

## **Scar ectopic pregnancy: laparoscopic treatment**

Angelo, Erica

Department of Interdisciplinary Medicine, Unit of Obstetrics and Gynecology, University of Bari, Bari, Italy

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### **ABSTRACT**

This case study demonstrates the accurate identification of scar ectopic pregnancy using ultrasonography in connection with lower abdominal discomfort and intermenstrual haemorrhage. A missed abortion in a scar pregnancy was indicated by the transvaginal ultrasound findings. Laparoscopic treatment was promptly decided upon based on the patient's condition and desire to maintain fertility. After ten months, the patient healed without incident and became pregnant naturally. Her pregnancy was uncomplicated; at 36 weeks, she had an elective lower segment caesarean section (LSCS) and gave birth to a full-term child. Fertility may be preserved by early and correct diagnosis and timely treatment of scar ectopic pregnancy.

**Keywords:** Cesarean section, laparoscopic management, scar ectopic pregnancy, transvaginal ultrasonography

### **INTRODUCTION**

With a frequency of 1:1800–1:2216 in women with an ectopic pregnancy and at least one prior caesarean section, caesarean scar pregnancy is the rarest kind of ectopic pregnancy.[1] The gestational sac is implanted in the myometrium at the location of a prior caesarean surgery in cases of caesarean scar pregnancy. In order to prevent major complications like extreme bleeding, which might need a hysterectomy, put the woman's life in peril, and have a detrimental impact on future fertility, early detection of caesarean scar pregnancy is crucial.[2] Hysterectomy is often necessary to limit bleeding during surgery, and pre-operative diagnostic confirmation is quite challenging.[3] We describe a case of an ectopic pregnancy in a prior caesarean section scar that was effectively treated by surgical laparoscopy while maintaining fertility after being identified by ultrasound and hysteroscopy.

### **CASE REPORT**

A 25-year-old woman, G2P1A1, complained of dyspareunia, lower abdominal discomfort, intermenstrual haemorrhage, and overall weakness for a week when she arrived at the outpatient department. She had previously had a spontaneous abortion and an uneventful term transverse lower segment caesarean section (LSCS) a year before. The uterus was retroverted, retroflexed, mushy, and large. The test for pregnancy in the urine came back positive.

Scar pregnancy was indicated by transvaginal ultrasonography, which revealed a single gestational sac in the gravid uterus in the lower uterine segment at the level of the prior LSCS scar. The chorionic shape of the gestational sac was uneven and there was no foetal heart flicker, indicating a missed abortion in a scar pregnancy. There was also a little ovarian cyst on the right side. The results met the suggested sonographic diagnostic criteria:

(i) A uterus that is empty, (ii) The cervical canal is empty,

Address for correspondence:

Dr. Nitin Laxmikant Lad, Dr. Lad's Navjeevan Hospital, Holkar Road, Tidke Colony, Nashik, 422 002, Maharashtra, India; next to Mahamarg Bus Stand. The gestational sac is situated in the anterior section of the isthmic region of the uterus with a reduced myometrial layer between the bladder and the sac; (iii) a discontinuity in the anterior uterine wall while passing through the amniotic sac.[4] A choice was made on potential surgical laparoscopy therapy after the patient's suitable counselling. A 5 mm trocar was inserted into the abdomen while the patient was under general anaesthesia, creating a pneumoperitoneum. Additionally, a 3 x 3 cm scar pregnancy



bulge was seen on the lower uterine section. Bladder sound was softly transmitted via the urethra to measure the bladder's length. There were no visible bladder adhesions. It was simple to do cervical dilation. Using a hysteroscope, the gestational sac was

Figure 1: Scar ectopic pregnancy

seen at the anterior wall's scar location [Figure 1]. The remainder of the cavity was normal. Only a few items were separated and eliminated despite the use of gentle suction and curettage. The decision to remove the items by laparoscopy was made because bleeding had intensified. The bladder was pulled down and a loose peritoneal fold was seen on the scar site. Following bladder protection, an incision was made on the scar, and the products of conception were entirely removed. Haemostasis was attained when the cavity was thoroughly cleaned. No. 1 vincryl was used to stitch the scar. Vaginal bleeding was examined, but no active bleeding was seen. A little cyst on the right ovary was found and ruptured. After a smooth recovery, the patient was released on the second post-operative day. After ten months, the patient became pregnant naturally. Her pregnancy was uncomplicated, she had an elective LSCS at 36 weeks, and the baby was born full term.

## DISCUSSION

Despite being an uncommon disease, the prevalence of caesarean scar pregnancy is rising as a result of more caesarean deliveries and improved imaging methods. There are no therapeutic protocols for the best management of this kind of ectopic pregnancy because it is so uncommon. The degree of symptoms, the patient's health, the goal to maintain fertility, gestational age, and surgical experience are all taken into consideration when choosing a therapy approach. Expectant management, surgical management, and medical management are treatment techniques. A study of 112 cases on the clinical appearance, diagnosis, and treatment options of caesarean scar ectopic pregnancy was published by Michael A. Rotas et al. Expectant management, laparotomy, laparoscopy, hysteroscopy, dilation and curettage, selective uterine artery embolisation, systemic methotrexate, local methotrexate, combination methotrexate, local embryocides, and sac aspiration were among the therapies administered to 112 women.[6] The majority of treatment approaches have been shown to cause consequences, such as bleeding or uterine rupture that required extra therapy, such as a hysterectomy. The most frequent indication for methotrexate treatment is an ectopic pregnancy; however, it should not be used if there is severe or ongoing abdominal discomfort.[5] According to Michael A. Rotas et al., the laparoscopic method is feasible if the necessary facilities and skills are available. Laparoscopic excision of the scar pregnancy and defect securing are the methods used to treat the disease in the given instance. The laparoscopic procedure even met the requirements for the best possible preservation of the patient's fertility. In order to prevent complications like bleeding and uterine rupture, which could result in a hysterectomy and impair the patient's fertility, scar ectopic pregnancy with symptoms of intermenstrual bleeding, lower abdominal pain, general weakness, and dyspareunia should be treated laparoscopically as soon as possible.

## CONCLUSION

In instances of scar ectopic pregnancy, early and precise diagnosis and treatment are crucial to preventing problems and maintaining fertility.

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