Neutral Citation Number: [2023] EWHC 1921 (KB)

Case No: G90MA332

IN THE HIGH COURT OF JUSTICE
KING'S BENCH DIVISION
LIVERPOOL DISTRICT REGISTRY

Liverpool Civil and Family Court
35 Vernon Street, Liverpool, L2 2BX

Date: 28/07/2023

Before :

THE HONOURABLE MR JUSTICE MARTIN SPENCER

- -

Between :

Jayden Astley (A minor by his father and litigation friend Craig Astley)	**Claimant**
- and -	
Lancashire Teaching Hospitals NHS Foundation Trust	**Defendant**

- -
- -

Mr Darryl Allen KC (instructed by **Fletchers Group Solicitors**) for the **Claimant**
Ms Sarah Pritchard KC (instructed by **Hempsons Solicitors**) for the **Defendant**

Hearing dates: 3rd - 7th July 2023

- -

Approved Judgment

This judgment was handed down remotely at 10.30am on Friday, 28th July 2023 by circulation to the parties or their representatives by e-mail and by release to the National Archives.

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The Honourable Mr Justice Martin Spencer:

Introduction

1. The Claimant, Jayden Astley, sustained brain injury as a result of an acute, profound hypoxia-ischaemia ("APH") at the time of his birth on 22 July 2012. He claims damages for alleged negligence surrounding the circumstances of his birth whereby it is alleged that, with appropriate monitoring, deterioration in his heart rate would have been observed prior to delivery and this would have led to delivery being expedited, thereby avoiding the damaging period of APH and leaving him neurologically intact.

2. Pursuant to an Order dated 9 February 2023, the matter was listed for a "split trial" and came before me on 3 July 2023 for trial of the issues of breach of duty and causation, with quantification to abide the outcome.

3. Certain matters were agreed between the parties' experts in advance of trial, and these formed an essential background to the issues which arose on the trial of liability and causation. Thus:

   (i) MRI imaging of Jayden's brain dated 1 August 2012 was consistent with an acute, near-total, profound hypoxic-ischaemic insult;

   (ii) Jayden was born in an asphyxiated condition, with a heart-rate of less than 40 beats per minute (the range of normality is 110-160 bpm);

   (iii) Circulation to his brain was restored when his heart-rate increased to over 100 bpm: this was not until 7 minutes after birth;

   (iv) A normal, healthy fetus/baby can withstand 10 minutes of APH before the brain starts to become damaged;

   (v) The APH commenced approximately 8 minutes before birth, and was caused by umbilical cord compression or occlusion;

   (vi) During that period of prenatal APH, the fetal heart-rate would have been severely bradycardic (probably in the region of 40 bpm);

   (vii) The APH became damaging from around 2 minutes after birth;

   (viii) Delivery 3 or more minutes earlier than the actual time of birth would have avoided all permanent brain damage.

4. Jayden was born at 15.11 hours on 22 July 2012. The above agreed matters can therefore be translated into the following timeline:

   15:03 Start of APH and severe bradycardia;
   15:08 Time by when delivery of Jayden would have avoided all permanent brain damage;
   15:11 Time of actual delivery: Jayden born severely asphyxiated with a HR of 40 bpm or less;

15:13 Start of brain-damaging APH;
15:18 Restoration of circulation to brain and cessation of APH, by which time Jayden had sustained 5 minutes of brain-damaging APH.

In the above context, the principal issue at trial was whether there was negligence on the part of the hospital staff in the management of the labour of Jayden's mother, Janene, and whether, but for such negligence, Jayden would have been delivered at or before 15:08 so as to avoid all permanent brain damage.

The Detailed Factual History

5. Janene Burnett, Jayden's mother, was born on 6 December 1983 and was booked at the Royal Preston Hospital on 29 December 2011 pregnant with her second child and at 9 weeks gestation with an estimated date of delivery of 21 July 2012. Antenatal care was uneventful and she went into spontaneous labour on 22 July 2012 with regular, strong contractions commencing at 08:30. She was admitted to the maternity unit of Royal Preston Hospital at 10:10 by Midwife Choi-Ling Kong who was assigned to Janene and was responsible for her care for the duration of her labour until Jayden's delivery at 15:11.

6. The labour was principally documented in two places: the labour notes, which start at page 1442 of the trial bundle of documents and the partogram, at page 1453. The labour notes, all completed by Midwife Kong on 22 July 2012, record the following:

10:10	Mother admitted by M/W Kong to Royal Preston Hospital maternity unit. "No documented birth plan". No SRM or show. Fetal movements felt
10:20	First VE: 5cm dilated, station -2. Estimated liquor: normal. Membranes ??intact "?tight to head". Commenced on entonox
10:20	Management plan devised
10:30	Supported by partner and mum. Nil loss PV. Conts 4:10 moderate on palpation. FH heard
11:00	Conts 4:10 moderate FH heard
11:00	Nil loss PV at present conts 4:10
11:25	Nil loss PV. Conts strong 4:10

11:35	Pushing with conts. Nil visible. Nil loss pv. FH heard 146 bpm
11:50	VE: 7-8 cm dilated. Membranes: already ruptured. Liquor: none. FHR 140. Findings discussed. Turned on R side. Conts 4:10 strong
12:00	Conts 4:10. On R side. B/S show pv
12:15	[min] B/S liquor pv. B/S show. Conts 4:10. Strong
12:45	Nil visible no external signs. Show + B/s liquor PV. Conts 4:10
13:00	Min B/S liquor + show PV. Conts 4:10. Lying on L side
13:30	Show PV. Conts 4:10
13:45	Conts 4:10. Show PV VE: fully dilated. Head at spines. Liquor blood stained minimal. FHR 144. Findings discussed. Janine to continue to push as she desires. FH heard following VE. MP 90
13:50	FH 140. MP 88. Conts 4:10 strong. Show PV
13:55	FH 136 MP 90. Nil loss PV
14:00	Conts 4:10 FH 144 MP 90 Mucusey show PV
14:05	nil visible. FH134 Birth stool suggested as an alternative position → Happy to try
14:10	Now on birth stool. Nil visible, FH 147 MP 88 nil loss PV
14:15	nil loss PV FH 140 MP 92. nil visible
14:20	pushing well on stool. Nil visible, conts 4:10. FH heard & regular 140bpm MP88

