

## Case Report

# ASYMPTOMATIC SPONTANEOUS UTERINE SCAR RUPTURE IN EARLY PREGNANCY

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## ABSTRACT

Spontaneous rupture in mid-trimester is very rare. The 'silent' rupture of uterus is encountered when the patient is asymptomatic and rupture or rent in the uterus is discovered incidentally on ultrasound or at surgery. We are presenting such a rare case of mid trimester silent rupture diagnosed on ultrasound.

**Keywords:** Uterine Scar Rupture, Early Pregnancy

## INTRODUCTION

Incidence of rupture uterus varies from 0.3/1000 to 7/1000 deliveries in India accounting for 5% to 10% of all maternal deaths (Sahu Latika, 2006). The incidence in developed and developing countries varies from 1 in 250 to 1 in 5000 deliveries depending upon standard of obstetric care and the population dealt with. In a WHO systematic review of maternal mortality and morbidity, the prevalence of uterine rupture in cases of previous caesarean section was found to be 1% (Hofmeyr *et al.*, 2005).

Spontaneous rupture in mid-trimester is very rare. The 'silent' rupture of uterus is encountered when the patient is asymptomatic and rupture or rent in the uterus is discovered incidentally on ultrasound or at surgery. Injudicious use of prostaglandins and augmentation of labour by oxytocin in a multiparous woman, previous scar or other surgeries upon uterus are risk factors for rupture uterus (Conturso *et al.*, 2003; Jocken *et al.*, 2002).

Rupture uterus is not uncommon following LSCS. Most of these occur during labor. Surgeries involving upper segment like hysterotomy, classical cesarean section, myomectomy, previously repaired uterine rupture, metroplasty, and LSCS with upward or inverted T-shaped extension are more prone to uterine rupture early during pregnancy and at term even before labor ensues (O'Grady *et al.*, 2008; Cunningham and Williams, 2001).

## CASES

A 27-year-old woman unbooked and uninvestigated presented to emergency of our tertiary care hospital. She was gravida 2, para 1, with a history of caesarean section 1 year back at a private nursing home in Uttar Pradesh. The caesarean was done for non progress of labour after patient had been in active labour for 16 hours, the baby expired within 3 hours of delivery. She presented at 29 weeks 2 days gestation with absent foetal movements for 1 day.

There was no history of pain abdomen, abdominal trauma, bleeding per vaginum or any other urinary symptoms. She had an ultrasound 3 days back which showed Single live intrauterine fetus of 27 weeks 4 days. On clinical examination she was haemodynamically stable with no pallor, no pedal edema, her pulse was 90 bpm, blood pressure (BP) 110/70 mm of Hg. Per abdomen examination showed a midline vertical scar, there was no distension or tenderness. Uterine contour could not be made out and fetal parts were superficial and could be felt easily. Fetal heart was not heard. Per vaginum findings- Cervix was uneffaced and os was closed with no bleeding, uterine size was around 20 weeks and presenting part was high up. Routine investigations were done. Her Hb was 11.7 g/dl. Ultrasonography suggested of uterine rupture with empty uterine cavity and the fetus and placenta was lying in abdominal cavity with no cardiac activity. Emergency laparotomy was done immediately, around 50 cc of clotted blood was present, fresh dead female fetus en sac with placenta weighing 1.095 kg was lying in the peritoneal cavity. Upper segment transverse uterine scar rupture was present which was repaired. Uterine edges were ragged and friable with no active bleeding. Uterus was repaired in view of no living issue. Ligation was

## Case Report

advised which the attendants refused. Postoperative period was uneventful. The woman was discharged on forth postoperative day in satisfactory condition.

## DISCUSSION

Spontaneous rupture of ante-partum uterus is uncommon in 1<sup>st</sup> and 2<sup>nd</sup> trimester (Abdulghani, 1993). Uterine rupture mostly occurs due to previous C-section (Nouria and Salama, 1998; Leung *et al.*, 1993; Walsh *et al.*, 2006). Risk of rupture in classical (vertical) section is greater than with transverse incision in subsequent pregnancy (Leung *et al.*, 1993; Walsh *et al.*, 2006).

Factors that can predispose to uterine rupture are multiparity, advanced maternal age, a scarred uterus, a big fetus, mal presentation, a contracted pelvis, the misuse of oxytocic drugs, obstetrical maneuvers like external cephalic or internal podalic version, instrumental deliveries (Ahmadi *et al.*, 2003; AL Salem *et al.*, 2000).

Several concomitant symptoms of uterine rupture include: Abdominal pain or tenderness and onset of sharp pain at the site of previous scar or supra pubic pain, sharp pain between contractions, palpation of fetal parts outside the uterus, deceleration or absence of FHS, vaginal bleeding loss of presenting part from its former position within the pelvis and should alert the obstetrician (Mishra, 2006).

In our case, there was rupture involving previous upper segment transverse incision at 29 weeks of pregnancy. There was no history of curettage, voluntary termination of pregnancy (MTP), or oxytocic abuse.

## Conclusion

Uterine rupture is one of the serious complications encountered in obstetrics, threatening the pregnant women and her fetus; more so in the developing countries. Lack of health information, illiteracy, poor antenatal care, poverty, home deliveries by traditional birth attendants and delay in referrals all contribute to uterine rupture. Reducing the primary cesarean section rate, proper uterine incision and repair and optimizing care for women with previous cesarean section will go a long way in decreasing the incidence of rupture uterus. Discharge slip with details of the surgery should be provided to the patients. A high index of suspicion would help in making an early diagnosis thus reducing the maternal morbidity and mortality.

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**Case Report**

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