

# A Month Old Traumatic Rupture Uterus

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## Abstract

Uterine rupture is a potentially catastrophic event during childbirth when the integrity of the myometrial wall is breached. Trauma is the leading nonobstetrical cause of maternal death. The effect of trauma on the pregnant woman and unborn fetus can be devastating. Here, we present the isolated and a rare case of a 25-year-old multigravida, who had uterine rupture following blunt trauma (fall from small bridge) one-month back and surprisingly remained undiagnosed for the long period. This report identifies numerous shortcomings in the health care system, many of which concern lack of specialist staff and failures in the referral between health care centers.

## INTRODUCTION

Uterine rupture is a potentially catastrophic event during childbirth when the integrity of the myometrial wall is breached. With a complete rupture the contents of the uterus may spill into the peritoneal cavity or the broad ligament. Majority of cases occur in women with scarred uteri or less commonly due to dysfunctional labor, labor augmentation, placenta increta, congenital anomalies, trauma and high parity.<sup>1,2</sup> Wrong massaging practices especially in rural areas also contribute.

The uterus is relatively elastic compared with the placenta, and blunt force directed to the uterus can cause shearing of the “inelastic” placenta, producing placental abruption or uterine rupture. The extensive blood loss that ensues may compromise or kill the fetus, and the extent of uterine damage may make repair impossible, necessitating emergency hysterectomy.<sup>3,4</sup> Incidence of traumatic rupture uterus is around 10% among all cases of rupture uterus.<sup>5,6</sup>

Here, we present the isolated and a rare case of a 25-year-old multigravida, who had uterine rupture following blunt trauma (fall from small bridge) one-month back and surprisingly remained undiagnosed for a long period.

## CASE

A 25-year-old pregnant woman, gravida 4, para 3 (all full term normal vaginal deliveries), with full term gestation was referred from District Hospital for intrauterine death (IUD) with failure of induction, with a referral note stating nothing about the treatment received. As stated by the patient, she

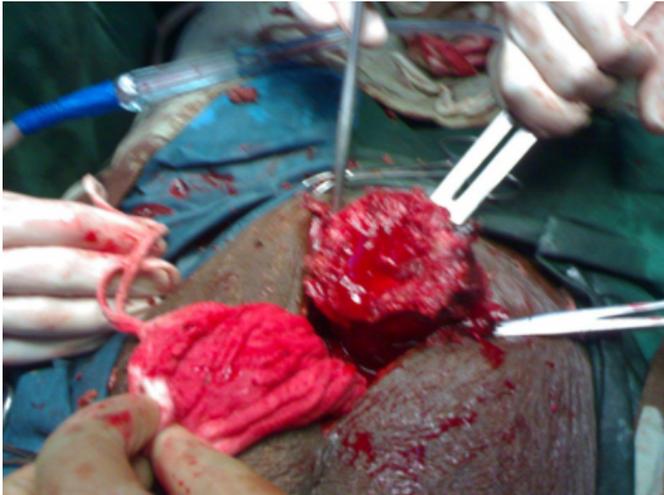
fell from a bridge 6 feet high, one month back following which she developed pain in abdomen and bleeding through vagina. Pain as described by the patient was similar to labour pains for which took some medication from a local practitioner. Pain subsided after treatment. Meanwhile she remained all right for 5-6 days. When she started having loose motions and vomiting, she was admitted in the District Hospital for a period of 20 days where she received treatment for the same, but no attention was paid to her pregnancy. After 20 days, patient complained of loss of fetal movements. Following which ultrasound was done, which revealed an IUD. After failed attempts at induction of labour for two days, she came to Padhar Hospital, a rural tertiary care Hospital. She denied any other medical or surgical illnesses and never had antenatal checkups. On examination she looked ill but was haemodynamically stable.

