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Spontaneous Fundal Rupture of an Unscarred Uterus: A Rare Case Report

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Abstract

Uterine rupture is a critical obstetric complication, predominantly linked to prior caesarean sections or uterine trauma. Spontaneous fundal rupture in an unscarred uterus is exceedingly rare, with limited cases documented. We present a case of a 31-year-old multigravida at 32 weeks 4 days of gestation with dichorionic diamniotic twins, who experienced a spontaneous fundal rupture without prior uterine surgery or significant risk factors. This case underscores the necessity for heightened clinical vigilance and prompt intervention in atypical presentations of uterine rupture.

Keywords: Spontaneous uterine rupture, unscarred uterus, fundal rupture, twin pregnancy, obstetric emergency

Introduction

Uterine rupture is a life-threatening event, often associated with previous caesarean deliveries or uterine trauma, leading to significant maternal and perinatal morbidity and mortality. The incidence in unscarred uteri is approximately 1 in 22,000, contrasting with 1 in 333 in those with prior caesarean sections. Spontaneous rupture at the uterine fundus without preceding uterine surgery is exceptionally uncommon, with sparse literature on such cases.

Case Report

A 31-year-old gravida 4, para 3, with two live births and one intrauterine foetal demise, (previous all FTND) DCDA Twins, presented at 32 weeks and 4 days gestation. She reported a 1-hour history of continuous abdominal pain without vaginal bleeding or trauma. Her medical and surgical history was unremarkable, with no prior hypertension, diabetes, tuberculosis, or surgeries.

On examination, she was conscious and oriented, with a pulse rate of 110 beats per minute and blood pressure of 104/70 mmHg. Pallor was noted, suggesting a clinical haemoglobin level of approximately 7 g/dL. Abdominal examination revealed a uterus consistent with 36 weeks of gestation, multiple foetal parts palpable, and tenderness with rigidity present over the fundus. Foetal heart sounds were not localised with hand held doppler. Pelvic examination showed a 2 cm dilated cervix, 30% effacement, vertex at -3 station, with intact membranes, and the presence of show.

Initial laboratory investigations indicated haemoglobin of 7.8 g/dL, white blood cell count of 26,630/µL, and platelet count of 183,000/µL. Liver and renal function tests & DIC Profile were within normal limits. USG done Suggestive of Twin intrauterine gestation with absent foetal cardiac activity in both twins with retroplacental clots for both twins (20 – 30 cc for Twin A, & 125 – 127 cc for Twin B), with echoes in amniotic fluid suggestive of concealed & revealed placental abruption. Two units of packed red blood cells were transfused.

Approximately one-hour post-admission, the patient developed acute right shoulder tip pain, severe abdominal pain, and difficulty in breathing. Vital signs showed a pulse of 140 beats per minute and blood pressure of 90/60 mmHg. Repeat abdominal examination revealed an over distended uterus with generalized tenderness and absent foetal heart sounds. Pelvic examination showed 5 cm cervical dilation, 50% effacement, absent membranes, and blood-stained amniotic fluid.

A provisional diagnosis of uterine rupture was made, and patient shifted for an emergency exploratory laparotomy. Intraoperative findings included 2.5 litres of hemoperitoneum and a fundal uterine rupture extending from the left to right cornua, involving the right lateral uterine wall. Twin A was found in the abdominal cavity, and Twin B was partially extruded from the uterine cavity. Both infants were delivered via breech extraction; Twin A weighed 2.038 kg, and Twin B weighed 1.976 kg. Due to the extensive nature of the rupture, a subtotal hysterectomy was performed. The estimated blood loss was 2,800 mL, with an additional 700 g of clots. Intraoperatively, the patient received 2 units of packed red blood cells, 4 units of fresh frozen plasma, 4 units of cryoprecipitate, and 6 units of random donor platelets. A pelvic drain was placed, and the patient was transferred to the intensive care unit for monitoring. Postoperatively, she received an additional unit of packed red blood cells. Her post operative recovery was uneventful, and patient discharged on the eighth postoperative day.

