

## Silent complete rupture of lower uterine segment scar in a multigravida

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### Introduction

Disruption of all three layers of the uterus (endometrium, myometrium, and serosa) beyond 28 weeks of the uterus is called rupture of the uterus. With liberal use of the cesarean section, primary and repeat scar rupture constitutes a significant percentage of uterine rupture. Depending on the indication of a previous cesarean section, patients may be offered elective cesarean section at term or a Trial Of Labor After Cesarean (TOLAC). Usually, these patients are flagged as high risk and are repeatedly counseled during the antenatal period to come to the hospital as soon as a woman experiences pain in the abdomen, leaking or bleeding Per Vaginal (PV), decreased/absent fetal movements.

The classical signs and symptoms of scar rupture are:

1) Sense of something giving way at the acme of uterine contraction; 2) Sudden cessation of uterine contraction with change in the character of pain; 3) Passage of blood in the urine (hematuria); 4) Examination may reveal features of shock; 5) Easy palpation of superficial fetal parts; 6) Absent FHS; 7) Absent uterine contour; 8) Two separate abdominal swellings, one is the contracted uterus, and the other is the fetal ovoid; 9) The most prominent feature on vaginal examination is bleeding per vaginum and receded presenting part<sup>(1)</sup>.

We report a case of previous two Lower Segment Caesarean Sections (LSCS) with asymptomatic complete scar rupture who presented with a history of absent fetal movements since 8 hours and only one episode of vomiting referred to our institution as a case of fetal distress.

### Case report

A 29-year-old, fourth gravida, parity three, with two live births and one neonatal death with previous two LSCS and one Vaginal Birth, After Cesarean (VBAC) referred from the sub-district hospital in view of term pregnancy with fetal distress and one episode of vomiting. On examination, the patient was pale but conscious and oriented. Pulse was 90 beats/min; BP was 140/80 mmHg. On abdominal examination, the uterus was term and relaxed, lie was transverse, Fetal Heart Sounds (FHS) was not audible, and

tenderness was present all over the abdomen. On per vaginal examination: Os was poorly effaced, posterior, and admitting tip of a finger.

*On Ultrasound:* The fetus was lying in the abdominal cavity, FHS absent. There was evidence of massive fluid collection in the abdomen. The uterus was retracted, and the placenta appeared to be in the uterine cavity. There was evidence of rupture of all three layers of the uterus.

### Treatment

Since the patient was hemodynamically stable, I/v fluids were started, blood was sent for grouping and cross-matching, and due consent was taken after explaining treatment options like obstetric hysterectomy and the other option was rent repair with tubal ligation. Broad-spectrum antibiotics injection Augmentin 1.2 gm every eight hourly with Injection Tinidazole 800 mg once a day and Inj Amikacin 500 mg once a day was started for seven days. Laparotomy was done under general anesthesia, which revealed massive hemoperitoneum with fetus lying transversely in the upper abdomen, uterus was retracted. Evidence of complete rupture of LSCS scar with no lateral extension. The placenta was lying separated in the uterine cavity. Since the margins of the scar were clean and no visible extension was noted, the decision was taken for rent/scar repair, and bilateral tubal ligation was done.

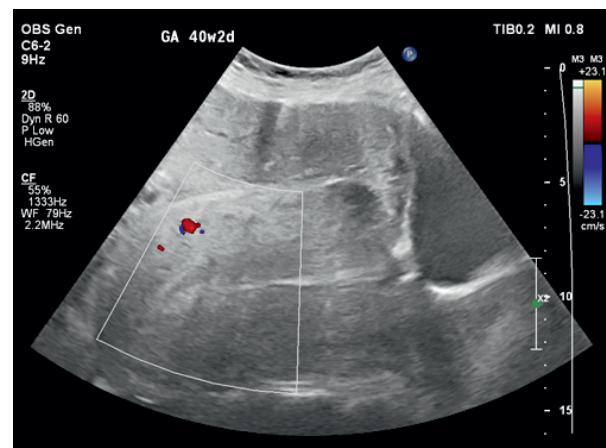


Figure 1: Ultrasound showing retracted uterus with free fluid in the abdominal cavity



Figure 2: Hemoperitoneum at laparotomy

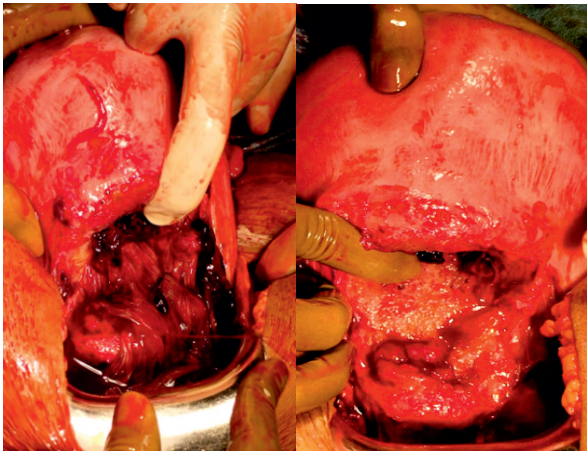


Figure 3 and 4: In situ placenta with clear edges of LSCS scar rupture

### Discussion

Usually, patients with previous cesarean section are counseled during the antenatal period regarding mode and place of delivery. These patients are usually offered elective cesarean sections or a trial of the scar. Rupture uterus can be very difficult to diagnose, especially in patients who may not display the classical textbook signs of rupture. The risk factors for uterine rupture include lower uterine cesarean sections scar, which may be single or multiple, hysterotomy scar, previous other internal uterine manipulations like manual removal of placenta, internal podalic version of second of twin, external manipulations like external cephalic version and history of fall or blunt trauma to the abdominal wall<sup>(2-8)</sup>.

In this case, the patient had two previous cesarean sections and one vaginal birth after a cesarean section at home. The patient did not have regular antenatal care and was referred to the hospital from sub divisional hospital as a case of fetal distress. Apparently, the patient was counseled during the antenatal period regarding the mode of delivery and the high-

risk nature of her pregnancy, but she chose to ignore this and was planning to deliver again at home. In this case, the patient waited till 40 weeks and did not report to the hospital until she noticed decreased fetal movements. She had no signs and symptoms of hemorrhagic/hypovolemic shock.

### Conclusion

Uterine rupture can occur at any gestational age in pregnant women. Classic symptoms of rupture uterus may be absent. It is well-nigh impossible to predict which patient is likely to rupture her uterus. Hence, it is necessary for the Obstetrician to be vigilant and use all the diagnostic tools at his/her disposal to come to a correct diagnosis and appropriate treatment and management.

### Consent

Written informed consent was obtained from the patient for publication and accompanying images.

### Conflict of Interest: Nil

### Source of Support: Nil

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