Good preparation saves lives: safe delivery of a live baby after complete uterine rupture at 36 weeks.

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BACKGROUND

Uterine rupture is a potentially catastrophic obstetric complication, with risks of severe morbidity and mortality to mother and baby. Patients with risk factors for rupture are delivered by elective caesarean section, but planning for emergency presentations is required, including provision of education to the patient. We present a case where antenatal counselling led to immediate action by a patient experiencing mild symptoms. Early presentation allowed for prompt action, resulting in the delivery of a live baby despite complete uterine rupture.

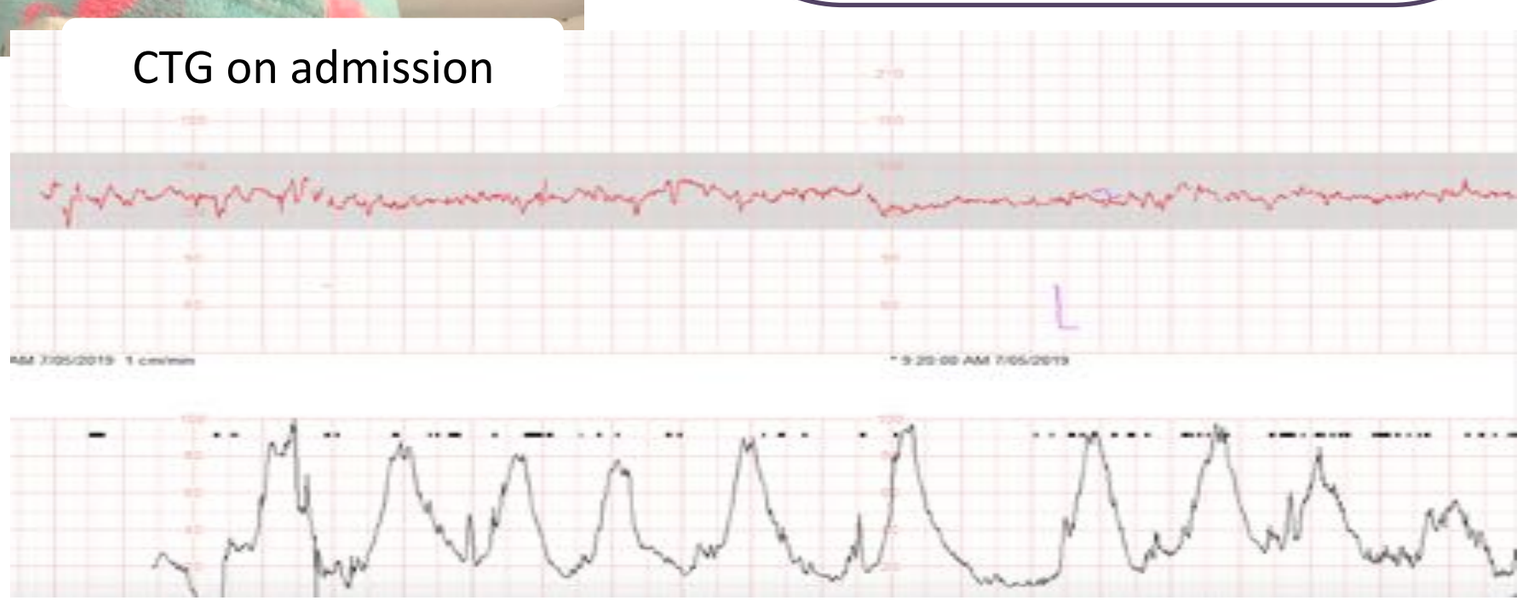
CASE

A 33-year old woman presented at 36+2/40 in her third pregnancy. Her first delivery had been a vaginal birth, with a secondary PPH complicated by uterine perforation at curettage. Her second pregnancy had ended in spontaneous rupture of the uterus at 19 weeks with fetal demise. Her elective caesarean was booked at 38/40 for this pregnancy.

She presented with a short history of pain and tightenings. CTG was normal, and the patient was booked as an emergency caesarean based on her history. In the anaesthetic bay, the patient experienced excruciating pain, the fetal heart was lost on auscultation and the decision made to proceed to a general anaesthetic emergently.

A pfannenstiel incision was made on the skin and a classical incision on the uterus. A full thickness posterior uterine rupture was then identified, with the baby and the placenta in the abdominal cavity. The baby was delivered as a breech extraction through the posterior and anterior wall of the uterus. The uterus was then repaired with a blood loss of 4L. The baby's cord pH was 6.8. The baby was admitted for 3 days to the neonatal unit, and discharged home with the mother on day 7.

CTG on admission



DISCUSSION

Uterine rupture has possibility for severe consequences to mother and baby[1]. Severe post-partum haemorrhage following a complete uterine rupture occurs in 43% of women and up to 20% of women requiring peri-partum hysterectomies[2].

Complete uterine rupture is associated with 25% neonatal/ infant death rate and this figure rises to approximately 95% when associated with placental separation and/or fetal extrusion.[3]

Antenatal counselling resulted in prompt attendance with mild symptoms. Emergent care and efficient teamwork resulted in rapid delivery, with excellent outcomes for mother and child.

LEARNING POINTS

- Quality antenatal counselling is imperative for safe delivery of baby
- Suspected diagnosis of uterine rupture to delivery time <30 minutes improves outcomes
- Action based on a patient's history alone, may be pertinent in cases with stable examination findings, but significant risk factors.

References:
1. Ofir K, Sheiner E, Levy A, Katz M, Mazor M. Uterine rup- ture: risk factors and pregnancy outcome. *Am J Obstet Gynecol*. 2003;189:1042-1046.
2. Al-Zirqi, I., Daltveit, AK., Vangen, S. Maternal outcome after complete uterine rupture. *Acta Obstet Gynecol Scand*. 2019;98:1024–1031. https://doi.org/10.1111/ aogs.13579
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