Abdomen was soft, with no evidence of tenderness or guarding. The uterus was soft and no uterine activity was detected. Fetal parts were easily palpable. Vaginal examination revealed undilated cervix with no bleeding. Haematological investigations, including coagulation profile, were normal. Urine microscopy was unremarkable. Ultrasound showed single dead fetus, with signs of maceration in breech presentation with liquor all around the fetus (intact membranes). Uterus was empty with extruded placenta lying on one side of the fetus. Echogenic material was present around the uterus and in pouch of Douglas representing hemoperitoneum. Diagnosis of rupture uterus was made and she was posted for laparotomy. Operative findings revealed about 500 ml of blood clot in the

peritoneal cavity with fetus lying in the peritoneal cavity with intact amniotic sac. Macerated fetus weighing 1800 gm was delivered by breech extraction after rupture of membranes. Uterine rent was noticed at fundus (Fig. 1) and placenta found to be partially attached to the fundus of the uterus. Small bowel loops were adherent all around. Uterus, fallopian tubes and ovaries were normal. Hysterectomy was done and mother was discharged 10 days after surgery.

### Figure 1

Figure 1: Uterine rent at the fundus



### DISCUSSION

Trauma is the leading non-obstetrical cause of maternal death. Traumatic ruptures of the uterus tend to occur at the fundus and usually result only from the most violent accidents. This is the first documented traumatic rupture uterus which remained undiagnosed for a period of one month. We believe that this patient immediately after the fall developed a rent in the uterus. Eventually, she developed peritonitis after 6 days, which manifested with loose motions and vomiting. During the 20-day hospitalization prior to transfer, it is possible the fetus was dead for the entire time. Probably because of pain in abdomen she could not perceive the loss of fetal movements during hospital stay in district hospital. Possibility of rupture uterus to be a cause of failure to ripen the cervix and that careful re-evaluation and use of ultrasound can improve diagnostic acumen.

This report identifies numerous shortcomings in the health care system, many of which concern lack of specialist staff, failures in the referral/ transport systems between health care centers and lack of family planning policies. Long-term political commitment at reducing maternal mortality is an essential prerequisite. Pregnant women are dying

unnecessarily because it takes too long for their local clinics to refer them to hospitals or lack transport to get them to hospital in time. Lack of emergency transport is a particular problem in the more rural areas in India. Most deliveries in rural areas occur at hospitals, which have no full-time specialist staff. When complications arise, women must be transported to more specialized facilities. If the referral and transport systems between hospitals could be made to function properly, there would be a substantial decrease in maternal mortality in India.

Assigning health workers trained in midwifery to village-based health facilities can help overcome problems of distance and transport. In many places, the services of skilled professional healthcare providers are not available and traditional birth attendants (TBAs) may be women's only source of care. TBAs can provide culturally appropriate nurturing in the community setting and offer a first-line link with the formal healthcare system. TBAs can recognize problems during delivery and, when necessary guide women to and through the healthcare system.

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### References

1. Mishra S, Morris N, Uprety D. Uterine rupture: preventable obstetric tragedies? *Aust N Z J Obstet Gynaecol.* 2006;46:541-5.
2. Topuz S. Spontaneous uterine rupture at an unusual site due to placenta percreta in a 21-week twin pregnancy with previous cesarean section. *Clin Exp Obstet Gynecol.* 2004;31:239-41.
3. Pearlman M, Tintinalli J, Lorenz R. A prospective controlled study of outcome after trauma during pregnancy. *Am J Obstet Gynecol* 1990; 162:1502-1 510.
4. Connolly A, Katz V, Bash K, McMahon M, Hansen W. Trauma and pregnancy. *Am J Perinatol.* 1997;14:331-6.
5. Malik H. Frequency, predisposing factors and fetomaternal outcome in uterine rupture. *J Coll Physicians Surg Pak.* 2006;16:472-5.
6. Rashmi, Radhakrishnan G, Vaid N, Agarwal N. Rupture uterus -changing Indian scenario. *J Indian Med Assoc.* 2001;99:634-7.
7. Tweddale C. Trauma during pregnancy. *Crit Care Nurs Q.* 2006;29:53-67.
8. Lamina M, Akinyemi B, Fakoya T, Shorunmu T, Oladapo O. Abdominal pregnancy: a cause of failed induction of labour. *Niger J Med.* 2005;14(2):213-7.
9. A Joint WHO/UNFPA/UNICEF/World Bank Statement, 1999. Reduction of maternal mortality. ISBN 92-4-156195-5.

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