14:25	FH150 MP90 nil visible. Nil loss PV. Conts 4:10 strong
14:30	FH147 MP90
14:35	FH154 MP86
14:40	Conts 4:10 strong & expulsive. Nil visible. Nil loss PV
14:45	Back onto bed as uncomfortable on stool now. Conts 4:10 Strong. Pushing with conts VX just visible. FH148 MP90
14:50	VX advancing slowly. pushing with conts. Janine tired, encouraged & reassured. Mucusey show PV. FH138 MP92
14:55	VX advancing. FH140 MP90 nil loss PV. Conts strong 4:10
15:00	VX advancing FH134 MP90. nil loss PV. Conts strong 4:10
15:05	VX advancing with conts. FH132 MP88. Buzzed for Second midwife
15:07	Sr Dunkley present in room. Janine pushing with conts, VX advancing FH134 MP90
15:09	FH127, conts 3-4:10. Head delivered. MP88
15:10	FH128. MP94
15:11	Normal birth live male infant: meconium liquor with delivery of body. Cord x3 tightly around neck and once around the body, quickly untangled. Cord clamped and cut. Pale, floppy, no respiratory effort. Baby passed to Sr Dunkley and taken to the resuscitaire.

In the above table, the abbreviations used signify the following:

SRM = spontaneous rupture of membranes

VE = vaginal examination

PV = per vaginam

Conts = contractions

FH= fetal heart

B/S = blood-stained

MP = maternal pulse

VX = vertex (baby's head)

7. The partogram is timed at 15 minute intervals from 10:30 until 15:15 and shows entries for the maternal pulse and fetal heart-rate which are consistent with the labour notes until 15:00. However, the column for contractions is not consistent: it shows the contractions as "4:10 MR" (4 contractions every 10 minutes, moderate, regular) whilst, from 11:25 in the labour notes, the contractions are shown as strong.

8. A few features of the above labour notes are worth noting at this stage.

   i) Full dilatation was diagnosed at 13:45. This denotes the start of the second stage of labour and from that time, a vaginal delivery was possible: delivery could have been assisted by vaginal operative means, using ventouse or forceps, if required.

   ii) There is nothing in the notes to presage the birth of Jayden in his asphyxiated condition: going by the notes, the labour would appear to have progressed wholly normally and uneventfully until the actual birth.

   iii) On the basis of the agreed evidence noted at paragraph 3(vi) above, the recordings of the fetal heart rate at 15:07, 15:09 and 15:10 cannot have been accurate as this was during the period of APH when the fetal heart rate would in fact have been severely bradycardic. This was acknowledged by the neonatologists (Dr Wardle and Dr Fox) in their joint statement dated 27 May 2023 where they state:

   > "We agree that the fetal heart recordings by the midwife in the final 5 to 10 minutes before birth are inconsistent with the fetal heart rates that would be expected during that period given the likely timings of the period of injury."

   iv) Consistent with point (ii) above, the notes do not disclose that Midwife Kong, when she auscultated the fetal heart, heard any decelerations. In their joint

statement, the expert obstetricians, Mr Ugwumadu and Professor Steer, were asked the question:

> "Do you consider that in the second stage of labour CTG monitoring and/or correctly administered intermittent auscultation would have likely shown variable or complicated decelerations due to cord compression as labour progressed? If not, please explain your reasoning"

They responded:

> "We agree that it is likely that CTG monitoring would have shown variable decelerations."

Professor Steer adds:

> "By definition, with such decelerations the heart rate is sometimes in the normal range and sometimes slow (below 110bpm). It is possible that by chance the auscultated rates were all when the FHR was in the normal range. While this would be uncommon, there is no fundamental impossibility that by chance this was what happened."

Auscultation of the fetal heart was noted by Midwife Kong to have been carried out using the "Doptone" (also called the "Sonicaid"). The obstetricians did not answer the question in relation to "correctly administered intermittent auscultation" but Mr Ugwumadu did address this in his oral evidence: see paragraphs 14 and 35 below. However, it is a further feature of the notes that, despite the obstetricians' agreement that there would have been variable decelerations in the second stage of labour (ie from 13:45), they were never detected – or at least noted as having been detected.

Jayden's Treatment

9. At birth, Jayden was handed to Sr Dunkley who had been present in the room since 15:07 and she noted:

> "Baby taken to resuscitaire, dried and stimulated. Pale, floppy, HR equal/under 40bpm. No resp effort. X5 initiate breaths given & emergency buzzer pulled by C Kong. Neonatal team called on 2222 by St/M K Hudson + S/M A Doherty. No chest movement. Airway inspected under direct vision with laryngoscope Meconium + in airway, suction with neonatal yonker sucker, guedal airway inserted."

The neonatal team arrived at 15:13 and took over the baby's resuscitation.

10. The paediatrician noted:

> "Meconium noted on baby's skin. Cord around neck x3.
>
> Airway taken over by myself.
>
> Laryngoscopy performed. Meconium suctioned from between cords.
>
> 5 inflation breaths given with good effect.
>
> HR > 100. Good chest wall movements. Pinked up (no sats available yet).
>
> Ventilation breaths continued as baby remained floppy. No respiratory effort.
>
> Decision made to intubate at 7 minutes of life. Patient intubated with size 3.5 ETT, secured at 9 mins to the lips. Passive cooling started.
>
> Spontaneous irregular respirations noted at 10 minutes old, as he was breathing against the tube."

11. Jayden's APGAR scores (a standard measurement of a baby's well-being at birth, ranging from 0, denoting a stillbirth, to 10, denoting a perfectly healthy baby) were 1 at 1 minute, 4 at 5 minutes and 6 at 10 minutes. His cord gases were noted to be:

    pH: Arterial 7.00/Venous 7.11;

    Base excess: Arterial -13.4/Venous -12.3.

    Jayden was transferred to the Neonatal Unit by transport incubator, admitted to the Unit at 15:40 and placed onto a ventilator. At about 00:30 on 23rd July 2012, Jayden was transferred to Burnley General Hospital for active cooling. Prior to transfer, passive cooling was commenced at 00:07. Active cooling commenced at 07:10 and continued for 72 hours.

