

# Rare case of caesarean scar pregnancy

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## Abstract

This case illustrates the importance of considering a diagnosis of ectopic pregnancy at previous caesarean scar. When a live intrauterine pregnancy consisting of gestational sac, fetal pole and or yolk sac cannot be visualized, in presence of sufficiently elevated quantitative serum chorionic gonadotropin ( $\beta$ -HCG) the possibility of all sites of ectopic pregnancies should be considered. Modern obstetrician needs to be aware of the diagnosis of caesarean scar ectopic pregnancy and consider evaluation of scar with ultrasound or magnetic resonance imaging (MRI). Early diagnosis and right treatment can preserve the fertility. We present here such a patient, in whom caesarean scar pregnancy was accurately diagnosed and appropriately treated.

**Keywords:** Caesarean Scar, Curettage, Ectopic pregnancy, Methotrexate.

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## INTRODUCTION

Caesarean Scar ectopic is one of the rarest forms of ectopic pregnancy. The incidence of scar pregnancy is on rise due to increasing number of caesarean sections as well as due to better imaging techniques. The diagnosis always requires high index of suspicion and often gets confused with cervical pregnancy and incomplete abortion.

## CASE HISTORY

A 22 years old female, G<sub>2</sub>P<sub>1</sub>L<sub>1</sub> presented in Out Patient Department with history of 2 months of amenorrhoea, per vaginal bleeding and mild pain in abdomen. She also committed the history of, curettage in private hospital around 8 days back, without being subjected to proper ultrasonography. Probably, the case was misdiagnosed as incomplete abortion. She had history of previous LSCS done 3 years back and had no other significant medical history. On per speculum examination, small amount of dark colour bleeding was present with cervical os closed.

Uterus size was bulky and soft in consistency. All other examination was unremarkable. When she was subjected to emergency Ultrasonography, the report was suggestive of an irregular Gestational sac seen in lower uterine segment along with increased peripheral vascularity. The possibility of cervical pregnancy or scar ectopic pregnancy was still a dilemma. The Serum Beta HCG level was 6000 mIU/ml. The urine pregnancy test was positive. Patient was admitted and further scrutinized by performing MRI Pelvis. However Magnetic Resonance Imaging [MRI] cleared the picture with all findings consistent with scar ectopic pregnancy. Patient was thoroughly counselled regarding the diagnosis, risk of haemorrhage and all possible modalities of management available with us. After all basic investigations, 3 doses of Inj Methotrexate [1 mg/kg] were given by systematic route, alternate day, followed by Inj Folic Acid [0.1 mg/kg]. Throughout the treatment, patient was monitored with serial Beta HCG levels. Her symptoms subsided. Beta HCG levels were noted to be trending down adequately and finally reached up to non pregnant level. Patient was discharged after repeat MRI scan and was advised contraception for next 6 months.

## DISCUSSION

Caesarean section scar pregnancy is rare clinical entity where gestational sac implants at the previous uterine scar<sup>1</sup>. Caesarean scar pregnancy is potentially life threatening if not diagnosed and treated early. It may lead to catastrophic complications, such as uncontrolled haemorrhage and uterine rupture, which may require

hysterectomy and results in subsequent loss of fertility. Exact incidence of scar pregnancy is not known. R. Maymon et al studied a series of 8 cases of scar pregnancies<sup>3</sup>. Analysis of all these women's obstetric history revealed that 63% of them had been previously operated, one had a cervical pregnancy and one had placenta previa. Four of them (50%) had multiple (>2) Caesarean sections. The study concluded that, the women at risk for pregnancy in a Caesarean section scar appear to be those with a history of placental pathology, ectopic pregnancy, multiple Caesarean sections. Early diagnosis and prompt management is the only key factor to avoid further consequences. It can be diagnosed with transvaginal ultrasound which can identify a gestational sac or mass located in the lower uterine segment, within the caesarean scar. MRI can accurately detect the exact location of pregnancy, thus confirming the diagnosis<sup>1,2</sup>

Criteria's for diagnosis are

1. An empty uterine cavity and cervical canal
2. Presence of gestational sac in anterior part of uterine isthmus
3. Absence of healthy myometrium between the bladder and gestational sac

Many times the picture may mimic like Cervical Pregnancy or retained products of conception.

There is no unique treatment modality available to effectively terminate this pregnancy. However, a combination of different techniques including Uterine Artery Embolization [UAE] and intragestational Methotrexate<sup>4,5</sup>; intramuscular and intragestational Methotrexate<sup>6</sup>; hysteroscopic or laparoscopic resection after uterine artery embolization or curettage after intragestational Methotrexate or UAE have all been attempted with varied success rates by different authors. Management is aimed at removal of gestational sac with preservation of fertility. Medical management includes administration of Methotrexate either by local or systemic route All the guidelines , indications and contraindications given for any other ectopic gestation are same in this case also. Surgical exploration has the advantage of repair of the scar along with the removal of gestational sac. Curettage should not be considered as treatment modality as it can cause heavy bleeding.

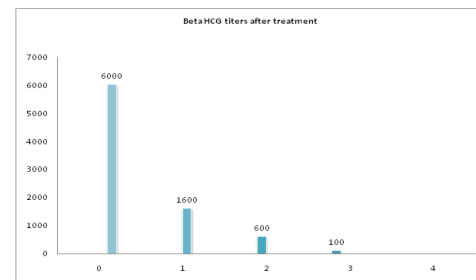
### CONCLUSION

The incidence of caesarean scar pregnancy seems to be on the rise due to increasing caesarean section rate. Even though rare, the possibility of scar pregnancy should be kept in mind for all the cases showing picture of ectopic pregnancy with history of previous caesarean section. Early diagnosis by means of transvaginal sonography and MRI can improve outcome and minimize the need for emergency extended surgery.



Image1

Round to oval cystic structure of 30 mm size in lower uterine cavity near anterior lip of cervix, surrounded by trophoblastic tissue, highly vascular on Doppler study.



Graph 1

Above graph shows decreasing titres of Beta HCG in mIU/ml against weeks after treatment. [Inj Methotrexate]. Due to history of curettage the beta HCG levels were not corresponding with weeks of gestation.

X axis – Number of Weeks after treatment

Y axis - Beta HCG in mIU/ml

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