

Case story

Fetal surveillance

This case story is based on real events and NHS Resolution is sharing the experience of those involved to help prevent a similar occurrence happening to patients, families and staff.

As you read about this incident, please ask yourself:

- Could this happen in my organisation?
- Who could I share this with?
- What can we learn from this?

Topic:

Recognising and detection of small for gestation age babies.

Key points:

- Accurate assessment of fetal growth both within the community and hospital is an important assessment of fetal wellbeing.
- Early identification of abnormal fetal growth supports appropriate monitoring, intervention and management.
- All symphysis fundal heights measurements should be plotted on a customised chart or population based fundal heights charts.²
- Women in whom measurement of the symphysis fundal height may be inaccurate (for example: due to a high Body Mass Index >35 (BMI), large fibroids or hydramnios) should be referred for regular assessment of fetal growth using ultrasound.²
- When a mother is in labour a risk assessment should be undertaken to determine the most appropriate place of birth and method of fetal monitoring.

Maternity story

A mother with her first pregnancy and BMI of above 36 was booked for midwifery led care. During the antenatal period she had regular antenatal care and two ultrasound assessments for fetal growth. The plotting of the symphysis fundal height measurement was undertaken using a customised growth chart.

On several occasions the symphysis fundal height was plotted incorrectly on the growth chart or was missed and as a result it was not spotted that fetal growth was static. Routine antenatal care continued until the mother presented in spontaneous labour at 41+3 weeks.

Labour care was provided on the midwifery led unit and assessment of the fetal heart rate was undertaken with intermittent auscultation (IA). Labour progressed until a prolonged deceleration in the fetal heart rate was noted. An artificial rupture of membranes was performed, meconium liquor was noted and the mother was transferred to the Labour ward. A cardiotocography (CTG) was commenced and found to be suspicious. Fetal blood sampling (FBS) was performed and the results were abnormal indicating fetal hypoxia. The woman was informed of the results and counselled about the immediate need for delivery of her baby by a lower section

caesarean section (LSCS) and she consented to this. A category 1 LSCS (delivery within 30 minutes) was performed and the baby was born in poor condition, requiring full resuscitation. The blood cord gases showed marked acidotic hypoxia and the baby's birth weight was <10th centile.

The baby was transferred to the neonatal unit for therapeutic cooling for 72 hours. A magnetic resonance imaging brain scan (MRI) was performed and baby had a diagnosis of grade 2 hypoxic ischemic encephalopathy.

During the case review it was identified that at 32 weeks and 37 weeks the symphysis fundal height was plotted incorrectly on the growth chart or had been missed and static fetal growth had not been recognised.

Had it been noted that the baby was at risk of being small for gestational age and that this baby had not had sufficient growth assessment in this pregnancy, the high-risk nature of this pregnancy may have been anticipated sooner and induction of labour offered.¹

In the presence of significant meconium liquor and an abnormal CTG, the decision to perform an FBS would not have been an appropriate course of action if the baby had been identified as small for dates.

Although the missed opportunity to assess the growth of this baby began in the antenatal period, this case story highlights the importance of performing ongoing risk assessments when a mother presents in labour. In this case it would have provided the opportunity for the mother to have received care in the most appropriate birth setting and CTG monitoring to have commenced on admission.³

Considerations for your hospital

- How often is robust training provided for detection of small for gestation age babies that includes measurement of fundal height, use and interpretation of charts and does this include a competency assessment?
- How do you assess risk for women at the onset of labour irrespective of place of birth?
- How do you determine the most appropriate place of birth and method of fetal monitoring?
- On admission to the birth setting do you measure the symphysis fundal height?
- Do all birth settings in your trust have up-to-date guidance on the conversion criteria for changing from intermittent auscultation to continuous electronic fetal monitoring?
- Does your trust undertake regular audits of small for gestation age birth rate, antenatal detection rate and if so, how are these findings shared with the wider team and with the Local Maternity System?

What has happened as a result?

This case was referred to NHS Resolution as part of the Early Notification scheme in light of the neonatal brain injury sustained.

The case will be reviewed to consider whether the injury could and should have been avoided. Where appropriate NHS Resolution will work with the family to ensure that they are fully compensated and that they and the staff involved are fully supported throughout the process.

It is very important to note that no amount of money is comparable with the loss of a child or a child living with lifelong neurological injuries. Where poor outcomes occur as a result of deficiencies in care all such cases are entitled to be fully compensated, NHS Resolution aims to resolve all such fairly and as quickly as possible.

The current average damages payment for a baby with a long term severe brain injury where liability has been admitted is approximately £10 million, the human costs notwithstanding.

The human costs to the baby, families and clinical teams involved are immeasurable.

Resources:

1. RCOG Green-Top Guideline 31: The Investigation and Management of the Small-for-Gestational-Age Fetus. Royal College of Obstetricians and Gynaecologists, (2013)
www.rcog.org.uk/womens-health/investigation-and-management-small-gestational-age-fetus-green-top-31
2. Saving Babies Lives Care Bundle, Version 2, 'A care bundle for reducing perinatal mortality' (2019) NHS England
<https://www.england.nhs.uk/wp-content/uploads/2019/07/saving-babies-lives-care-bundle-version-two-v5.pdf>
3. Intrapartum Care for healthy women and babies – Clinical guidance NICE National Institute for Health and Care Excellence, published December 2014, revised 2018 nice.org.uk/guidance/cg190

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