Monitoring of fetal heart rate during labour 16HDC00455, 20 June 2017

Midwife ~ Lead maternity carer ~ Fetal monitoring ~ Risk factors ~ Communication ~ Documentation ~ Right 4(1)

A 20-year-old woman was pregnant with her first baby. At five weeks' gestation, she booked a self-employed registered midwife as her lead maternity carer (LMC).

At 39 weeks' gestation, the woman underwent an ultrasound scan. The scan report stated, "Liquor oligohydramnios¹ (one single pool of 1.3cm)", and noted that there was no history suggesting spontaneous rupture of membranes to account for the reduction in liquor. Following the scan, the LMC assessed the woman. The woman then had a consultation with an obstetric registrar at which the midwife was present. A plan was made for induction of labour the following day.

At approximately 6pm that same day, the woman had a gush of fluid with a pink show. At 7.30pm the LMC met the woman at the hospital. On examination, the woman was 8–9cm dilated and the cervix was fully effaced. At 7.40pm the LMC commenced cardiotocography (CTG) monitoring, and recorded that the results were "reassuring". At 7.40pm, the LMC recorded that the woman was "wishing to use the pool", and that the pool was filling. The LMC asked a hospital midwife for her opinion on the woman using the birthing pool for labour. The hospital midwife advised against allowing the woman to labour in the pool. The woman got into the birthing pool at approximately 8.10pm, and the CTG was discontinued.

The LMC recorded that the second stage of labour commenced at 9pm. At this time, the woman was fully dilated, and began pushing. Between 9pm and 9.50pm, the fetal heart rate (FHR) was monitored every 20 minutes, with the highest documented rate being 140bpm and the lowest documented rate 120bpm. At 9.55pm the FHR was documented as 100bpm.

At 10pm the LMC recorded that peeks of the vertex (head) were visible on pushing. At 10.15pm the fetal heat rate was documented again for the first time since 9.55pm, and remained at 100bpm.

The woman proceeded to deliver the baby underwater at 10.18pm in a severely compromised condition. The LMC recorded that as the baby was emerging, she unwrapped the cord, which was around the baby's neck. The LMC pressed the midwifery assist call bell. The hospital midwife responded and pressed the emergency bell within seconds of walking into the room. She pulled the delivery instruments over to the LMC, which she recorded were not in arm's reach or open, and plugged in the oxygen and tested it. She recorded that within 30 seconds of arriving, the baby was transferred to the resuscitation table.

Following resuscitation by the LMC, the hospital midwife and the paediatric team, the baby was transferred to the Neonatal Intensive Care Unit at another hospital. Sadly, the baby died.

Findings

The LMC failed to provide services to the woman with reasonable care and skill in breach of Right 4(1) in the following ways:

¹ A significant deficiency in liquor surrounding the baby.

- a) Prior to labour, the LMC did not attempt to access the scan report from the radiology service to clarify her understanding of the results, and, as a result, she failed to recognise that the woman's labour would be high risk, requiring continuous CTG monitoring.
- b) The LMC incorrectly interpreted the CTG report at 7.40–8.10pm as being "reassuring".
- c) The LMC did not communicate effectively with the hospital midwife about the hospital midwife's concern regarding the woman using the birthing pool during labour.
- d) At 9.55pm, when the FHR was 100bpm, the LMC did not undertake closer monitoring of the FHR. The LMC also did not document the FHR between 9.55pm and 10.15pm.
- e) When the FHR was detected at 100bpm on several occasions between 9.55pm and 10.15pm, the LMC did not check the maternal pulse to ensure that she was hearing the FHR.
- f) The LMC did not prepare the birthing or resuscitation equipment adequately, and failed to recognise that the baby's condition was severely compromised at birth, and immediately press the emergency bell.

Adverse comment was made about the LMC's postnatal documentation.

Recommendations

It was recommended that the LMC undertake further training on documentation and fetal monitoring, and apologise in writing to the woman.

The LMC was referred to the Director of Proceedings for the purpose of deciding whether any proceedings should be taken. The Director filed proceedings by consent against the midwife in the Human Rights Review Tribunal. The Tribunal issued a declaration that the midwife breached Right 4(1) by failing to provide services with reasonable care and skill.