12. Jayden was admitted back to Royal Preston Hospital on 27th July 2012 and discharged home on 2 August 2012 having had an MRI scan of his brain on 1 August 2012.

Allegations of Negligence

13. Although there was an issue at trial as to whether Midwife Kong absented herself from Delivery Room 6 (Janene's room) for extended periods of time arising from the evidence of Jayden's mother, his father, Craig Astley and Craig's mother, Julie Tully, who were all present throughout the labour, this was not a pleaded breach of duty and was not relied upon by Mr Allen KC in his written opening for the trial. Whilst I shall deal with this matter briefly in paragraph 47 below, it is arguably peripheral to the important causative breaches of duty pleaded and pursued.

14. In his opening, Mr Allen KC wrote:

> "There are three main elements of the Claimant's case. They relate to events during his mother's labour on 22nd July 2012. They are:
>
> 1. Failing to pay adequate attention to the fact that Miss Burnett was passing blood-stained liquor, failing to commence CTG monitoring and failing to request medical review from about 12:45 onwards.
>
> 2. Failing to accurately monitor the Claimant's heart rate.
>
> 3. Failing to identify the Claimant's bradycardia/fetal heart rate abnormality from about 14:55 onwards."

Clearly, allegations 2 and 3 belong together. Given the agreement of the expert neonatologists that the APH and bradycardia started at about 15:03, that is the time from when there was a failure to identify the bradycardia, rather than 14:55. However, in his evidence, Mr Ugwumadu stated that, in his opinion, the variable decelerations which he had agreed with Professor Steer would have been present from 13:45 would have been complicated (or "complex") variable decelerations from 14:45. When Professor Steer was called, he did not disagree with this opinion which I therefore take to have been agreed: after Mr Ugwumadu finished giving his evidence in chief, Ms Pritchard KC was given time to take instructions from Professor Steer, she did not then challenge that opinion, and when Professor Steer gave evidence, he was not asked about it. The consequence of there being complex variable decelerations is that Mr Ugwumadu said he would have expected these to have been picked up by Intermittent Auscultation. Allegation 3 could therefore be refined as follows:

> "3a Failing to identify the Claimant's fetal heart rate abnormality in the form of complex variable decelerations from about 14:45 onwards;
> 3b Failing to identify the Claimant's bradycardia from about 15:03 onwards."

These are both aspects of allegation 2, the failure accurately to monitor the Claimant's heart rate, and, in my judgment, the above refinement to allegation 3 can therefore be made without injustice to the Defendant who, at trial, had every opportunity to deal with it through their experts.

The Evidence of Midwife Kong

15. Midwife Kong was called and affirmed witness statements which she had made on 10 January 2022, 19 May 2022 and 3 July 2023. She confirmed that she used intermittent auscultation to monitor the fetal heart in accordance with the Trust's protocol using the Sonicaid. She said that the fetal heart rate was monitored and documented within the notes on the partogram, that it remained within normal limits and there were no concerns or any other indication to commence continuous CTG monitoring. She said that the practice was to use the Sonicaid to listen to the fetal

heart rate for at least 60 seconds following contractions. She heard the fetal heart clearly and did not confuse it with the maternal pulse. She said:

> "In this case my recordings on the partogram show that the maternal pulse rate and the fetal heart rate were very different and I'm sure that I was not listening to the maternal pulse rather than the fetal heart in error."

16. Midwife Kong referred to her entry at 12:15 where she noted:

> "min B/S liquor PV. B/S show"

She said she would not use that terminology for fresh bleeding. A minimal amount of blood-stained liquor in established labour is not unusual and arises as a result of changes in the cervix commonly termed a "show". This differs from fresh bleeding and is not something of concern. She said that at no point did she have concerns about fresh bleeding such as to require continuous CTG monitoring. If she had had any concerns, she would have requested an obstetric review and commenced CTG monitoring. By 14:40 the contractions were strong and expulsive and the mother was pushing well, getting closer to delivery. At 14:45 the vertex was "just visible" as the baby advanced. She continued with her monitoring and at 15:05 she summoned assistance from a second midwife and Sr Dunkley attended at 15:07. The baby's head was delivered at 15:09 and the body was delivered at 15:11. She stated:

> "I was very surprised by the condition of the baby at birth. He was pale and floppy and made no respiratory effort. The umbilical cord was wrapped three times tightly around the baby's neck and once around his body. I quickly untangled it and clamped and cut the cord. I passed the baby to my colleague, Sr Dunkley, and she immediately took the baby to the resuscitaire."

17. In cross-examination by Mr Allen KC, Midwife Kong confirmed that she would listen for a full 60 seconds when auscultating the fetal heart and then document it. However, towards the end, if the baby was advancing, she would write the notes afterwards although she might write a number on her arm. She was asked about the inconsistency between the labour notes and the partogram in relation to the contractions being strong or moderate and she said she didn't know why there was a difference, she was unable to explain that. She agreed that if the notes were written contemporaneously and were accurate there was no reason why they should be different. She said that once contractions are strong, you would expect them to remain strong and the partogram was inaccurate from 11:45 in this regard.

18. Mr Allen referred Midwife Kong to the NICE guideline 55 on intrapartum care where at paragraph 1.7.3 it is stated:

> "**Parous women**:
>
> • Birth would be expected to take place within 2 hours of the start
> of the active second stage in most women.

> • A diagnosis of delay in the active second stage should be made
> when it has lasted 1 hour and women should be referred to a healthcare professional trained to undertake an operative vaginal birth if birth is not imminent."

She confirmed that in this case the mother was parous (ie she had had a previous child), that the active second stage started at 13:45 and that delivery was not imminent at 14:45 and she agreed that, within the guideline, she should have sought obstetric help at 14:45. She said from her experience, she knew that the baby would deliver.

19. Referring to the note at 12:15, Midwife Kong agreed that the word "min" had been added later but she said she couldn't say at what point. Mr Allen took her through the notes recording blood-stained shows and blood-stained liquor, but she maintained that in the absence of fresh bleeding and with the fetal heart remaining within normal limits on intermittent auscultation, there was no indication to commence CTG monitoring.

