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Case Report

A rare case report of total uterine rupture from cervix to fundus in an unmarried teenage pregnancy

Shanthi K. Elango, Rizwana Taj, Monisha Mohan*

Department of Obstetrics and Gynecology, Government RSRM Lying in Hospital, Stanley Medical College, Chennai, Tamil Nadu, India

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***Correspondence:**
Dr. Monisha Mohan,
E-mail: monishamohan.3694@gmail.com

ABSTRACT

Uterine rupture is an uncommon and a life-threatening obstetric complication. It is mainly a result of delivery by untrained personnel. This is a catastrophic situation where there is a high mortality rate for both the mother and the baby and a nightmare for the obstetrician also. There are many cases of uterine trauma reported in which there may be scar dehiscence, scar rupture, uterine rupture, perforation, cervical injuries, colporrhexis etc. This case report is regarding an unusual and rare presentation of a 19-year-old unmarried girl who landed in our institution-a case of total and complete uterine rupture extending from cervix to fundus, a peculiar presentation, a hazardous result of YouTube delivery by her boyfriend highlighted. A scenario where the maternal anatomy totally distorted due to the trauma. This patient managed by immediate resuscitation and uterus reconstructive surgery successfully. In spite of the advice not to conceive for the next few years, patient turned back to us in the late trimester within the next year itself, again a big challenge. Both the mother and baby managed successfully. With this case report we emphasize the need for immediate intervention in case of suspected uterine rupture and the possibility of successful subsequent pregnancy highlighted.

Keywords: Rupture uterus, Colporrhexis, Cesarean section, Rent repair

INTRODUCTION

Uterine rupture can be complete, full thickness tear through myometrium and serosa or incomplete, where the myometrium is disrupted but the serosa is intact. It may be primary, in a previously unscarred uterus or secondary, in a previous cesarean section or full thickness gynecological uterine incision scar.[1] Previously, the incidence of uterine rupture was predominantly primary because of higher parity and lower incidence of cesarean delivery. Now the incidence is increasing in the latter due to rise in the number of cesarean deliveries and trial of labour after cesarean section. In developed countries, rupture occurs 1 in 4800 deliveries. The frequency of primary rupture is 1 in 10,000 to 15,000 births.[2] In developing countries the causes for uterine rupture is attributed to obstructed labour, grand multiparity, lack of antenatal care, poor access to emergency obstetric care, injudicious obstetric intervention rather than cesarean section.[3] Traumatic rupture accounts for 10% of all uterine ruptures. It is mostly commonly seen after blunt trauma which is likely to cause placental abruption. Neonatal mortality is higher in women presenting with uterine rupture. Here we present an interesting and very rare obstetric event recorded till date-a case of total uterine rupture in an unmarried primigravida. This case report is a gripping one in which complete rupture involving throughout from the fundus to the cervix with colporrhexis was found, a rare dangerous event ever seen.

CASE REPORT

A 19-year-old girl studying second year college, unmarried pregnancy having relationship with a known family person was brought to the ER with history of 8 months of amenorrhoea. She was taken up to a remote place behind a factory on the same day morning by her boyfriend. The male partner tried to deliver the baby by

himself with video guidance. He was able to hold the right upper limb of the foetus and was continuously pulling it in an attempt to deliver the foetus. By that day evening mother's condition detoriated and he was not successful in the delivery process. Hence, he amputated the outside lying upper limb of foetus, thrown it into bushes, informed mother of the pregnant lady and they arrived at govt. RSRM lying in hospital in a critical and moribund position.

Patient was received at our hospital, MLC made, resuscitated, anatomy of external genitalia completely distorted, uterus could not be identified and there was no reliable history from the attenders. Patient had hypotension and tachycardia. Blood and blood products started and initial resuscitation attempted immediately.

Abdominal examination revealed uterine size corresponding to 32 weeks, fetal parts felt superficially with absent fetal heart rate, tenderness, guarding and rigidity present. Presenting part could not be identified. Local examination showed multiple lacerations over the genitalia- a tear in the perineum extending from the fourchette to just above the anal opening measuring 3 to 4 cm length and 1 cm depth, lacerations over the medical aspect of both labia minora and a small tear present below the urethral meatus. On per vaginal examination, a tear of size 3 cm was noted in the posterior vaginal wall, cervix could not be felt and placental tissue felt in the vagina and the presenting part of the foetus could not be identified clinically.

Ultrasound picture, altered uterine contour with a single fetus in the peritoneal cavity corresponding to 32 weeks and absent fetal heart rate.

The diagnosis of uterine rupture was made out and patient was shifted for emergency laparotomy after resuscitation. Intraoperatively, hemoperitoneum of around 800 ml was noted, a dead male foetus with amputated right arm, torn umbilical cord seen lying outside the peritoneal cavity and the same removed. Placenta seen through the rent of the uterus and it was removed. A rent visualized in the left posterolateral wall of the uterus extending from the fundus to cervix damaging the pelvic diaphragm. The abdominal cavity and vaginal outlet found to be in continuity. Her blood pressure was stable and there was no active bleeding from the rupture site. Hence proceeded for uterine rent closure. Vaginal tear sutured. Peritoneal closure done at the Pouch of Douglas. She recovered well after the procedure. Her abdominal and vaginal wound were healthy (Figure 1-3).

