

22 February 2023
Baby M
+ Nurse witnesses re Baby L

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Wednesday, 22 February 2023
(10.30 am)

(In the presence of the jury)

MR ASTBURY: My Lord, I recall, please, Belinda Williamson.

MS BELINDA WILLIAMSON (recalled)

Examination-in-chief by MR ASTBURY

MR ASTBURY: Could you state your name for the record, please?

WILLIAMSON: Belinda Williamson.

ASTBURY: Thank you. Nurse Williamson, we have heard from you before. In fact we heard from you last week about a baby named [Baby L] and your involvement with [Baby L] on the day of 9 April 2016. You touched on your involvement with his twin

brother, [Baby M]. You have been invited back told to deal specifically with [Baby M] so I'm going to ask you some questions about that, please. And in so doing I might cover some of the ground we covered last time, but only as a refresher and, I hope, to assist you as well in your recollection.

You were working a day shift on 9 April 2016; is that right?

WILLIAMSON: Yes.

ASTBURY: I'm going to ask Mr Murphy, please, to go to tile 80 to begin with. We can see through the swipe data you arrived at the neonatal unit at 7.28 am that morning; is that consistent with your routine?

WILLIAMSON: Probably, yes.

ASTBURY: Good. If we can go, more importantly, please, to tile 83 and if we can remind ourselves of who was on duty that particular day. We've been through the doctors. For your benefit we can see that the shift leader that particular day was [Nurse B].

WILLIAMSON: Yes.

ASTBURY: [Baby M]'s designated nurse was Mary Griffith. Also on duty, as far as registered nurses, Lucy Letby, Belinda Simcock, yourself -- apologies, your name appears in your former name -- and Ashleigh Hudson. And then we have, as a nursery nurse, Angela McShane.

Had you had -- sorry, yes, let's look at the allocations just to remind ourselves again. If we can look to the right in nursery 1, we can see both [Baby M] and [Baby L], as you confirmed last time, were under the care of Mary Griffith. There were two other babies in room 1 under the care of Lucy Letby. And if we go clockwise around the form we can see in nursery 2, your colleague [Nurse B], with --

MR JUSTICE GOSS: We've looked at this several times now.

We can just see where -- you were in nursery 3 and responsible for three babies.

WILLIAMSON: Okay.

MR JUSTICE GOSS: Thank you.

MR ASTBURY: Thank you.

Now, on the last occasion you showed us a plan, which I'm going to ask Mr Murphy to remind us of, please, at J18122. If we can zoom in, thank you.

You pointed out to us on the last occasion that there should be a door where the letter E --

WILLIAMSON: Yes.

ASTBURY: -- appears on your plan. But can I just confirm with you, as you told us last time, that baby A in the right-hand corner, was that one of the babies under the care of Lucy Letby?

WILLIAMSON: Yes.

ASTBURY: B and C, I think, are [Baby M] and [Baby L] respectively?

WILLIAMSON: Yes.

ASTBURY: Did you have any contact with [Baby M] during the course of the day shift up until around 4 o'clock?

WILLIAMSON: Not that I remember.

ASTBURY: Did you have any dealings with the baby appearing here as A on the plan during the course of that day shift?

WILLIAMSON: Yes.

ASTBURY: Briefly, please, what was the contact with baby A as they appear on your plan?

WILLIAMSON: I was trying to re-site a cannula.

ASTBURY: Had anyone drawn your attention to that issue?

WILLIAMSON: Yes. Lucy had asked me to come and have a look at the baby and review it and then the cannula had gone, so I was trying to get a new cannula in.

ASTBURY: Right. Was it just a cannula that was causing concern?

WILLIAMSON: No, it was just the general -- that and the appearance of the baby.

ASTBURY: And what was the appearance of the baby?

WILLIAMSON: From what I can remember, pale, mottled, just not quite right, oedematous.

ASTBURY: Was your attention drawn to [Baby M] at that stage or at any other stage before 4 o'clock?

WILLIAMSON: No.

ASTBURY: You told us last time that about 4 o'clock there was an event involving [Baby M].

WILLIAMSON: Yes.

ASTBURY: Before we leave the plan, could you tell us what additional information appears on there in relation to that incident?

WILLIAMSON: I was just stood at E, talking to Mary and Lucy.

ASTBURY: Where you've told us there was a doorway?