20. Mr Allen then asked Midwife Kong about the notes of the fetal heart rate from 15:05. She confirmed that each auscultation would take about 2 minutes, listening for a full 60 seconds after each contraction. It followed that, in the 6 minutes before Jaden's birth she was listening for at least 4 minutes. Mr Allen put the agreed expert evidence to her and suggested that her records of the fetal heart could not be right. She said: "That is what I heard and documented." Mr Allen put to her that the entries were a fabrication, which she denied. She denied that her technique for listening to the baby's heart rate was flawed.

21. In re-examination, Midwife Kong reiterated that she never observed fresh blood loss and it would be very unusual for the liquor to be clear all the way through and most mothers will have a blood-stained show or blood-stained liquor. Here it was minimal and did not concern her. She confirmed that she had many years of experience using a Sonicaid and that she did not fabricate the notes. She said that if she had detected a low fetal heart rate, she would have called for help straightaway.

The Evidence of Midwife Cook (previously Dunkley)

22. Sr Cook who, when Sr Dunkley, had been called in to assist with the delivery, was called to give evidence. She confirmed the statements that she had made as being true and accurate and she identified her note made at 15:11 (see paragraph 9 above). She said that she did not have any independent recollection of this case and was dependent upon the notes. She said that when called to assist with a labour, her standard approach was to allow the mother to continue to labour with the midwife with whom they had developed a relationship and she would start to get the room ready for delivery of the baby by preparing the resuscitaire, ensuring there were towels available and so on. She would keep a close eye/ear on the progress of the labour and the contractions. She said:

> "Whilst preparing the room I would have heard the fetal heart (via the Sonicaid when being taken by Midwife Kong) and

> would have commented if I had any concerns about what I could hear. The Sonicaid is at a volume that enables parents to hear the fetal heart, so it would not be difficult for me to have heard it too. After many years of experience, I am confident that I can intuitively recognise a concerning heart rate, for example one that is excessively low or high. If that is ever the case, I immediately raise it with the other midwife and either ask them to repeat the reading or suggest that CTG monitoring is commenced. Had any such concerns been noted or raised by me in this case these would have been noted in the medical records. I see that the records do not contain any note to indicate that I raised concerns about the fetal heart, which suggests that when I heard the same via the Sonicaid it was not concerning. The checking of the fetal heart (having heard the Sonicaid) and advice from supporting midwife is standard practice. If I'm ever asked to re-check a fetal heart (or I suggest to a colleague that they re-check) then that would be done without question. The re-checking and raising concerns would also be noted in the medical records at the time."
>
> … Both midwives in the room would be able to hear the fetal heart rate via Sonicaid and had I thought that the fetal heart rate was concerningly low (or that the heart valves sounds were confusing the reading) I would have raised this with Midwife Kong immediately and requested that the reading be checked/repeated. I would also have noted those concerns in the medical records."

She said that it is not unusual for a baby to be born in an unexpectedly poor condition.

The Expert Midwifery Evidence

23. Midwifery experts were called on each side: Ann Moody for the claimant and Linda Crocker-Eakins for the defendant. They each affirmed their reports and their contributions to the joint midwifery report arising from their discussion on 22 May 2023.

24. **Ms Moody** referred to the references in the notes to blood-stained liquor from 12:45 and then again at 13:00 and 13:45 and stated that, in her opinion, CTG monitoring was warranted in view of evidence of blood-stained liquor. Whilst blood-stained liquor can be part of normal labour, it may also be indicative of more sinister concerns, for example a placental abruption which is critical and potentially life-threatening to both mother and fetus. She stated:

> "Without CTG monitoring, you cannot gain full assurance of no concerns with the fetal heart rate alongside a concerning feature (blood-stained liquor). I would have expected the CTG to have remained in situ until there was no longer evidence of blood-stained liquor and an otherwise normal CTG"

25. In relation to the monitoring of the fetal heart by Midwife Kong, Ms Moody stated:

> "It is for the court to determine whether the fetal heart rate readings recorded prior to delivery were accurate. However, given the baby's condition at delivery, the fetal heart recordings made by midwife Kong in the period leading up to delivery are unlikely to be accurate"

Ms Moody confirmed that recognition of a fetal bradycardia would trigger using the emergency call bell and she would expect obstetric support to arrive within 2 minutes. If the baby was deliverable in the labour room then support by the midwife to allow the obstetrician to expedite delivery urgently would be required.

26. In answer to questions from Ms Pritchard KC, Ms Moody agreed that the NICE guideline makes no reference to blood-stained liquor as triggering the need for CTG monitoring; nor does "Myles Textbook for Midwives" refer to the need for CTG monitoring where there has been 45 minutes of blood-stained liquor. She estimated that blood-stained liquor would be seen in about 40% of cases and that she would expect a midwife to be able to distinguish between blood-stained liquor and fresh bleeding. Ms Pritchard put that her view was not mainstream, or otherwise it would be reflected within the NICE guideline or the Myles textbook and Ms Moody disagreed saying that she would expect a midwife to be concerned. She did not agree that there would be a reasonable body of midwives that would not have converted the monitoring to CTG. She said that she would expect a bradycardia to be detected on intermittent auscultation and although 3 minutes is a fetal bradycardia by definition, the midwife would not wait for the full 3 minutes before calling for help and she would expect a midwife to start preparing for an instrumental delivery immediately.

27. I put to Ms Moody part of paragraph 32 of the obstetric report of Mr Ugwumadu where he stated:

> "In my opinion the observation of new onset blood loss at 7–8cm cervical dilatation and beyond is more consistent with antepartum haemorrhage/abruption than "show" and should have prompted continuous CTG monitoring. "Show" is characteristically mucoid and seen in the latent and early stages of labour, not usually at 7–8cm cervical dilatation or in association with the amniotic fluid. Furthermore, the absence of blood loss up to 12.00 makes "show" a less likely explanation of the bleeding."

She endorsed this comment from a midwifery standpoint, saying that it sounded reasonable to her.

