultrasound with colour doppler-

Ultrasound examination revealed single gestational sac in the lower uterine segment at the region of previous caesarean scar extending into anterior myometrial wall with surrounding increased vascularity and decidual reaction, suggestive of scar ectopic pregnancy. Fetal pole and yolk sac were not visualized on the scan. Mean Gestational sac measuring 9.9m, corresponding to 5.5 wks.

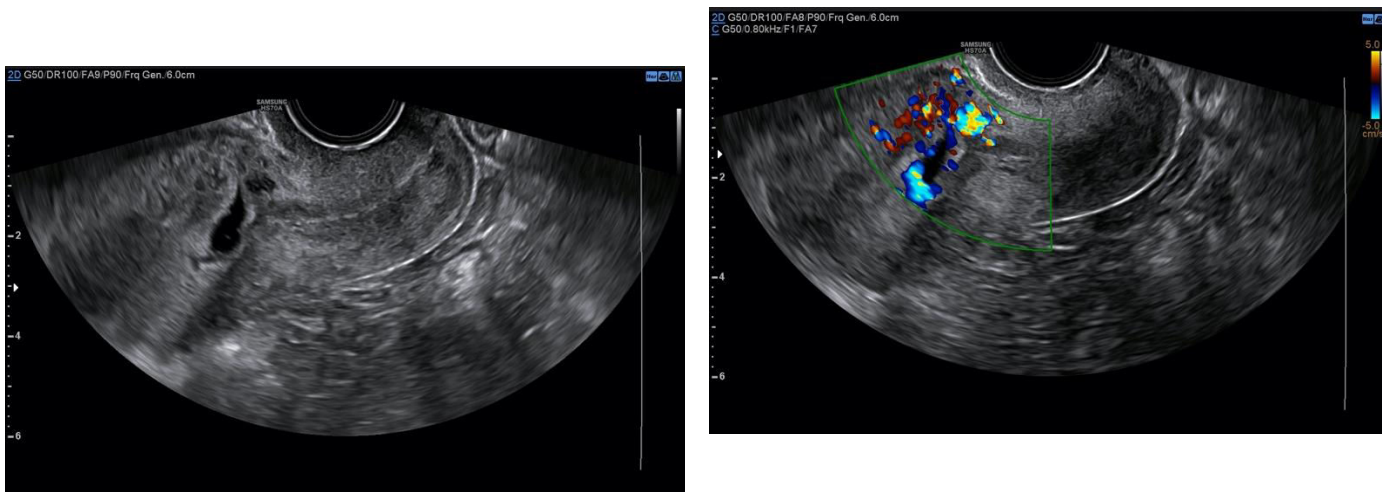


Fig.1

#### Investigations-

All routine antenatal parameters were within normal limits. Beta hcg was 9725mIU/ml. Beta hcg was repeated every 48 hours along with TVS. After 2 days repeat beta hcg was 5679mIU/ml. The third test following 48 hours was 3364mIU/ml. Repeated fourth test following 2 days was 2336mIU/ml. Throughout it showed a decreasing trend and was 845mIU/ml on Day 10.

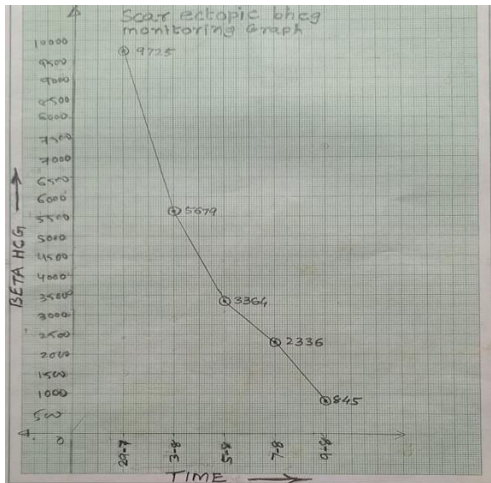


Fig. 2

### Differential Diagnosis

- Spontaneous abortion
- Cervicoisthmic pregnancy
- Trophoblastic tumour
- Very low implanted intrauterine pregnancy
- Missed abortion
- Ectopic pregnancy
- Delayed conception
- Heterotopic pregnancy

### Management

Evidence based CSP treatment should prioritise preventing serious consequences and preserving fertility.

#### Medical management

- USG guided local embryocide
- Systemic Methotrexate
- Combined medical treatment
- Medical treatment combined with surgical aspiration

#### Surgical treatment

- Hysteroscopic evacuation
- Laproscopic removal
- Uterine curettage
- Hysterotomy
- Hysterectomy

#### Others

- High intensity focused ultrasound with hysteroscopic suction and curettage
- High intensity focused ultrasound ablation

## Conclusion

The incidence of scar ectopic pregnancy is growing, possibly as a result of the global increase in Caesarean procedures. The implantation of the embryo in the previous caesarean scar, though rare is a potentially dangerous complication of previous caesarean section. The advanced diagnostic techniques of ultrasound by the TVS and colour flow doppler is increasing the accuracy of diagnosis and early management. Though there are different modalities of treatment, yet there are no specific guidelines in the management and follow up of caesarean scar pregnancy.

Fig. 1- Ultrasound and doppler study images demonstrating scar ectopic pregnancy

Fig. 2- Graphical representation of decreasing trend of Beta hcg values after administering Inj. Methotrexate

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