

Introduction

Uterine rupture is one of the most catastrophic obstetric emergencies, urgent intervention is required for the best maternal and fetal outcome. It is a rare complication usually associated with labor trial after previous cesarean section with approximately 0.5-2% risk. Examples of other risk factors include previous uterine surgery, induction of labour, obstruction of labour , multiple pregnancies and multiparity. Most uterine ruptures (more than 90%) occur during labour (the peak incidence being at 4–5 cm cervical dilatation), with around 18% occurring in the second stage of labour and 8% being identified post vaginal delivery. Fundal uterine rupture is very rare therefore we report a case of a uterine rupture in a woman with a history of previous cesarean section for preeclampsia , placental abruption alongside with Bakri balloon insertion.

Case Description

39 years old lady Gravida 15 Para 12+2 previous 1 cesarean section due to preeclampsia and placental abruption . She was 32+5 weeks gestation known diabetic on medication. Presented with severe preeclampsia symptoms and uncontrolled blood pressure. Upon examination no contractions felt, had brisk reflexes but clonus negative ,urine protein was positive. CTG had reduced variability, no decelerations. Started on parenteral infusion of labetalol as blood pressure remained high. She was also started on magnesium sulphate and given the first dose of betamethasone injection. Ultrasound reported IUGR baby with absent end diastolic blood flow upon umbilical artery doppler testing and bilobed placenta. Decision for urgent delivery was made. Intraoperatively as the uterus was dextro-rotated an attempt was made to correct the position, a thin defect/bulge felt as over the fundal area about 6 by 4 cm in size, However, we proceeded with lower segment cesarean section and baby was delivered in a good condition. After delivery of the placenta, uterine fundal area noted to be thin, necrosed with only serosal layer remaining. Repair of the defective area was done with approximation and suturing of healthy myometrium around the area. Uterus closed in 2 layers and hemostasis achieved. Post operative recovery was smooth with no complications . As the patient refused tubal ligation , long-acting reversible contraception advised and Implanon was inserted before discharge . Follow-up in clinic was done.

Discussion

Fundal uterine rupture can be caused by previous hysteroscopy injury or other uterine surgeries which weakens myometrial layer. In this case the patient had a history of previous lower segment cesarean section due to massive placental abruption with postpartum hemorrhage and couvelaire uterus found intraoperatively managed by uterotonic and Bakri balloon insertion. No definitive cause can be identified in this case. Generally, patients who have undergone previous uterine surgery (regardless of the surgical method) should be treated with extreme caution due to the high risk of uterine rupture .

Conclusion

Rupture of scarred or unscarred uterus can lead to devastating outcome for both mother and baby. Our patient advanced maternal age , grand multiparity , history of postpartum hemorrhage with Couvelaire uterus can lead to increased risk of uterine rupture in the following pregnancies. Patients should be fully counselled in antenatal visits about trial of labor after cesarean section , all information should be provided and explained . After that a shared decision between the obstetrician and the patient about mood of delivery is made .

References

- Pansota, M., Ajmal, A., & Sher Zaman, B. (2014). RUPTURE OF UTERUS (FUNDUS). The Professional Medical Journal, 114-117. <https://doi.org/10.17957/TPMJ/16.3109>
- (2015, October 1). *Birth After Previous Caesarean Birth*. Royal College of Obstetrics and Gynecology. https://www.rcog.org.uk/media/kpkjwd5h/gtg_45.pdf
- J. Clin. Med. 2023, 12(10), 3532; <https://doi.org/10.3390/jcm12103532>