28. **Ms Crocker-Eakins** affirmed her report of 23 June 2022 and said that the evidence she had heard had not changed her opinion at all. There were, as it seems to me, two features of her report produced for the purposes of the trial which were immediately of some concern.

    i) First, when she gave her opinion and conclusions in Part Four of her report and addressed the allegations, she responded to the allegations in the Letter of

Claim rather than the allegations in the Particulars of Claim. This meant that she was addressing some allegations which were no longer pursued and other allegations which had been refined.

ii) Secondly, and of greater concern, she failed to address adequately what was clearly the most important feature of the Claimant's case, namely the inconsistency between the fetal heart rate recordings from 15:05 and the agreed paediatric evidence that, during this period, the baby would have been severely bradycardic. In her report, Ms Crocker-Eakins quoted the allegation in the Letter of Claim which had stated:

> "The Defendant failed in any event to appropriately perform intermittent auscultation of fetal heat rate from 08:30 hours to delivery at 15:11 hours to an acceptable standard. The Claimant will rely upon the recorded fetal heart rate obtained at intermittent auscultation during delivery, and specifically, the record at 15:10 hours which states that fetal heart rate was 128 bpm. It is the Claimant's case that the auscultation was negligently performed on the basis of fetal heart rate on delivery at 15:11 hours (1 minute later) being recorded at 40 bpm and recovery heart rate being less than 100 bpm for a number of minutes."

As already observed in Particulars of Claim, the allegation had been refined to:

> "From about 14:55 onwards (1) failing to identify that the Claimant was suffering from a bradycardia."

In her report, Ms Crocker-Eakins responded:

> "From the records, the fetal heart rate auscultation was in accordance with a reasonable and responsible body of midwives. None of the recordings represented a bradycardia … If the Court were to favour the Defendant's case from the care documented in the records, then the care was in accordance with a reasonable and responsible body of midwives. If the Court were to favour the Claimant's position, that the fetal heart was not auscultated every five minutes during the second stage of labour, as Midwife Kong was absent for periods of time greater than five minutes, as suggested by the Claimant's parents in their witness statements, then the care was below the standard of any reasonable and responsible body of midwives."

The difficulty with this is that, by the time of her report, Ms Crocker-Eakins had the report of Dr Grenville Fox where he had said that the FHR recordings by the midwife in the final 5-15 minutes before birth were inconsistent with the onset of the APH. That difficulty was compounded when she gave her evidence by the fact that, by this time, she had the agreed neonatology evidence that the FHR would have been bradycardic from 15:03 hours. I found it frankly astonishing that, in view of this, Ms Crocker-Eakins should have glibly stated that she stood by her report and nothing in the evidence changed that.

29. Inevitably, Mr Allen KC took this up in cross-examination. Ms Crocker-Eakins confirmed, in answer to his questions, that she knew that a central feature of the claimant's case has always been the inconsistency between the recorded fetal heart rates and Jayden's condition at birth. She further confirmed that she had read the Particulars of Claim carefully when she prepared her report and had understood that it was the claimant's case that the midwifery records could not be accurate. She was unable to explain why she had not set out and dealt with these allegations in her report. She agreed that she had not given any consideration to the inconsistency in the fetal heart rate recordings from 14:55 to the time of the delivery. Mr Allen put to Ms Crocker-Eakins paragraphs 2.20 to 2.23 of the report of Dr Grenville Fox, the defendant's neonatal expert and in particular paragraph 2.23 where he stated:

> "The FHR recordings by the midwife in the final 5-15 minutes before birth are inconsistent with the timings above and I defer to expert obstetrics and midwifery opinion regarding the likely accuracy of the documented intrapartum FHR measurements."

Ms Crocker-Eakins confirmed that she had seen and read the report of Dr Fox at the time she wrote her report and that it had been an error on her part not to have considered the inconsistency between the fetal heart recordings and the baby's condition as highlighted by the neonatologists. She said:

> "I agree I haven't addressed a central plank of the claimant's case. I believed until pointed out by you [ie Mr Allen] now that it was in my report: I last read my report last night."

This part of her evidence was, I am afraid, embarrassing. She deferred to the neonatologists and obstetricians as to the likely fetal heart rate over the period of APH and as to the likely fetal heart pattern in labour and she accepted that there would likely have been variable decelerations. She agreed with the comment of Professor Steer at paragraph 19 of the obstetric joint report – see point (iv) paragraph 8 above.

30. In relation to the question whether CTG monitoring should have been started in response to the observation of blood-stained liquor, Ms Crocker-Eakins maintained that if the mother was low risk and everything was satisfactory, she would only start CTG if fresh blood was observed. She said that liquor mixed with a show presents differently from fresh blood: it has a different consistency and looks very different. She said that pinkish liquor is different from fresh blood. She said that midwives look at this on a daily basis and know automatically if what they are seeing is fresh blood. A reasonable midwife would have regard to all the circumstances including the extent of dilatation and the progress being made and would adopt a holistic assessment in deciding whether CTG was needed. She agreed that an observation of blood-stained liquor would be one factor to take into account.

31. In re-examination, Ms Crocker-Eakins confirmed that blood-stained liquor is a common and usual finding which she estimated would appear in the majority of labours. Nor would she be overly concerned by a finding of variable decelerations if seen on a CTG in the second stage of labour. The CTG only becomes pathological after 90 miniutes of variable decelerations.

The Obstetric Evidence

32. I heard evidence from two obstetricians, Mr Ugwumadu and Professor Steer, who are both eminent.

33. **Mr Ugwumadu** who is a Consultant Obstetrician at St George's Hospital, London, affirmed his report of March 2022 and his joint report with Professor Steer of 24 May 2023. His report included the comment which I put to Ms Moody (see paragraph 27 above). At paragraph 35 of his report, Mr Ugwumadu said:

> "Jayden's injury on MRI is attributable to acute profound asphyxia only. Therefore, in my opinion based on the balance of probabilities, it is likely that cord compression occurred in the second stage of labour leading to FHR collapse, probably related to the cord round his neck and body and changes in Janene's birthing positions. It is my further opinion that an FHR bradycardia of sufficient duration and severity to cause Jayden's condition at birth ought to have been detected by a competently conducted IA."