She was advised not to get pregnant for the next 2 years and follow-up at OPD. She never turned up to the hospital. She revisited the hospital after 8 months for her second pregnancy, marrying the same person. She was advised admission and complications of her present pregnancy was well explained to her. She then absconded and lost follow-up. She got admitted at 37 weeks 5 days of gestation with labour pains. In view of previous history of traumatic rupture and due to the fear of subsequent rupture, emergency cesarean section was done. There were minimal adhesions on opening the abdomen and the surgery was done without much difficulty. (Figure 4) An alive term girl baby of birth weight 2.41 kg was delivered. Both mother and baby well and postoperative period uneventful (Figure 5-7).

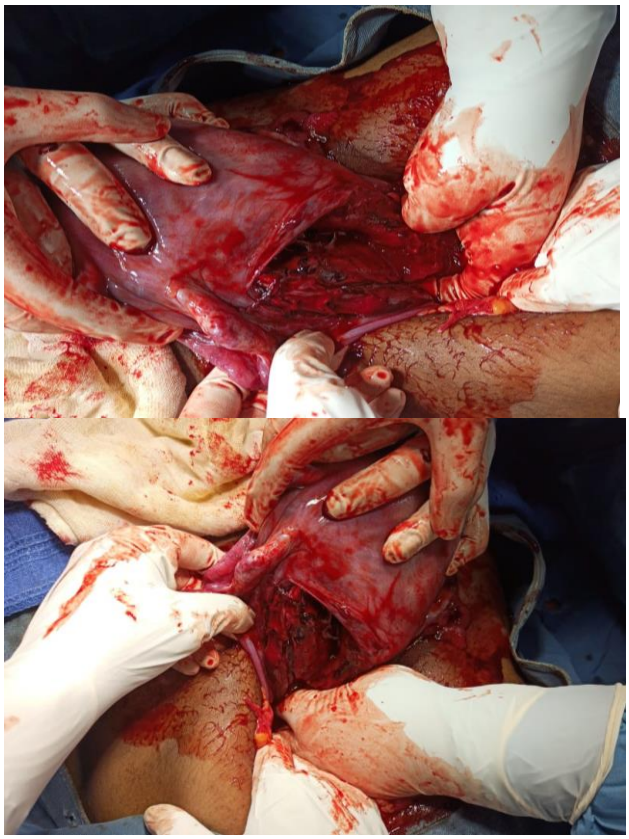

Figure 1: Rupture in the posterior surface of uterus.

Figure 2: Dead fetus with amputated right arm and torn umbilical cord.

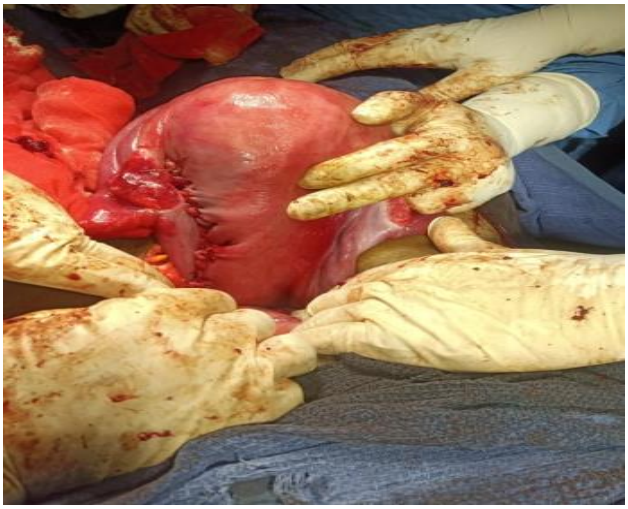

Figure 3: Uterine repair done in the posterior uterine surface.

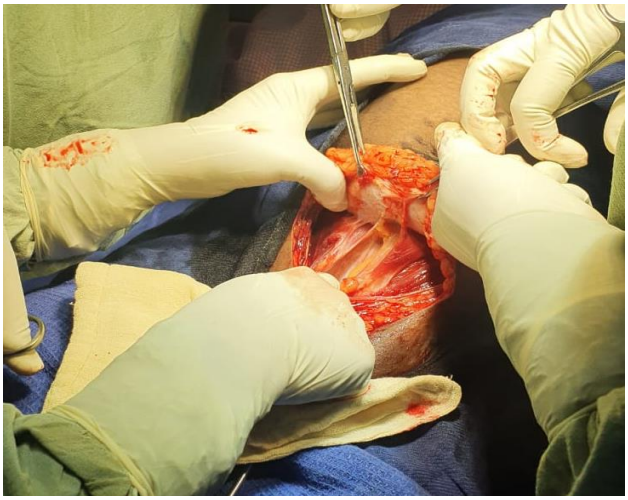

Figure 4: Minimal adhesions noted on opening the abdomen.