WILLIAMSON: Yes.

ASTBURY: It's missed off the plan.

WILLIAMSON: Yes.

ASTBURY: Where were Mary and Lucy, just remind us?

WILLIAMSON: Just at the medication bench, so just inside the door on E.

ASTBURY: Standing together?

WILLIAMSON: Yes.

ASTBURY: And just so we can distinguish it in comparison, perhaps, to other accounts, where would the nursing desk be in relation to that?

WILLIAMSON: So at the doorway the nursing desk, as you go in, is to the right.

ASTBURY: If we look at D, is it on the other side of the wall from where you've drawn that D?

WILLIAMSON: No, it's...

ASTBURY: There's a mouse there if that assists.

WILLIAMSON: The nursing bench is here (indicating).

ASTBURY: Sorry, I was asking about the desk.

WILLIAMSON: The desk? It was here (indicating). They were here at the nursing bench doing medications, fluids. I was stood in the doorway and they were here (indicating).

ASTBURY: Thank you. What did you first notice at 4 o'clock of concern reading [Baby M]?

WILLIAMSON: There was an alarm alarming on the baby.

ASTBURY: What was that alarm in relation to? Could you tell at that point?

WILLIAMSON: I think, from memory, it was a bradycardic alarm so the baby had become bradycardic.

ASTBURY: Remind us what bradycardia is.

WILLIAMSON: Low heart rate.

ASTBURY: Right. What, if anything, did you do when the alarm went off?

WILLIAMSON: Nothing, because Lucy had responded to it, she walked across the room to answer it.

ASTBURY: We've heard, and I think it was accepted, that Mary Griffith at that point was in the process of preparing a dextrose bag --

WILLIAMSON: Yes.

ASTBURY: -- and as a consequence was in sterile clothing or protective sterile clothing?

WILLIAMSON: Yes.

ASTBURY: What did she do?

WILLIAMSON: She -- because the alarm wasn't correcting, she walked over behind and helped Lucy.

ASTBURY: Did you get involved with [Baby M] at all?

WILLIAMSON: No.

ASTBURY: What did you do, please?

WILLIAMSON: From reading my statement, it said that as they tried to get the Neopuff the mask had dislodged and landed somewhere, so I went and grabbed a spare mask as per Mary's request.

ASTBURY: Let's pause there. Tell us then first before I deal with what you did, what did Mary and Lucy do when they got to [Baby M]?

WILLIAMSON: I couldn't see exactly what they did, but I'd assume they'd do what we normally do, which is assess the baby, try and make them respond, so you give them a tickle, touch them, trying to get their heart rate back up.

ASTBURY: You mentioned a mask. Tell us about that, please.

WILLIAMSON: So the mask attaches to the Neopuff, so it's a face mask. Quite often we loop them in through the back of the incubator so they're -- sometimes if -- they just fall off, as if you've moved them. They can dislodge.

ASTBURY: I'm imagining, correct me if I'm wrong, there's a tube --

WILLIAMSON: Yes.

ASTBURY: -- that comes from the source at the wall?

WILLIAMSON: Yes.

ASTBURY: And the mask is a consumable, I think we have heard is the term?

WILLIAMSON: Yes.

ASTBURY: So that's attached to the end of the tube to then be applied to the baby?

WILLIAMSON: Yes.

ASTBURY: So when you talk about the mask falling off, is that the consumable --

WILLIAMSON: That's the consumable that fits on the end, yes.

ASTBURY: So that's come loose for some reason?

WILLIAMSON: Yes.

ASTBURY: Did you see how that happened?

WILLIAMSON: No.

ASTBURY: So you assisted by, what --

WILLIAMSON: Mary had apparently asked me to just grab another one in the correct size.

ASTBURY: All right. And are you able to remember how long that took?

WILLIAMSON: It doesn't take long because they're usually in the room, there's spares in the room on the resus trolley if you need them.

ASTBURY: So a matter of walking to wherever they were in the room?

WILLIAMSON: And just picking it up and handing it over.

ASTBURY: You assisted with the mask? Did you notice what they did once you had handed the new consumable over to them?

WILLIAMSON: No.

ASTBURY: What did you do then?

WILLIAMSON: I went back outside. I think --I don't know, but I may have called the twos if they had asked for it, which is the emergency number. But I have gone back outside and I would have shouted for [Nurse B] to come back in if she wasn't in the room.

