

Case Report

Traumatic transfundal rupture of full term non-scarred uterus

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Introduction

Rupture of non-scarred uterus is rare but more catastrophic than the rupture of scarred uterus. The main cause of the rupture of unscarred uterus is traumatic rupture or spontaneous rupture in obstructed labor. In traumatic rupture it is a very rare occurrence to have transfundal complete rupture of the uterus without any external evidence of trauma.

Case report

Mrs. MMZ a 29 year old unregistered primigravida with a history of nine months amenorrhea was admitted at 9.30 a.m. on 27th September, 2004 with a history of a trivial fall from the steps two hours earlier followed by pain in the abdomen. She did not complain of vaginal bleeding or of decreased fetal movements. She was married for a year.

She was pale, her pulse was 80/minute and blood pressure 90/70 mm Hg. Abdominal examination revealed full term pregnancy with vertex presentation. Uterus was tense and contracted, and fetal heart sound could

not be heard. On vaginal examination there was no bleeding. Cervix was 1 cm dilated. Clinical impression was primigravida with 36 weeks gestation having concealed accidental hemorrhage with intrauterine fetal death. Her hemoglobin was 8.5g/dL. Sonography showed a single dead intrauterine fetus of gestational age 34 weeks and 5 days. Liquor was adequate and placenta was fundoposterior with no evidence of retroplacental clot. There was minimal fluid in the pouch of Douglas. In view of intrauterine fetal demise a decision to induce labor was made. After two hours of labor induction she complained of increased abdominal pain though the uterus was apparently relaxed. Her pulse rate increased to 120/minute and systolic blood pressure dropped to 70 mm of Hg. As her abdomen was distending abdominal paracentesis was done which revealed frank blood.

Emergency exploratory laparotomy done with infraumbilical vertical incision under general anesthesia revealed hemoperitoneum of more than 2 liters which was drained. A fresh stillborn baby weighing 2.5kg was delivered by lower segment cesarean section. Placenta and membranes were delivered completely. There was no evidence of retroplacental clot or placental infarction.

We now delivered the uterus out for closure. To our surprise there was a complete fundal vertical tear of 8x6 cm in the uterine fundus. It was bleeding actively. Lower uterine incision was closed quickly. Ruptured part of

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the uterus was sutured in two layers with no 1 vicryl. Hemostasis was confirmed. Injury to other abdominal viscera was ruled out. She had uneventful postoperative recovery and was discharged on the 10th day with advice to avoid pregnancy for atleast a year, avoid MTP in future and have elective cesarean delivery in future.



Figure 1. Traumatic rupture uterus in pregnancy.

Discussion

In this case retrospectively cause of fetal demise was the rupture uterus.

Rupture of unscarred and term uterus is very rare. Pregnant patients who sustain severe blunt trauma are infrequently encountered in most practices¹. Unless there is high clinical suspicion, a meticulous physical examination and patient monitoring it is difficult to diagnose the rupture of unscarred uterus following blunt injury even with the help of sophisticated radiological imaging. Computerized tomography is commonly used to detect blunt traumatic injuries. This can help in screening of injured pregnant women². Review of the literature has shown that a patient who presents immediately and is intervened urgently still

had high perinatal mortality of 78-80%³. Maternal outcome was usually fair. In our case the contribution of oxytocin to the rupture is difficult to assess.

A traumatic transverse fundal uterine rupture with fetal death followed by recurrent rupture during the subsequent pregnancy but with favorable fetal outcomes has been reported by Catanzarite et al⁴. In Indian scenario incidence of traumatic rupture of unscarred uterus is approximately 10%, while it is 63% in scarred uteri (mostly previous cesarean section scar) and obstructed labor in 26.6% cases⁵. Case fatality and perinatal mortality outcome differs in developed, developing and underdeveloped countries. Case fatality was 17.9% and perinatal mortality 92% as reported in case series from Nigeria by Ogunnowo⁶. In contrast Rashmi et al⁵ from India report 3.35% maternal and 78.66% perinatal mortality.

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