

# Caesarean Scar Ectopic Pregnancy: A Rare Case Report

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## **Abstract:**

*An uncommon, life-threatening kind of pregnancy is cesarean scar ectopic pregnancy. This is associated with the rise in C-section delivery. Early recognition and prompt treatment are essential to avoid terrible complications, like excessive bleeding and uterine rupture, which could necessitate a hysterectomy and eventually lead to fertility loss. The main imaging technique used to diagnose pregnancies with caesarean scars is ultrasound. However, making a fast and accurate decision can be challenging. We report a case of a 23-year-old female who had one previous lower-segment cesarean section. Following assessment and diagnostic tests she was diagnosed to have caesarian scar ectopic pregnancy, the treatment options were explained to the patient, and she wished for permanent sterilization, then had undergone surgery of simple total laparoscopic hysterectomy with caesarian scar pregnancy removal, bilateral salpingectomy, and cystoscopy.*

*Keywords: Caesarean, hysterectomy, ectopic pregnancy*

## Introduction:

Cesarean scar pregnancy (CSEP), is a rare kind of ectopic pregnancy that was originally identified in 1978. Cesarean scar ectopic pregnancy (CSEP) refers to the implantation of a pregnancy within the myometrial tissue that corresponds to the site of a previous hysterotomy. Cesarean scar pregnancy is frequently a late complication of a previously done caesarian section [1]. Cesarean scar pregnancy is a newer type of ectopic pregnancy (CSEP). This is due to an increase in the number of caesarean deliveries and advances in imaging technology [2].

Cesarean scar ectopic pregnancies are classified into two categories. Type 1 begins in the myometrium and advances exophytically into the uterine cavity, whereas type 2 begins in the myometrium and progresses exophytically toward the uterine serosa. Type 2 pregnancies have a bad prognosis because they can cause spontaneous uterine rupture, hemorrhage, and maternal death. Fertility loss is risky if a massive hemorrhage necessitates a hysterectomy [3].

The actual incidence of CSEP has not been identified because only a small number of cases have been documented in the literature. However, the number of such incidents appears to be increasing. Despite its rarity, this iatrogenic condition can be fatal due to the high risk of complications such as uterine rupture and extensive hemorrhage [4].

Ultrasound imaging is the most common imaging modality used to diagnose CSEP, although getting a correct and early diagnosis can be complicated. The initial finding of a low, anteriorly positioned gestational sac should raise suspicions about CSEP and require further investigation [5]. Color Doppler ultrasonography and/or postoperative pathology were used to confirm all CSEP instances.

There are a variety of CSEP treatment options available, ranging from medicinal to surgical treatments such as dilatation and curettage, laparoscopic excision, laparotomy resection, or a combination of these methods [6].

## Case presentation:

We describe a case of 23 years old female, with 2 gravida 1 para, with one previous lower segment cesarean section 11 months back and the second conception was spontaneous. The patient presented to the hospital with a known complaint of ectopic pregnancy but no proper evidence for caesarean scar ectopic pregnancy. There is no history of pelvic bleeding, abdominal pain, burning micturition, or white discharge. No history of high blood pressure .no history of epigastric pain and pedal edema.

At presentation, the patient is conscious, coherent, cooperative, and afebrile the patient is moderately built and nourished; the other vitals are mentioned in table no:1, SUMI, and the appendectomy scar is visible. Per vaginal examination revealed cervix is long and the os is closed.

Table No: 1 **vitals**

Pulse rate	113 Bpm
Blood Pressure	110/60mmHg
GRBS	104mg/dl
Per abdominal test	Soft

Table no 2: **Laboratory values**

HB	10.9g/dl
WBC	8.33[10 <sup>3</sup> /UI],
RBC	4.49[10 <sup>6</sup> /UI]
T4	98
TSH	0.5
Ascitic fluid total proteins	7.78gm%,

She had a color doppler study which revealed a single intrauterine gestational sac noted in the lower uterine segment in the anterior wall of the cervix posterior to the urinary bladder at the previous lower segment caesarean section scar site with a fetal pole of CRL 19mm with 8 weeks 4 days with cardiac activity. The yolk sac is present, and peri-gestational vascularity was noted. Ultrasound pelvic scan report revealed the uterus has a single gestational sac in a lower uterine segment in the anterior myometrium at the scar site posterior to the urinary bladder, residual myometrium between the bladder wall and gestation trophoblastic tissue is absent. The ultrasound scan suggested a cesarean scar ectopic pregnancy. A gestational sac was detected in the anterior aspect of the lower uterine segment superior to the internal cervical os at the site of a past caesarean scar on an MRI of the abdomen and pelvis without contrast. The myometrium was suspected to be disrupted between the gestational sac and the bladder. Only the uterine serosa remained intact, which was most consistent with implantation into the preceding surgical scar. After explaining her imaging findings, the risks of continuing a caesarean scar pregnancy, and her reproductive goals with the patient, she expressed her wish for permanent sterilization. She had a simple total laparoscopic hysterectomy with caesarean scar pregnancy removal, bilateral salpingectomy, and cystoscopy. She was discharged after a week postoperative day and was scheduled for close obstetrics and gynecologist follow-up.

### **Case Discussion:**

We present a case of a 26 years old female who previously had undergone caesarean delivery 11 months before the second conception. The second conception was found to be caesarean scar ectopic pregnancy in color doppler test and it is confirmed in MRI reports.

Despite being rare, caesarean scar ectopic pregnancy is becoming more common as the number of caesarean deliveries rises. Due to the high risk of maternal hemorrhage, these pregnancies are potentially fatal. To prevent substantial morbidity and mortality, it is crucial to recognize and treat ectopic pregnancies formed on caesarean scars (7).

Most of the patients with caesarean scar ectopic pregnancy are asymptomatic or can show symptoms of vaginal bleeding that may or may not be associated with abdominal pain (mild to moderate). Diagnosis for CSP is Transvaginal ultrasound, Transabdominal ultrasound, a pathological entity that will be clarified by the 3D sonography, Color Doppler test is mostly used. MRI is preferred for difficult-to-diagnose cases.

Methotrexate is the standard treatment for many types of pregnancy who desire future fertility which stops the cells to divide but it is safe to use for patients who are hemodynamically stable,

with an unruptured uterus (< 8 weeks), and without a heartbeat. Uterine curettage, hysteroscopy, uterine artery embolization, and double balloon catheter, when all these surgical treatments fail, or if the patient has severe abdominal pain with bleeding hysterectomy, is preferred (8).

In our case, the patient is 8 weeks and 4 days pregnant. Surgical excision is the first preference because the pregnancy has a heartbeat. Methotrexate is limited to pregnancies less than 8 weeks. uterine artery embolization and expectant management are included for stable patients although these procedures need to be closely monitored to prevent potentially fatal outcomes like a uterine rupture. After discussing their future fertility with the patient, she wished for permanent sterilization. Surgical excision can be done by laparotomy, laparoscopy, hysteroscopy, and vacuum aspiration. A simple laparoscopic hysterectomy was done based on the gestation location, the surgeon's expertise, and other factors.

### **Conclusion:**

Cesarean scar pregnancies are a rare form of extrauterine pregnancies, but their incidence is increasing due to increased cesarean deliveries. Cesarean deliveries should be restricted only when normal deliveries are impossible. Special care should be taken if the patient has undergone a caesarean in previous delivery a regular checkup should be done from the first trimester itself to avoid permanent sterilization and morbidity of the mother.

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