

SBAR – Baby born in poor condition and actively cooled following a category 1 LSCS.

MI-003703

WR111019

Situation: HSIB report

Background: A 28 year old lady with a history of 3 vaginal births and 1 LSCS due to cord prolapse and twin pregnancy was admitted to labour ward on 7 June at 40 weeks for IOL following a report of reduced fetal movements. Following insertion of a balloon catheter the CTG baseline was difficult to determine and variable decelerations were present. A decision was made to remove the catheter and for artificial rupture of the membranes (ARM)

Immediately following the ARM, 20mls of fresh red vaginal loss was noted and the fetal heart became bradycardic. A category 1 LSCS was performed under GA. Full resuscitation occurred including administration of blood and 72 hours of active cooling.

A MRI brain scan showed 'no evidence of intracranial injury' on day 7 and baby was discharged home on day 8.

Vasa praevia is a very rare condition affecting between 1 in 1200 and 1 in 5000 pregnancies. It is where blood vessels travelling from a baby to the placenta, unprotected by placental tissue or the umbilical cord, pass near to the cervix. These blood vessels are very delicate and can tear when in labour or when waters break. This is very dangerous as the blood that is lost comes from a baby.

Assessment findings:

- 1. HSIB considers that the COVID-19 pandemic did not have an impact on the care and outcome for the Mother and Baby.**
- 2. The Mother's antenatal care was managed in line with local and national guidance.**
- 3. The Mother reported four episodes of reduced fetal movements during her pregnancy and these were managed in line with national guidance.**
- 4. The symphysis fundal height measurements and estimated fetal weight calculated during serial growth ultrasound scans, indicated that the Baby's growth was within expected range. The Baby's birthweight indicated that the Baby was a small for gestational age (SGA) and had it been detected that the Baby was an SGA, it is likely the plan for method and time of birth would have been re-visited.**
- 5. During the Mother's numerous antenatal hospital attendances and two admissions, she was seen by multiple obstetric and midwifery clinicians. With increased obstetric and midwifery continuity and senior obstetric reviews, there may have been greater clinical**

oversight of the Mother's holistic picture; consideration may be given to the presence of abdominal pain in the context of a previous caesarean section.

6. When the Mother attended the hospital on multiple occasions during pregnancy with abdominal pain, fetal fibronectin test was not consistently preformed. This did not affect the outcome.

7. During the induction of labour, the CTG was not categorised to assess the wellbeing of the Baby. Having a structured approach to categorised CTGs may assist clinicians to identify early when escalation is required.

8. When the Baby's heart rate changed, following the insertion of the cervical ripening balloon, an earlier review was indicated. There was an opportunity to consider the option of a caesarean section as an alternative to artificial rupture of membranes, to expedite the birth of the Baby. This may have affected the outcome.

9. Following the removal of the cervical ripening balloon, when an artificial rupture of membranes was done, fresh blood was seen. An emergency caesarean section was carried out in a timely manner.

10. The Baby was born in poor condition. The resuscitation of the Baby and active therapeutic cooling was undertaken in line with national guidance.

11. The Baby's placenta was sent for histological examination, in line with national guidance. The examination results showed:

- a small term placenta with villitis of unknown of aetiology (VUE), contributing to a small for gestational age Baby.
- evidence of some 'intramembranous vessels' confirming vasa praevia. which may have affected the outcome.

12. A magnetic resonance imaging scan of the Baby's brain was performed on seventh day of age and showed 'no evidence of intracranial injury'.

Safety recommendations:

The Trust to ensure that a structured approach is used to categorise a cardiotocography, enabling timely escalation.

Full investigation report



20220201_MI-00370
3_HSIB Final Materni

The service agrees with the findings of the report and the recommendation. Since the incident a proforma has been developed for antenatal CTG interpretation to assist with accuracy and consistency of classification and escalation of concerns.