



FUNDAL RUPTURE OF UTERUS FROM PREVIOUS ABORTION-RARE CASE REPORT APARNA R RAJENDRANL

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Abstract : uterine rupture is a potentially catastrophic event, during childbirth in which integrity of myometrial wall is breached. Hereby reporting a case of spontaneous uterine rupture at fundus at term gestation in a patient who never had any previous uterine surgery except for a check curettage done for second trimester abortion.

Keyword : Spontaneous rupture, uterine fundus, previous abortion.

INTRODUCTION:

Uterine rupture is an obstetric emergency associated with poor fetal and maternal outcome. Incidence of uterine rupture is 0.4 to 0.6% of all deliveries. Uterine rupture is classified as complete and incomplete rupture. Complete rupture is classified as traumatic and spontaneous. In a complete rupture of uterus the contents may spill into peritoneal cavity or the broad ligament. In an incomplete rupture peritoneum is still intact. Uterine rupture is a life-threatening event for both mother and baby.

CASE REPORT:

21-year-old G3P1L1A1 woman was admitted with labour pain at 39 weeks of gestation. Her labour pain started in the morning about 10am and was admitted in our hospital by evening 8pm. No h/o either bleeding or draining per vaginam. She had previous first normal vaginal delivery 3 years back, and history of spontaneous abortion at 20 weeks of gestation one year back, for which check curettage was done. On admission her vitals were stable, PR 98/min, BP 120/80mmHg. On examination the patient was pale, uterus was acting tense, not tender. Uterine contour was altered and head was mobile, fetal heart sounds couldn't be localised clinically. Pelvic examination revealed she was in early labour, cervix was 25% effaced, and dilated 2cm. Suddenly there was bleeding per vaginam: Ultrasound showed only fetal head in cephalic presentation, with absent fetal cardiac activity. Her coagulation profiles were normal. In view of abruptio placentae, patient was shifted to operation theatre. To our surprise it was fundal rupture of uterus about 10cm transversely.



fig1-transverse rupture about 10 cm

Baby trunk was found in the peritoneal cavity with fetal head in uterine cavity. Term dead-born male fetus of about 2.8kg was delivered out. The rupture was sutured in two layers; omental patch was found to be attached to fundal region. Bilateral tubal sterilisation was done.



fig 2-fundal rupture sutured in two layers

Post partum hemorrhage preventive measures were taken. Two units of blood were transfused postoperatively. Post operative period was uneventful, the patient was discharged on 10th post operative day.

DISCUSSION:

During eighteenth century, William Smellie was the first to observe the rent in the uterus in vivo. Ames and Meredith, some 80 years later stated this serious and often tragic obstetrical emergency was threatening to mother and baby. Rier has stated that the term spontaneous rupture is misleading since uterine rupture does not occur unless there is a basic cause for uterine wall defect. Uterine rupture is an important cause for maternal mortality accounting for as many as 9.3% of maternal death in less and least developed countries according to one Indian study (1) Rupture can occur anywhere on uterus. Two most common sites are an old scar and the line joining the upper and lower segments. In one study (2) 68% of women with ruptured uterus

ruptured at the site of their previous scar. Rupture of unscarred uterus is rare, but appear to be increasing(3). Uterine rupture of unscarred uterus incidence is 1 in 15000 deliveries(4). Rupture can occur in upper or lower segment. A rupture in upper segment is most catastrophic as this has large blood supply. The baby move out of the uterus into abdominal cavity. This is very dangerous to the mother as it places the tension on the placenta, cause its separation from uterine lining leading to more blood loss in mother and baby loses its oxygen supply. A rupture in lower segment is less catastrophic as this area has lower blood supply and bladder will inhibit the ability of baby to leave the uterus. This is however still an emergency requiring immediate intervention. Symptoms of rupture may be quite subtle; If a rupture occur the following symptom may occur; vaginal bleeding, hypotension, tachycardia, cessation of labour-labour may cease during rupture because the muscle tissue are no longer able to contract, Abdominal pain- which occur for two reason tear by itself and secondly by blood loss into abdominal cavity irritate the peritoneum. Loss of fetal heart rate, prolonged deceleration or persistant late deceleration, there is indication that baby is not receiving enough oxygen due to rupture, problem with placental pressure on cord, low blood pressure in mother(5).

The uterus normally feels boggy, where the baby has partly or fully escaped from the uterus into abdominal cavity. When examining the abdomen the baby can be felt clearly. Besides caesarean section, prostaglandin and oxytocin usage, previous instrumental abortion, vacuum extraction deliveries, difficult forceps delivery and vigorous fundal pressure are the risk factor for uterine rupture. Risk factors also include five or more children, placenta implanted too deep, over distended uterus, too frequent and forceful contraction, prolonged labour, trauma in uterine procedure, external cephalic version. Rupture has also been attributed to inherent or acquired weakness of myometrium, disorder of collagen materials(6). The most critical aspect of treatment in the course of uterine rupture are establishing timely diagnosis and minimizing the time from the onset of signs and symptoms until the start of surgery. These cases are usually diagnosed at intrapartum or shortly after delivery and managed by immediate repair of usually encountered full thickness rupture or subtotal hysterectomy. It is an obstetric emergency and its management depends on hemodynamic status of patient, availability of blood, length of uterus defect, anaesthesia time between rupture and surgery. Conservative surgical management involving uterine repair should be reserved in the following cases:

- Desire future delivery,
- No extension of tear to broad ligament,
- cervix, Good general condition,
- No clinical or laboratory evidence of evolving coagulopathy.

Hysterectomy should be the choice in intractable bleeding, multiple longitudinal or low lying rupture. Severe morbidity may complicate 2nd trimester abortion by perforation, infection and peritonitis. Uterine rupture during pregnancy and more specifically in labour has been reported after hysteroscopic metroplasty with or without perforation. Although associated maternal mortality is now less than 1%, the fetal mortality rate is about 30%.

CONCLUSION:

Rupture are rare events, exceedingly rare for women who never had a caesarean section, other uterine surgery or previous rupture. The possibility of spontaneous uterine rupture must always be considered when sudden pain with bleeding per vaginum occur in pregnancy with past history of abortion especially abortion occurred in second trimester. The vast majority of rupture occur during labour but they can also occur before onset of labour.

REFERRANCE:

- 1.Rajaram.P.Agarwal.A.Swain S,Determinants of maternal mortality; A Hospital based study from south India.
- 2.porrew RP, ClarkSL, Belfort MA et al. The enhancing spector of uterine rupture.
- 3.Intrapartum rupture of unscarred uterus-miller ad Goodwin, ghesman and paul, obstetric and gynaec97.

4.Zwart JJ, RichereJM, OryF et al.uterine rupture in Netherland; a nation wide population based cohort study B5OG 2009.

5.Fetal heart rate change associated with uterine rupture Ridge way jj, weyrich DL, beneditti T.

6.Ehler Danlos type IV Rudd NL, Nimrodc, Holbrook KA, ByersPH, pregnancy complication in Ehler-Danlos syndrome.

