

DOI: <http://dx.doi.org/10.18203/2320-1770.ijrcog20180930>

## Case Report

# Ruptured caesarean scar ectopic pregnancy

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**Received:** 26 December 2017

**Accepted:** 31 January 2018

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### ABSTRACT

Caesarean scar ectopic is a rare form of ectopic whose incidence has been on rise recently due to increase in incidence of caesarean section. In 1972 the first report of scar ectopic was reported in medical literature. It is a type of abnormal implantation in a scarred uterus following surgery most commonly caesarean section. Early diagnosis and management is the key to prevent morbidity and mortality. Here we present a case of gravida 3 para 2 with previous 2 LSCS with ruptured caesarean scar ectopic with massive haemorrhage. Timely resuscitation and laparotomy helped prevent morbidity and mortality in this patient.

**Keywords:** Caesarean scar ectopic, Hemoperitoneum, Rupture

### INTRODUCTION

Caesarean scar pregnancy is the rarest form of ectopic pregnancy. Incidence being 1 in 1800 to 1 in 2200 of all pregnancies, and 6.1% of all ectopic pregnancies.<sup>1</sup> The incidence is on rise due to increase in number of caesarean section. It is a life-threatening condition due to high risk of uterine rupture severe Haemorrhage and maternal mortality. There are various treatment modalities like expectant medical and surgical management. The treatment needs to be individualized. The following is a case of a ruptured scar pregnancy treated surgically.

### CASE REPORT

A 28-year-old female gravida 3 para 2 with previous 2 Caesarean sections presented with 2 1/2 months amenorrhoea, bleeding per vaginum, vomiting and severe abdominal pain. Her previous caesarean section was done 1yr back. Patient had one antenatal visit during 6<sup>th</sup> week with us and a sonography was done which suggested 6weeks gestation sac lying near scar site. Patient was counselled regarding risk of scar rupture and was advised

termination during first visit but chose to continue pregnancy and lost to follow up. On present examination she had severe pallor, pulse 140/min poor volume, blood pressure of 80/40. Abdominal examination revealed diffuse tenderness and gross distention. Her hemoglobin was 4 gm%. She was admitted and resuscitated with IV fluids and blood.



**Figure 1:** Ultrasound image showing fetus at the ruptured scar site.

Ultrasound showed a single live embryo of 9 weeks gestation in lower uterine segment at previous scar site with gross haemoperitoneum and normal adnexa. Laparotomy was done. 2 litres of haemoperitoneum suctioned. Amniotic sac and fetus seen protruding through the defect at scar site. Products evacuated through the rent, uterine cavity was ensured empty and scar repaired in 2 layers. Bilateral tubectomy done was done with consent. Patient required 4 units of whole blood preoperatively and 2 units postoperatively. Fresh frozen plasma transfused. Patient recovered well. Post-operative period was uneventful.



**Figure 2: Ultrasound image showing ruptured scar pregnancy with hemoperitoneum.**

## DISCUSSION

Invasion of the conceptus into the myometrium is result of microscopic dehiscence or defect in the scar due to poor healing, poor vascularity and fibrosis.<sup>2</sup> The incidence of scar ectopic is on rise due to increase in number of caesarean pregnancies in recent times. Since the reported cases are few, there is no standard treatment protocol and the optimal treatment modality should be individualised based on gestational age, hemodynamic stability and future fertility. The role of ultrasound in diagnosing caesarean scar ectopic is well established. The ultrasound diagnostic criteria include:

- An empty uterine cavity and cervical canal
- A gestational sac in the anterior part of uterine isthmus
- An absence of healthy myometrium between the bladder and gestational sac
- Circular blood flow surrounding the sac must also be clearly visible.<sup>3</sup>

Ultrasound has also been helpful for follow up of sequelae related to scar pregnancy like AV malformations, persistent trophoblastic tissue, postoperative scar hematoma etc. The various treatment options are expectant management for silent miscarriages, methotrexate therapy locally systemically or both, suction evacuation under ultrasound guidance, uterine artery embolization and surgical approach for ruptured caesarean ectopic.<sup>4,5</sup> women who continued their pregnancy without any intervention had high incidence of severe haemorrhage and emergency hysterectomy. The prevalence of hysterectomy in scar pregnancies ranges between 2-12%.<sup>6</sup>

## CONCLUSION

Early diagnosis by transvaginal sonography is the best approach. A timely detection and intervention can avoid a hysterectomy and decrease morbidity and mortality

*Funding: No funding sources*

*Conflict of interest: None declared*

*Ethical approval: Not required*

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**Cite this article as:** Saiyyed A. Ruptured caesarean scar ectopic pregnancy. *Int J Reprod Contracept Obstet Gynecol* 2018;7:1249-50.