

Case Series of 9 Cases for Rupture Uterus in Scarred and Unscarred Uterus

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Abstract

Background: Uterine rupture is an important event leading to life threatening haemorrhage. Incidence varies between 1 in 2000 in develop countries to 1 in 200 in developing countries. Incidence of rupture among unscarred uterus has decreased has compared to scarred uterus due to increase rate of c-section and judicious use of uterine stimulant. Although diminished enthusiasm for TOLAC has decrease the incidence of rupture among previous c section but rates are still higher compared to unscarred uterus.

Objective: To study the incidence, outcome on uterine rupture in DMCH, Laheriasarai, Bihar.

Method: Retrospective study of case series of 9 patient in Department of Obstetrics and Gynaecology from December 2021 to May 2022 [after taking permission from ethical committee].

Result: 9 cases of uterine rupture out of 2880 deliveries reported with prevalence of 3.1%. 3 cases of previous 2 c-section, 1 case of previous 3 c-section, 2 cases of previous 1 c section, 1 case of pre. 1 c-section with twin and 2 case unscarred uterus. Complication like hysterectomy in 33%, PPH in 77%, transfusion in 77%, maternal mortality 1, IUFD in 6 cases [66.6%], systemic infection in [33%].

Conclusion: Uterine rupture is in an cause of maternal mortality, morbidity and fetal mortality. risk factors are previous scarred uterus, multiparity, trauma, number of previous cesarean birth, version. Early diagnosis, rapid management and promotion of institutional deliveries can reduce the risk.

Keywords: Rupture Uterus, Scarred, C-Section, TOLAC.

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Introduction

Rupture uterus is one of dreadful condition fearing obstetrician and endangering life of mother and fetus. It is completely separation of all three layers of endometrium (from endometrium to serosa). Scar dehiscence is the term used when serosa is still intact. Past history shows that rupture uterus was more

common in neglected labour cases. Nowadays increasing rate of c-section has led increase incidence of rupture uterus in previously scarred uterus.

This scenario gains special importance in cases of TOLAC. Rupture uterus can also result from other trauma, accident and

injudicious use of labour augmenting drugs [1-5].

Case Series of 9 Cases for Rupture Uterus in Scarred and Unscarred Uterus

Case 1

22yr old G3P2L2, POG 36wk +2d with last VBAC 1.5yr back came with complaint of Pain in abdomen followed by bleeding p/v and breathlessness. She underwent emergency laparotomy during which scar site rupture extending to posterior wall and broad ligament was present.

Baby was dead lying in abdominal cavity. Repaired was not possible so hysterectomy was done. About 1.5 to 2 l of blood loss was present intraoperatively. Post op 4 unit of blood transfusion and FFP done. Patient had systemic infection which was managed with broad spectrum and was discharged on D10.

Case 2

28yr old G3P2L1, with 38wk +6d gestation, came with complaint of pain in abdomen for 12 hrs with loss of fetal movement from 2 hr with previous 2 cesarean deliveries. Abdomen was tender and tense with urine output nil for 2 hrs. She underwent Laparotomy during which scar site rupture with bladder wall rupture was noticed and both were repaired in layers. SPC, drain was kept insitu during surgery. Baby was in utero but dead. Post operative 3 unit of blood transfusion done and patient discharge on D16.

Case 3

22yr old G2A1 with 39wk gestation came to emergency with complaint of lower abdominal pain and USG suggestive of severe oligohydrominos. Due to fetal bradycardia and oligohydrominos she was taken for LSCS during which lower segment rupture extending laterally and downwards which was repaired with vicryl. Baby was live but didn't cried So sent to paediatric

emergency. Post op Period Was uneventful patient was discharged on day 8.

Case 4

30yr old G3P2L2POG 34wk +3d with 1 cesarean delivery 2 yr. back, came with complaint of pain in abdomen with leaking p/v for 12 hrs. After giving corticosteroids coverage patient was taken for LSCS during which Scar site rupture of about 2cm noted with intact aminotic sac. Baby was delivered and died soon after birth. Repair with bilateral tubal ligation was done. post operative period was not significant and patient was discharged on day 8.