At the time he wrote his report, Mr Ugwumadu had available to him Dr Stoodley's neuroradiology opinion which was to the effect that Jayden suffered APH for about 15-20 minutes, suggesting onset of FHR bradycardia at about 14:55. At that time he did not have the joint neonatology report modifying this time to 15:03. Mr Ugwumadu stated:

> "If CTG monitoring had been in place or the IA conducted competently it would have been possible to deliver the baby with episiotomy within 5 minutes of the onset of bradycardia since his head was already visible by 14.45, advancing with effort, the labour was efficient, and Janene was parous. If the midwife had summoned the doctor instead and prepared for instrumental vaginal delivery, and the doctor arrived within 2 minutes, the doctor would have delivered the baby with episiotomy within 2 – 3 minutes or 'lifted the baby out' with a vacuum device, also within 2 -3 minutes."

Mr Ugwumadu was critical of Midwife Kong's conduct of intermittent auscultation. He said:

> "The recommended procedure for conducting IA is to listen to the FHR for 60 seconds after a contraction to detect late or complicated variable decelerations, which are associated with fetal acidosis. It is highly unlikely that the IA was carried out correctly as recommended. It is inconceivable that the Claimant's FHR was 134bpm at 15:00, 132bpm at 15:05, 134 at 15:07, 127bpm at 15:09, 128bpm at 15:10 (Table 1), and he was delivered the very next minute with heart rate <40bpm for >5 minutes, in the absence of severe pneumonia, meconium aspiration syndrome, or congenital airway abnormality. It is a matter for the court and there was a second midwife in the room

> from 15:07, however, it is not credible that the FHR and MHR were counted for a full minute, and documented every other minute, whilst simultaneously assisting and managing a mother in active second stage of labour."

These criticisms hold good with an agreed onset of bradycardia at 15:03 rather than 14:55.

34. In his report, Mr Ugwumadu was also critical of a perceived failure on the part of Midwife Kong to obtain informed consent from Janene to have intermittent auscultation rather than CTG for monitoring the baby's heart rate, but he did not maintain this criticism and it had formed no part of the allegations in the Particulars of Claim.

35. In his evidence in chief, Mr Ugwumadu was asked to explain the cause of variable decelerations which he and Professor Steer agreed would have been present in the second stage of labour. He explained that there are two groups of variable decelerations: uncomplicated and complicated. The first group start and finish within 60 seconds of a contraction and are not asphyxiating. The second group last longer than 60 seconds and would be heard after a contraction. Mr Ugwumadu explained that, in Jayden's case, the umbilical cord travelled from the placenta into the mother's pelvis, went round the baby's neck three times and then into the baby's umbilicus. For the cord to have got round the baby's neck three times was highly likely to be historic, from a much earlier stage of gestation. The variable decelerations would have arisen as the baby's head passed through the birth canal. There is limited space between the bony part of the pelvis and the baby, creating two points at which the cord was liable to become compressed, namely as the cord goes in and out of the pelvic inlet. Compression of the cord would cause blood to be reduced resulting in an almost instantaneous drop in the fetal heart rate. By 14:45, the baby's head was noted to be at the vertex and it is highly likely that there would have been variable decelerations by that time which, on balance of probability, would have been complicated. Because of the compression points identified, the fact that the cord was round the baby's neck three times and the head was very low it is very likely there would have been significant interference with blood flow through the cord by that time. Mr Ugwumadu said he would have expected such decelerations to be picked up by intermittent auscultation. As the labour progresses, the decelerations would tend to get worse as the challenge to the blood flow is escalating rather than de-escalating. Mr Ugwumadu was unable to give a time for the onset of the variable decelerations. He said that the time taken by the baby to recover would have taken longer and longer until the final collapse represented by the bradycardia and APH. Thus, the bradycardia would not have occurred suddenly from a normal fetal heart rate but there would have been a progression from a normal heart rate to variable decelerations to complicated variable decelerations getting worse until the final collapse of the fetal circulation and the bradycardia. He said he would have expected a midwife to call the obstetrician as an emergency.

36. In cross-examination, Ms Pritchard KC took Mr Ugwumadu through the allegations contained in the Letter of Claim which had been drafted in part on the back of a preliminary report of Mr Ugwumadu and demonstrated that his views had changed in certain regards. On the basis that there had been no allegation in the Letter of Claim that the fetal heart monitoring should have been changed to CTG by reason of the

documented blood loss, Ms Pritchard KC suggested that this was not something that Mr Ugwumadu had thought in his first report. Mr Ugwumadu disagreed saying that he had always held the view that blood loss was documented many times and should have led to CTG. Ms Pritchard suggested that, had that been the case, it would have been in the Letter of Claim.

37. Ms Pritchard KC took Mr Ugwumadu to his answer to question 9 in the agenda for his joint discussion with Professor Steer. Question 8 had asked if there was a distinction between the terms "blood-stained liquor", "fresh bleeding" and "a bloody show" and question 9 asked: "Of what significance, if any, is such distinction in relation to the recorded presentation in this case?" Mr Ugwumadu responded:

> "Blood-stained liquor", "fresh bleeding", and "a bloody show" may look different to different observers depending on the relative amounts of blood, amniotic fluid, and/or mucus plug involved. Given that this was recurrent and reported as different things in late labour for 2 – 3 hours it qualifies for continuous electronic fetal heart monitoring in my opinion."

Ms Pritchard asked Mr Ugwumadu what he meant by the words "it qualifies for" and he said that his assessment was that it made more sense for the midwife to err on the side of caution and assume the worst and therefore move to CTG. He agreed that fresh blood loss looks different and he did comment that it depends on the amount of liquor and he was influenced by the fact that the amount of liquor was minimal. He agreed his opinion was not based on any guidelines saying he considered it to be common-sense. Janene had been monitored for 2-3 hours, blood loss had been noted and in his opinion this should have raised concerns, particularly when it was still being shown after full dilatation which is not what he would expect in a normal delivery. He agreed that it is not uncommon for there to be blood-stained show. He maintained that the fact that his view was not reflected in the guidelines did not make his view unimportant. He said: "I would have expected extra consideration to be given from the number of times blood staining was mentioned and the fact that it continued in the second stage. It seemed a long time to me." He said that if, as Midwife Kong, had said in her evidence, it was "pinkish with streaks of blood" and had been a one-off finding, his view would change, but not when this was over a 2-3 hour period. He said he believed that should have triggered CTG in a case like this. He agreed this is not covered in the local guidelines for his own hospital at St George's.

