

Poster Number: **EP 111** Name: **Dr. Medhaa Bhattacharya**
Title: **Spontaneous Uterine Scar Rupture during the Second Trimester:
A Rare but Life-threatening Emergency**

INTRODUCTION

Uterine rupture in the first or second trimester is rare and difficult to diagnose due to variable presentations and overlapping pregnancy changes. Risk factors include advanced maternal age, grand multiparity, placenta increta, macrosomia, shoulder dystocia, and medical termination of pregnancy. The overall incidence of uterine rupture in unscarred and scarred uterus is 0.7 and 5.1 per 10,000 deliveries, respectively.

AIMS & OBJECTIVES

1. To raise awareness of mid-trimester uterine rupture in patients with previous cesarean sections and placental abnormalities like accreta.
2. To highlight diagnostic challenges and the risk of misdiagnosis due to atypical presentation of uterine rupture.

CASE OPERATION PROCEDURE

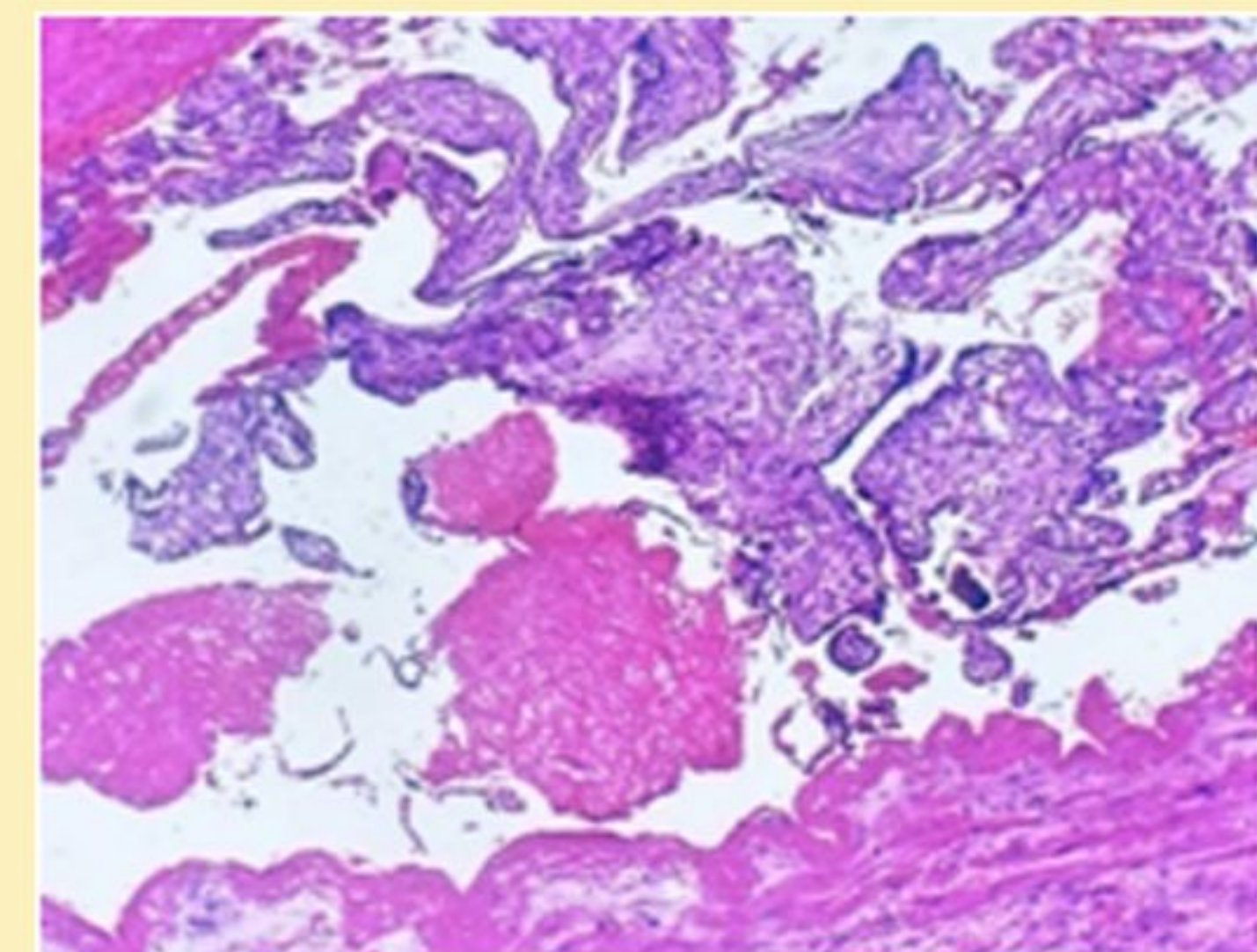
A 42-year-old woman, G7, Para 1, L1, A5 at 21 weeks of gestation, with a history of a previous cesarean section and five spontaneous abortions (requiring surgical evacuation), presented to the emergency department with acute abdominal pain and distension. She had cesarean delivery 11 years back for maternal desire, had no intra & post-op complications. There were no history of trauma, use of abortifacient or any other methods of intervention. On examination, she was severely pale with a heart rate of 140 bpm, blood pressure of 110/70 mmHg, respiratory rate of 32/min, and SpO₂ of 99% in room air. Abdominal examination revealed distension, tenderness, and guarding, with a uterus corresponding to a 20-week size. Ultrasound showed moderate free fluid in the peritoneal cavity and placental lakes on the anterior uterine wall. The fetus was still viable with a fetal heart rate of 162 bpm. Hemoperitoneum was confirmed during ultrasound-guided paracentesis. An emergency laparotomy was carried out. Gravid uterus was corresponding to 18 weeks size. The lower segment of uterus had given away with the placenta and non-viable fetus in the abdominal cavity. A subtotal abdominal hysterectomy was done. Estimated blood loss was about 1500 ml requiring peri-operative transfusion of packed red blood cells and fresh frozen plasma. Postoperative recovery was uneventful, and she was discharged on day 8. A biopsy from the rupture site confirmed the presence of placenta accreta



A.



B.



C.

A. Anterior placenta with placental lakes covering internal Os.

B. Free fluid in Morrison's Pouch.

C. Superficial penetration of trophoblastic cells into the myometrium.

DISCUSSION

Uterine rupture in a non-laboring woman is extremely rare and can be fatal for both the mother and fetus. In our 42-year-old patient, prior cesarean sections and multiple surgical abortions were key contributing factors. Uterine rupture generally occurs during labor, due to factors such as injudicious use of oxytocics, obstructed labor, or instrumental delivery. However, in our case, rupture occurred at 21 weeks of gestation spontaneously. In the second trimester, ruptures usually occur at the fundal area. Our patient's rupture, however, occurred at a transverse lower uterine segment scar. USG showed free fluid and an intact gestational sac, but the rupture was confirmed during laparotomy. The cause remains unclear but could involve morbidly adherent placenta or trophoblastic invasion. Placenta percreta-induced rupture is more dangerous due to increased vascularization. Total hysterectomy is often required in cases of severe bleeding or poor homeostasis.

CONCLUSION

Clinicians should be aware of this rare but serious complication, as the number of uterine surgeries is rising. Sometimes ultrasound has limited value and urgent surgery is necessary to prevent uterine rupture.

ACKNOWLEDGEMENT

Faculties Obstetrician, Anaesthetists, Intensivists

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Declaration: There is no conflict of interest amongst the authors.