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Caser Report

## Caesarean scar-unusual site of ectopic pregnancy: a rare case report

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### ABSTRACT

Scar ectopic pregnancy is the rarest type of ectopic pregnancy; however, it is becoming more common around the world. It is a life-threatening condition caused by abnormal embryo implantation in the myometrium and fibrous tissue of the prior scar after a caesarean section, hysterotomy, myomectomy, or metroplasty. With a better understanding of the disease and an increased rate of caesarean section, there is a significant increase in this condition. Early and correct diagnosis, combined with prompt treatment, can help to avoid pregnancy problems including haemorrhage and uterine rupture, as well as preserve fertility.

**Keywords:** Scar ectopic pregnancy, Abnormal implantation, Previous scar, Haemorrhage, Uterine rupture

### INTRODUCTION

Scar ectopic pregnancy is a hazardous and complicated condition that has become more common in recent years. Following a caesarean section, scar ectopic pregnancy is the most common.<sup>1</sup> The rate of caesarean section ectopic pregnancy varies from 1:1800 to 2216 pregnancies, with 0.15% of all ectopic pregnancies occurring in women who have had a previous caesarean section and 6.1% of all ectopic pregnancies.<sup>2</sup> Caesarean scar pregnancy is a rare type of ectopic pregnancy in which the gestational sac is implanted entirely or partially within the scar.<sup>3</sup> With the rising rate of caesarean section, it is linked to serious complications such as uterine rupture and excessive bleeding. With a greater understanding of the disease, there has been a significant increase in this condition.

Scar ectopic pregnancies can be divided into two categories. Type 1 is caused by implantation in a previous scar, which then progresses to the cervico-isthmic space or the uterine cavity. Type 2 is produced by deep implantation into a scar defect with infiltrating growth into the uterine myometrium and serosal surface, which can lead to uterine rupture and extensive bleeding in the first trimester, which is the riskiest time of pregnancy.<sup>4</sup> It

frequently lacks particular symptoms (such as painless vaginal bleeding or pain in the lower abdomen) and is readily misunderstood.<sup>5</sup> This can result in a life-threatening haemorrhage during pregnancy or curettage, uterine rupture, DIC, or even death. As a result, early and accurate diagnosis is critical for successful treatment to avoid these life-threatening consequences. Thankfully, the use of first-trimester ultrasound imaging has resulted in a large proportion of these pregnancies being recognised and managed early.

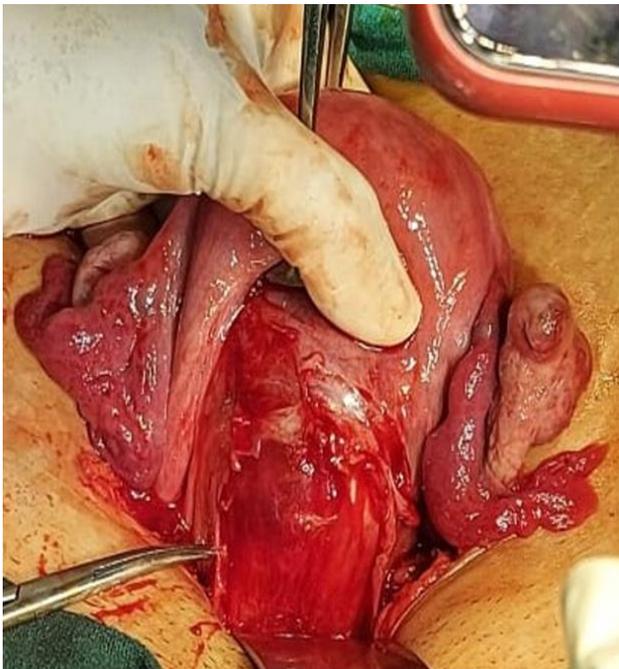
### CASE REPORT

We present a case of a 39-year-old woman who had two previous caesarean sections and was complaining of amenorrhoea for 1.5 months, bleeding p/v (spotting) for 8 days, and a normal general examination. The cervix was normal on speculum examination, there was minor bleeding on vaginal examination, the uterus was bulky and anteverted, and there was no tenderness in bilateral fornices. The results of the blood and urine tests were normal.

Her transvaginal sonography indicated an empty uterine cavity with well-defined endometrium, a CRL of 8.8 mm

equating to 6 weeks and 6 days, and a high likelihood of a simple caesarean scar ectopic pregnancy visible anteriorly in the lower uterine section with no heart activity. The cervical canal is clear, and the adnexa is normal. Hyperechoic rim of choriodecidual reaction with increased vascularity on doppler examination, suggestive of caesarean scar ectopic pregnancy.