Case 5

27yr old G2P1LI with POG 35wk +1d came with complaint of Pain in abdomen for 1 day and bleeding per vagina for few hours. She was diagnosed case of twin pregnancy with previous birth by c-section 3yr back. She was taken for laprotomy during which complete scar rupture was noticed. Aminotic sac was already ruptured and 1st baby was delivered with no cord pulsation. 2nd amniotic sac was intact and baby was delivered by breech extraction which cried after initial resuscitation. Scar site repair was done. Post op 1 unit of whole blood was given.

Case 6

36yr old G6P4L4 came with complaint generalized pain in abdomen, weakness, breathlessness. She was referred from some private hospital for non-progress of labour. On examination contour of uterus was lost, fetal part could be easily palpated, fetal heart sound was absent, there was abdominal distension, with guarding.

Suspecting it a case of rupture patient was stabilized; with 2 unit of blood Laparotomy was done. Hemoperitoneum was seen. 1.5 to 2 l of blood with clots was removed. Lower segment rupture extending to posterior wall, lateral wall and right side broad ligament

hematoma seen. Fetus was lying in abdominal cavity. Hysterectomy was done. 4 unit of blood and FFP was transfused. Patient went into sepsis and multiorgan dysfunction. She went into DIC and died on post op D4.

Case 7

29yr old G4P2L2A1 with 26wk+6d was diagnosed to have anencephalic baby. She had 1st baby delivered vaginally and 2nd by csection. She was given trial for vaginal birth in some private hospital since 2 days. Suddenly her vitals started deteriorating with abdominal discomfort, degree of pallor got increased. She came to our emergency where bedside USG was done and rupture was suspected for which Laparotomy was done. Hemoperitoneum was present with approx. 1 to 1.5 l of blood loss. Scar site rupture with inverted T Shape was identified which was repaired in double layer. Post op she went into sepsis which was managed with blood culture and antibiotics. 3 unit of whole blood was transfused. Wound gape occur for which secondary suturing was done. She was discharged on day 16th.

Case 8

24yr old G3P2L2 with POG 37w k +6d came to emergency with pain in lower abdomen and leaking p/v with previous both deliveries by c-section. On examination head was seen in perineum and she delivered in few minute. She went in PPH which couldn't be controlled by medical method and uterine massage. On examination rent could be felt per vaginally in anterior wall of uterus. Laprotomy was done and scar site rupture extending upwards was repaired. Post operative period was uneventful. Patient was discharged on day 8.

Case 9

27yr old G4P2L2A1 at POG 36wk +6dwith previous both child by c-section came with complaint of fall from stairs, following which she bleeding p/v had bleeding p/v and pain

abdomen. Her vitals were deteriorating and FHR was absent. Suspecting it as rupture Laparotomy was done. There was Scar site rupture which was extending upwards on anterior wall and Posterior wall Rupture extending upto fundus. Hemostasis could not be secured and subtotal hysterectomy was done.

Discussion

Number of rupture Cases was seen more in previous Cesarean cases ranging to about 66%. Repair and uterus Preservation was more easily possible in previous scarred uterus because of limited extent of rupture and more defined margins. Rupture was more extensive and severe in case of trauma and unscarred uterus. IUD was associated with all cases of unscarred uterus.

Hysterectomy was done for 2 cases unscarred rupture. Blood transfusion was required in all cases with no significant difference. ICU admission was more in unscarred rupture.

Conclusion

- On the basis of above study, it was evident the incidence of rupture uterus was more common in previous cesarean cases.
- However, outcome of mother and fetus was still better in past cesarean case due to early hospital visit and strict monitoring of scar dehiscence features.
- Maternal and fetal morbidity and mortality was high in unscarred rupture repair uterus cases. Even though there incidence has now reduced significantly.
- Rupture uterus is still an important concern to reduce maternal mortality.

References

1. Practical bulletin 205 vaginal birth after cesarean delivery.
2. Society of obstetrics and gynaecology Canada. Guidelines for vaginal birth after cesarean number155.

3. Kwee A, bOts ML, Visser GH, Bruinse SW, rupture uterus and it's complications in Netherlands, prospective study.
4. Williams-obstretics 25th edition.
5. Tarney CM, whitecar P rupture uterus in unscarred uterus with quadruplet pregnancy.