38. Ms Pritchard KC asked about paragraph 27.2 of the Particulars of Negligence which alleged failing to request medical review from about 12:45 and he agreed this was not in his report, nor had it been in his earlier report. However, he did believe that the recordings of blood-stained liquor should have triggered both CTG and medical review.

39. Ms Pritchard put to Mr Ugwumadu, and he agreed, that the exact timing of the onset of complicated variable decelerations is impossible. There are a number of variable factors including the length of the cord, the degree of protection and the response of the fetus. Ms Pritchard suggested that prior to 15:03 a significant proportion of the fetal heart rate readings on intermittent auscultation could have been normal. Mr Ugwumadu said that whilst this was possible, it was improbable by reference to the likely fetal heart rate pattern before and after 14:45. Whilst the recordings of the fetal

heart rate before 14:45 could have been accurate, competent intermittent auscultation after 14:45 should have revealed a low fetal heart rate which would have been present for more than 50% of the time. Mr Ugwumadu confirmed he was also critical of the readings after 15:03, the agreed time for the onset of the bradycardia.

40. Ms Pritchard KC then asked questions relating to causation. Mr Ugwumadu said that an emergency call by fast bleep would have been appropriate before 15:03 and the bradycardia would have triggered a "crash call". Although the response times may range from 2 to 10 minutes, he would have expected a response at the lower end. With a severe bradycardia, there would be no need to assess the mother and it only takes a few seconds to infiltrate local anaesthetic into the perineum. He would have expected the time from the first call to delivery to be no more than 5 minutes. In answer to questions from the court, Mr Ugwumadu said that, whilst waiting for the obstetrician to arrive, he would have expected the midwife to put the woman in the lithotomy position and perform an episiotomy. In many cases, for the midwife to do this will in fact result in the baby being delivered before the obstetrician even arrives.

41. **Professor Steer** was called on behalf of the defendant and he affirmed his report of June 2022 and his contribution to the joint report with Mr Ugwumadu dated 24 May 2023. Professor Steer is Emeritus Professor of Obstetrics at Imperial College and a member of the Academic Department of Obstetrics and Gynaecology at Chelsea and Westminster Hospital. In his report, Professor Steer stated that he could not see any evidence of the intermittent auscultation carried out by Midwife Kong having been below an acceptable standard. He said:

> "The assertion that there was a fetal bradycardia present is purely conjectural and has no obvious evidential base"

In relation to the allegations surrounding the blood staining, he stated that he concluded that the blood staining of the amniotic fluid was minor, did not represent "fresh bleeding" and was regarded by the birth attendants (appropriately) as being associated with rapid cervical dilatation and the passage of a show and therefore not of any sinister significance and that their decision that there was no need for any further evaluation or acute intervention was supported by the literature. Asked to comment on the allegation in the Particulars of Claim that there been a failure to identify that the claimant was suffering from a bradycardia, he responded:

> "The allegation of a bradycardia is not substantiated by the clinical records made at the time."

In relation to the allegation in the Particulars of Causation that CTG monitoring would have identified any significant fetal heart abnormality, he stated:

> "If CTG monitoring had been in place, given Jayden's condition of birth and the fact that the umbilical cord was wrapped three times around his neck, I would have expected to see variable decelerations in the fetal heart rate produced by umbilical cord compression prior to the birth. They would likely have appeared as the baby's head descended through the birth canal, some time before the actual birth itself. The timing of the appearance of the decelerations would depend on the

> rapidity of head descent; one would not expect to see them until the umbilical cord was compressed or tightened as the head descended. This could have been as little as 10 min before the birth, or possibly up to an hour prior to the birth. As there was no indication for CTG monitoring, and therefore it was not performed, it is not possible to know when the variable decelerations would have appeared. Interference with blood flow between the baby on the placenta is unlikely to have occurred until the umbilical cord was compressed or tightened"

42. In cross-examination, Mr Allen KC questioned Professor Steer about his comment that the assertion that there was a fetal bradycardia was "purely conjectural and has no obvious evidential basis". Professor Steer conceded that he had not been clear enough in this comment and he had meant that there was no specific evidence of bradycardia in this case. He said: "I knew an issue was whether Jayden was bradycardic before delivery. I was focusing on what was contained in the notes. I did have access to the report of Dr Fox. I agree he highlighted the inconsistency between the notes and Jayden's likely bradycardia." He stated that he was giving the midwives the benefit of the doubt in his report. In answer to questions from the court, Professor Steer conceded that, on the basis of the neonatology joint statement, the readings in the records from 15:05 were likely to be incorrect.

43. Mr Allen KC also questioned Professor Steer about his views on causation and he agreed that in a situation such as this where there is full dilatation and the baby's head is low, you would hope to get the baby out within 10 minutes.

44. Mr Allen KC asked Professor Steer about the bloodstained liquor and whether that could be an indicator of a significant problem and he agreed stating that it needed to be assessed but is up to the midwife's clinical judgment.

Discussion and Findings

Breach of Duty

45. As Mr Allen KC submitted, on the evidence the following are agreed and/or incontrovertible:

    i) The APH started at 15:03;

    ii) From 15:03 there was a profound bradycardia;

    iii) The recordings of the fetal heart rate by Midwife Kong cannot be accurate: this encompasses the purported readings at 15:05, 15:07, 15:09 and 15:10;

    iv) There is no explanation as to how those readings could have been recorded if Midwife Kong was carrying out competent intermittent auscultation;

    v) Midwife Kong therefore failed to identify the bradycardia over a period of 8 minutes.

Mr Allen KC postulated two possible explanations: first, that there was a fundamental failure in Midwife Kong's technique for carrying out intermittent auscultation, despite this being basic midwifery practice and despite Midwife Kong being a very experienced midwife; secondly she didn't in fact carry out the intermittent auscultation that she claims to have carried out. He submitted that the difficulty with the first explanation arises from the evidence of Midwife Cook who stated that if she had detected a low heart rate when she was in the room, she would have raised it with Midwife Kong and would have documented it. He submitted that the absence of any documentation of such concerns leads inevitably to the conclusion that the intermittent auscultation wasn't carried out at all.