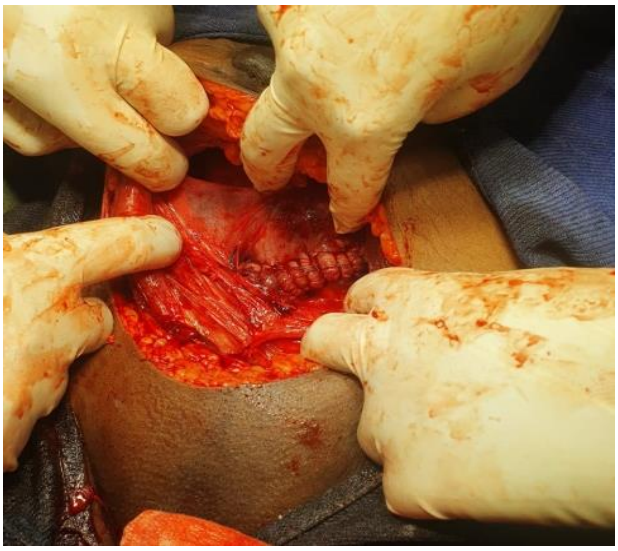

Figure 5: Transverse cesarean incision sutured.

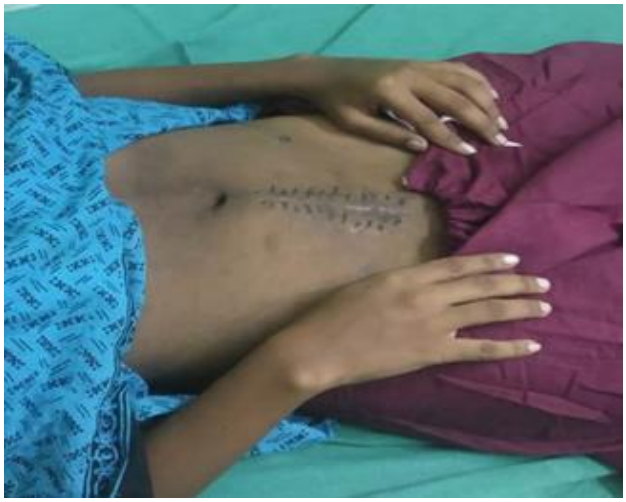

Figure 6: Midline laparotomy scar.

Figure 7: Mother and baby well after second delivery.

DISCUSSION

Rupture uterus is an uncommon but severe obstetric complication which poses a challenge for the obstetrician in both the timely diagnosis and the intervention. There are only limited case reports of complete uterine rupture and colporrhexis together. Rupture of a scarred uterus is common. It is even reported as early as during the first trimester. A classical cesarean section scar has a greater risk than the transverse scar. The use of uterotonics for trial of labour in a case of previous cesarean section is even more dangerous. The induction of labour using prostaglandins also carries high risk for uterine rupture. Gynecologically surgeries like myomectomy and previous history of curettage also gets added to this list.

Uterine rupture in an unscarred uterus is mainly due to obstetric intervention due to the use of uterotonic drugs for induction or augmentation of labour, mid cavity forceps delivery which is not practiced now in modern obstetrics, breech extraction with internal podalic version. Prolonged labour or obstructed labour, malpresentation or

malposition may also cause uterine rupture.[1] Congenital uterine anomalies are also a risk factor for uterine rupture. Cases were reported in primigravida women with uterine anomalies like bicornuate uterus. Recently the video deliveries attempted by untrained people are also an added dangerous etiological factor as experienced in this case, which is a very dangerous act towards the maternal life.

ACOG advocates trial of labour in patients with previous low transverse uterine scar. Mothers with classical cesarean section and/or inductions with prostaglandins are discouraged by ACOG as there is increased risk of rupture.[4] Trial of labour is also discouraged in hospitals where cesarean section cannot be performed with 30 mins.[5]

Most surgeons consider subtotal hysterectomy as the procedure of choice for uterine rupture. Surgically repair can be considered when it is technically feasible and there is a desire for future fertility.[6] However, there is increased risk of recurrence which may be fatal. The choice of surgery is mainly based on the surgeon's decision which has to be carefully decided as per the general condition of the patient and the type of injury. This is a rare case scenario where a young girl's life and her reproductive future is also saved. Amidst the high risk for the mother, the subsequent pregnancy within 1 year though very dangerous, this mother was able to come out with a healthy baby by the successful team of our institution.

CONSLUSION

Rupture uterus in a previously scarred uterus is often picked up by adequate surveillance as we anticipate the event. But it should always be remembered that even in a primigravida the diagnosis must be ruled out. There are only a very few case reports which are not complicated by subsequent rupture. This is one such case where we saved the life of teenage woman due to early management and was able to achieve a successful subsequent pregnancy.

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