The patient was scheduled for a laparotomy. At the region of a previous scar, an intraoperative finding revealed a soft and vascular tumour. The incision was connected to the uterine cavity, scar tissue was removed and freshened, and gentle uterine curettage was performed. The tubal ligation was done on both sides. The diagnosis of caesarean scar pregnancy was established after tissue was sent for histopathological evaluation.



**Figure 1: ectopic pregnancy on previous caesarean scar.**



**Figure 2: Tissue seen after excision of scar.**



**Figure 3: Ultrasonography image showing ectopic scar pregnancy.**

## DISCUSSION

The diagnosis of ectopic scar pregnancy is difficult. The use of imaging in the diagnosis of ectopic pregnancy is critical, and ultrasonography is the modality of choice.<sup>6</sup> Empty uterus and cervix with normal endometrium and endocervical canal on USG, gestational sac in the anterior part of the lower uterine segment in the location of the caesarean scar with a thin myometrial layer between the bladder wall and gestational sac.<sup>7</sup> In cases of unclear or equivocal sonographic findings, MRI may be used as an additional imaging technique.<sup>8</sup> Because there is no universal agreement on the best or most preferable treatment modality, termination of pregnancy in the first trimester should be considered, and treatment options should be personalized to the individual. The most common symptom of a caesarean scar pregnancy is painless vaginal bleeding with no other symptoms. To differentiate from cervical pregnancy in TVS no myometrium between gestational sac and bladder must be seen because the gestational sac grows into the anterior portion of isthmus.<sup>9</sup> Various cases of ectopic scar pregnancy, even when bleeding support treatment as a surgical option was not available. This covers procedures such as elective laparotomy and the removal of a gestational mass.<sup>1</sup>

The benefit of surgery is that it reduces recurrence by resection of the old scar and replacing it with a new uterine closure. It also has a shorter follow-up period. The use of uterine artery embolization in cases of caesarean ectopic pregnancy has contributed to good therapy without bleeding.

## CONCLUSION

Understanding the ultrasonographic signs of a caesarean ectopic scar pregnancy is critical for early detection, precise diagnosis, and appropriate management to avoid

problems. Transvaginal ultrasonography is the best way to detect an ectopic pregnancy within the scar of a previous caesarean delivery (TVS). A delay in diagnosis or treatment, on the other hand, might result in uterine rupture, hysterectomy, and considerable maternal morbidity. Despite being a rare occurrence, caesarean scar pregnancy appears to be on the rise as the rate of caesarean sections rises. Increased obstetrician awareness of the possibility of scar pregnancy in women who have had a previous caesarean section, as well as early ultrasonography in these women, may lead to early identification and hence a chance of conservative care. An is likely to come across this entity.

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## REFERENCES

1. Patel MA. Scar Ectopic Pregnancy. *J Obstet Gynaecol India.* 2015;65(6):372-5.
2. Chueh H-Y, Cheng P-J, Wang C-W, Shaw S-W, Lee C-L, Soong Y-K. Ectopic twin pregnancy in cesarean scar after in vitro fertilization/embryo transfer: case report. *Fertil Steril.* 2008;90(5):2009.e19-21.
3. Cesarean section scar ectopic pregnancy-a management conundrum: a case report. *J Med Case Rep.* Available at: <https://jmedicalcasereports.biomedcentral.com/article/s/10.1186/s13256-019-2069-9>. Accessed on 2021 May 21.
4. Ectopic pregnancies in a Caesarean scar: review of the medical approach to an iatrogenic complication | *Human Reproduction Update Oxford Academic.* Available at: <https://academic.oup.com/humupd/article/10/6/515/626622>. Accessed on 2021 May 21.
5. Vaginal Bleeding-Types, Causes, Complications. Available at: <https://www.healthgrades.com/right-care/womens-health/vaginal-bleeding>. Accessed on 2021 May 21.
6. Magnetic Resonance Imaging as an Adjunct to Ultrasound in Evaluating Cesarean Scar Ectopic Pregnancy. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3692029/>. Accessed on 2021 May 21
7. Shafqat G, Khandwala K, Iqbal H, Afzal S. Cesarean Scar Pregnancy: An Experience of Three Cases with Review of Literature. *Cureus.* 2021;10(2).
8. Abdelazim IA, Belal MM. The role of magnetic resonance imaging in refining the diagnosis of suspected fetal renal anomalies. *J Turk Ger Gynecol Assoc.* 2013;14(1):6-10.
9. Lee R, Dupuis C, Chen B, Smith A, Kim YH. Diagnosing ectopic pregnancy in the emergency setting. *Ultrasonography.* 2018;37(1):78-87.

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