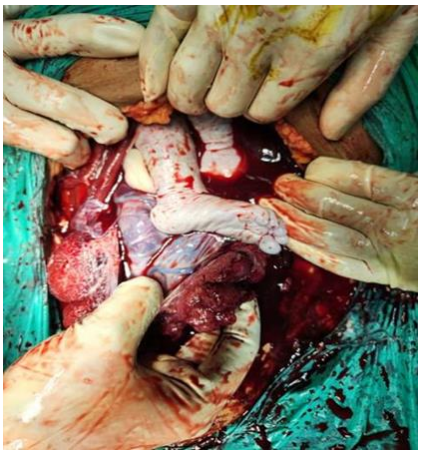

Figure 1:

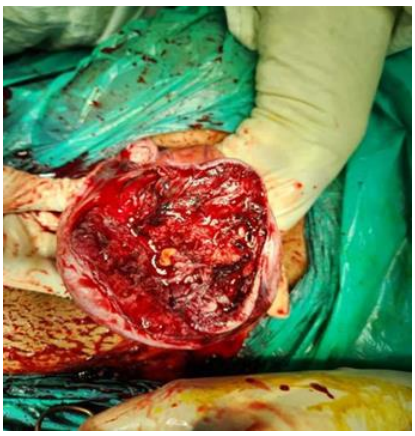

Figure 2:

Uterine rupture at fundus extending from left cornua to right cornua of uterus & partially extending into right lateral wall.

Discussion

Spontaneous rupture of an unscarred uterus is an infrequent but severe obstetric emergency. Identified risk factors include grand multiparity[1,2], collagen vascular disorders, obstetric manoeuvres, malpresentations, cephalopelvic disproportion, macrosomia, abnormal placentation[2], placental abruption[4], trauma, uterine anomalies, iatrogenic factors such as induction or augmentation of labor[1], prolonged or obstructed labor, and uterine over distension. In this case, the absence of

significant risk factors, aside from a multifetal gestation potentially leading to uterine over distension, highlights the diagnostic challenge. (here whether abruption was preceding factor for uterine rupture or not could not be ruled out). As The clinical presentation was atypical, lacking common precursors such as prolonged labor or uterine hyper stimulation. This underscores the importance of maintaining a high index of suspicion for uterine rupture, even in unscarred uteri, to facilitate prompt diagnosis and intervention.

Conclusion

This case exemplifies the rarity and severity of spontaneous fundal rupture in an unscarred uterus, particularly in the context of a twin pregnancy without overt risk factors. Early recognition and immediate surgical management are crucial to optimize maternal and foetal outcomes. Further research and case reports are necessary to elucidate the pathophysiology, risk factors, and optimal management strategies for this uncommon obstetric emergency.

Abbreviations

FTND – Full Term Normal Vaginal Delivery, DCDA – Di Chorionic Di Amniotic

References

1. Catanzarite V, Cousins L, Dowling D, Daneshmand S. Oxytocin-associated rupture of an unscarred uterus in a primigravida. Obstet Gynecol. 2006; 108(3 Pt 2):723–5.
2. R.M. Al-Wazzan, E.A. Al-Jabbar, Intrapartum Uterine Rupture Raida Muhammed Al-Wazzan1, Entessar Abdel Al-Jabbar2 Department of Obstetrics and Gynecology, Col-lege of Medicine, University of Mosul 2 Department of Obstetrics and Gynecology, Al-Batool Teaching Hospital, Ninevah Directorate of Health., 2020
3. Henderson CE, Hana RG, Woroch R, Reilly KD. Short interpregnancy interval and misoprostol as additive risks for uterine rupture: A case report. J Reprod Med. 2010;55(7–8):362–4.
4. Francois KE, Foley MR. Antepartum and postpartum hemorrhage. In: Gabbe SG, Niebyl JR, Simpson JL, editors. Obstetrics: Normal and Problem Pregnancies. 5th ed. Philadelphia: Elsevier Churchill Livingstone; 2007.