46. From my perspective, it is sufficient for me to find that, on the basis of the agreed evidence of the neonatologists that there would have been a severe bradycardia from 15:03, the readings at and from 15:05 were erroneous and represent a breach of duty on the part of the defendant. Whilst the finger of blame points principally at Midwife Kong, it is not possible wholly to exonerate Sr Cook: either, when she was in the room, no intermittent auscultation was being done at all or, if it was being done, she would have heard a very low heart rate. It is therefore impossible to accept her evidence where she stated:

> "I see that the records do not contain any note to indicate that I raised concerns about the fetal heart, which suggests that when I heard the same via the Sonicaid it was not concerning."

It would, or should, surely have been just as concerning for Sr Cook not to have heard any heart rate at all because no intermittent auscultation was being carried out as to have heard a bradycardia.

47. When the members of Jayden's family gave evidence, namely his mother and father and paternal grandmother, they suggested that no intermittent auscultation was carried out at any stage during the labour, Mr Astley and his mother both saying that they would have remembered hearing the baby's heart-beat sounding in the room. However, I find myself unable to accept this evidence as it would mean that the records of the FHR throughout the labour as recorded in the labour notes and on the partogram, are a fabrication throughout. They also asserted that Midwife Kong was absent for extended periods during the labour, but I accept Ms Pritchard's submissions that, had that been the case, they would have challenged her about her frequent absences. In my judgment, at least until 13:45, it is probable that measurements of the fetal heart rate were made using the Sonicaid as recorded and that Midwife Kong must accordingly have been in the Delivery Room in order to have made those measurements. I consider the recollections of the family to be faulty and this is understandable when the events took place 11 years ago. I do accept their evidence, though, as to the lack of intermittent auscultation in the period immediately leading up to Jayden's delivery. Midwife Kong claims to have carried out intermittent auscultation after the baby's head was delivered, which I find highly unlikely: by then, delivery was inevitable and it is difficult to understand what intermittent auscultation at that stage could have told her or could have hoped to achieve. If there was no intermittent auscultation then, it is a small step to find there was none earlier. I find that, once Midwife Kong thought that she was moving towards delivery, which is when she thought that delivery was "imminent" and called Sr Cook into the room at

15:05, there was no further intermittent auscultation, and the entries in the notes and on the partogram for this period were fabricated.

48. In my judgment, the fact that the recordings of the fetal heart rate were inaccurate and, indeed, fabricated, from 15:03 has a knock-on consequence in relation to the recordings of the fetal heart rate prior to 15:03, certainly from 14:45 and probably from 13:45. On the basis of the obstetric evidence, there would have been variable decelerations in the second stage of labour, that is from 13:45. From at least 14:45, those variable decelerations would have been complicated, as Mr Ugwumadu said, with which Professor Steer did not disagree. Furthermore, I accept Mr Ugwumadu's evidence that the complicated variable decelerations could and should have been detected upon competent intermittent auscultation. In general, I found the evidence of Mr Ugwumadu to be impressive. There would have been such decelerations following the majority of contractions from at least 14:45 and I find there was a breach of duty on the part of Midwife Kong to have failed to detect them on intermittent auscultation from that time. This should have led to the instigation of CTG monitoring and an emergency call being made for the attendance of an obstetrician. Professor Steer gave a window for variable decelerations of between ten minutes and one hour before birth and on this basis I find that conversion to CTG monitoring should in fact have taken place earlier than 14:50. By 14:45, the baby's head was visible and the baby had therefore descended through the birth canal and was very low in the pelvis: although Mr Ugwumadu was unable to pinpoint the start of the complicated variable decelerations, I find they would have been present before 14:45 and should have been detected earlier than 14:45 giving even more time for CTG monitoring and obstetric review.

49. It is the claimant's case that CTG monitoring should have started even earlier, and there should have been earlier obstetric review, as a result of the observation of blood loss. In this regard, I prefer the submissions of Ms Pritchard KC. It was agreed that an experienced midwife would be expected to be able to distinguish between "normal" blood staining which, the midwives agreed, is associated with a large proportion of normal labours, and fresh blood loss or bleeding such as might be found as a result of a placental abruption. There was no placental abruption or other potential cause for bleeding in this case and therefore the clinical judgment of Midwife Kong was borne out, as Professor Steer observed. Importantly, there is nothing in the NICE guideline or in any local hospital guidelines to indicate that normal blood staining should lead to CTG monitoring if it is observed for a certain period of time. Mr Ugwumadu regarded it as a matter of common sense but, in my judgment, it cannot be regarded as a breach of duty to fail to convert to CTG monitoring in the absence of a clear guideline or practice to that effect and where this is acknowledged to be a matter for the judgment of the midwife. Had there been conversion to CTG monitoring, the uncomplicated variable decelerations would have been observed from 13:45, but this would have been serendipitous as the indication for such monitoring would have been for other reasons.

Causation

50. As I have already observed, it is agreed that all permanent damage to Jayden's brain would have been avoided if he could have been delivered 3 minutes earlier. I have no doubt that, but for the breaches of duty which I have identified, that would have happened. I accept Mr Ugwumadu's evidence that the time interval from an

obstetrician being called to delivery being effected would probably have been no more than 5 minutes. Having detected complicated variable decelerations and having both converted to CTG monitoring and called for obstetric review, an experienced midwife such as Midwife Kong would have started to prepare for delivery, including instrumental delivery. This would have included the putting of the mother in lithotomy and the cutting of an episiotomy. As Mr Ugwumadu observed, this might itself have achieved earlier delivery, even before the obstetrician arrived. If the obstetrician had not arrived by 15:03, a crash call would have been made at that time, the obstetrician would have arrived by 15:05 and given that the baby's head was visible, the delivery would have been a "lift-out", with delivery by 15:08. The more likely scenario is that the obstetrician would already have been present and the baby would have been delivered before there was any bradycardia at 15:03; failing this, the obstetrician would have been present at the time the bradycardia started and would have reacted immediately to deliver the baby within 2 or 4 minutes. On any of these bases, Jayden would have been resuscitated and the circulation to his brain would have been restored before any permanent damage or neurological injury could be sustained.

51. Accordingly, there shall be Judgment for the Claimant