

Rupture Of A Scarred Uterus Without Involvement Of The Previous Lower Segment Uterine Scar: A Case Report

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Citation

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Abstract

Uterine rupture is an obstetrical emergency with high maternal and perinatal morbidities and mortalities. Uterine scar is usually thought to be the weakest point on a uterus. Therefore, when a ruptured scarred uterus is suspected, the general tendency is to explore the lower segment and especially the scar. We hereby present a case of a ruptured scarred uterus with intact previous uterine scar.

INTRODUCTION

Uterine rupture is an obstetrical emergency with an incidence that varies from 0.006% in developed countries¹ to 0.38% in some developing countries.² It is associated with high maternal morbidity and mortality rates, and a very high perinatal mortality rate, especially in developing countries. Risk factors for uterine rupture are many, one of them being a previous uterine scar. It is usually assumed that when there is rupture of a scarred uterus, rupture occurs at the level of the scar.³ We report a case of uterine rupture that occurred on an unscarred portion of the uterus.

CASE REPORT

A 33 year old G2P2002 woman consulted at the emergency department six hours post partum for fatigue, sweating and abdominal pain. Her past history revealed that she had undergone a transverse lower segment cesarean section 2 years ago for type 4 placenta praevia with an uneventful post operative period. During the second pregnancy a pelviscan done at 36 weeks reported a borderline pelvis (true conjugate of 10.1cm). She was counselled for an elective cesarean section, but she reported in the delivery room at full cervical dilatation with normal fetal heart tone and station +3. Few minutes later, she had a normal vaginal delivery of a male newborn that weighed 3036 grams with an Apgar score of 8 and 9 at the 1st and 5th minutes respectively. Gentle digital scar exploration revealed no dehiscence.

On physical examination, her blood pressure was 80/40mm Hg, pulse rate was 120 beats/min, and respiratory rate 40 cycles/min. Her abdomen was slightly distended with a general tenderness and fluid thrill. She had bright red per

vaginal bleeding. Uterine rupture was suspected and paracentesis abdominis drew 5ml of uncoagulated blood. An emergency laparotomy was then performed. We discovered a vertical rupture of about 5 cm in the left lateral border of the uterus, with a hemoperitoneum of 700ml. The previous lower uterine segment transverse scar was intact. Uterine repair was done, the peritoneal cavity cleaned and the abdominal wall closed. She had an uneventful post operative period and was discharged 7 days after surgery.

DISCUSSION

Uterine rupture is one of the worst obstetrical emergencies. The incidence of uterine rupture varies worldwide and reflects the degree of obstetrical care.

Risk factors for uterine rupture include previous uterine scar, maternal age of 40 years and above, (grand) multiparity, fetal weight of more than 3500g, abnormal presentation, contracted pelvis, misuse of uterotonics, prolonged labour, and even past history of curettage.⁴ Our patient had a uterine scar and a borderline pelvis.

Rupture of a scarred uterus involves the scar.³ Our patient had a rupture at the left lateral border of the uterus with an intact previous scar. This is the first case report found in literature about uterine rupture without involvement of the previous uterine scar.

Maternal and fetal outcomes of uterine rupture vary in different countries. Outcomes depend on the prompt intervention of the obstetrical team. In a study done by Chauhan et al in the United States, maternal death following uterine rupture was 0.32% and the perinatal mortality was

6.45%.⁵ These figures are very low compared to the 17.5% maternal mortality rate and the 80% perinatal mortality found in a study conducted in Nigeria.²

In some rare circumstances, like in our case, uterine rupture occurs towards the end of the second stage, thus, is discovered after vaginal delivery, with better perinatal outcome. Some authors claimed that digital uterine scar exploration should not be systematic and should be indicated in symptomatic women (persistent suprapubic pain, placental retention, excessive bleeding during labor or delivery) or when risk factors are present (prolonged labor, prolonged expulsive efforts, instrumental extraction).⁶ In our case, digital exploration of the uterine scar (done because of borderline pelvis and previous uterine scar) revealed no dehiscence. Digital exploration should no more be limited to the uterine scar, but to the whole uterus as this case report suggests.

CONCLUSION

Uterine rupture is an obstetrical emergency with maternal and fetal outcomes depending on the prompt diagnosis and management. This case report teaches us that at times the lower uterine segment scar may be stronger than other

unscarred parts of the uterus. Therefore, digital exploration should no more be limited to the uterine scar only, but to the whole uterus. Furthermore, past history of cesarean section should not frighten us for conducting trial of scar given that the scar might be stronger than the unscarred part of the uterus.

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