ASTBURY: Was [Baby M], when you were in the room, responding in the way that was hoped?

WILLIAMSON: I don't remember.

ASTBURY: Presumably the situation was persisting if you were calling others and you may have called the twos.

WILLIAMSON: Yes.

ASTBURY: Anything you can tell us about how things progressed from there?

WILLIAMSON: No.

ASTBURY: Do you recall assisting with [Baby L] at that stage?

WILLIAMSON: Yes.

ASTBURY: What did you do?

WILLIAMSON: I took over making the fluids up.

ASTBURY: Would you have remained at the workstation that you've pointed out at point D?

WILLIAMSON: No. I came back out because I need to listen out for the other nurseries.

ASTBURY: Because obviously other babies (overspeaking) --

WILLIAMSON: Still yeah (overspeaking) --

ASTBURY: -- require attention while others are drawn to --

WILLIAMSON: The emergency.

ASTBURY: -- the emergency in room 1?

WILLIAMSON: Yes.

ASTBURY: So you went elsewhere. Did you pick up where Mary had left off or did you have to start again?

WILLIAMSON: Depending where she was up to I probably would have started again because I wouldn't know where she was up to. So if she has drawn fluids up into a syringe I don't know she's drawn up, when or how much, so --

ASTBURY: It all depends where she was up to?

WILLIAMSON: Yes. So she may have just gotten the sterile stock out.

She may not have yet opened it or started. So if she hasn't started --

ASTBURY: You can't remember?

WILLIAMSON: No.

ASTBURY: Did Dr Jayaram attend the emergency?

WILLIAMSON: According to my statement, yes.

ASTBURY: Do you have any recollection of that?

WILLIAMSON: No.

ASTBURY: Did you take any part in the resuscitation that followed?

WILLIAMSON: No.

ASTBURY: Did you ask anybody else, can you recall, anyone else on duty to complete any other tasks?

WILLIAMSON: I asked Ashleigh to go up and get the parents so I asked her to run up the back stairs and get the parents.

ASTBURY: The parents were still?

WILLIAMSON: Up on ward 32.

ASTBURY: Thank you. Ward 32 being?

WILLIAMSON: Post-natal ward.

ASTBURY: Thank you. Because we've heard that [Baby M]'s mum was still an inpatient --

WILLIAMSON: Yes.

ASTBURY: -- at that point.

Did you at any point ascertain how well the resuscitation was progressing?

WILLIAMSON: I know from my statement that I've said I heard, at one point, Ravi talking to the parents and they were talking about discontinuing if they didn't get a response.

ASTBURY: Did it strike you that it had gone on for some time at that point?

WILLIAMSON: Yes.

ASTBURY: Anything else, Nurse Williamson, you can recall that may help us with regard to the collapse of [Baby M]?

WILLIAMSON: No.

MR ASTBURY: Thank you. If you could wait there, please.

Cross-examination by MR MYERS

MR MYERS: I'm going to ask if we can keep the map on the screens, Mr Murphy. Thank you.

Just some questions first about the map, please.

The positions D and E, position E is where you recall you were at the time [Baby M] collapsed; is that correct?

WILLIAMSON: Yes.

MYERS: Do you recall in fact position D is where roughly you thought Lucy Letby and Mary Griffith were standing?

WILLIAMSON: Yes, because that's where the bench is, it's just inside those doors.

MYERS: That's why you marked it D because that's where they were?

WILLIAMSON: Yes.

MYERS: You have been asked about the positions of [Baby M] and [Baby L]. [Baby M] you put down at B and [Baby L] as C, didn't you?

WILLIAMSON: I think so.

MYERS: And you've said that, that's not disagreeing with what you've said.

Just with regard to the position of [Baby M], and I know you've been asked questions about this, you've described to us that when the Neopuff was used at the time of the collapse it fell on the floor.

WILLIAMSON: Yes.

MYERS: Just a little more detail on that: there's a housing, a wall-mounted unit that the Neopuff mask will fix into, isn't there?

WILLIAMSON: The actual machine, yes, so that didn't collapse on the floor, that stayed wall-mounted.

MYERS: But what happens is the baby will have a mask that's used for that baby?

WILLIAMSON: Yes.

MYERS: And so when a baby is put in a position in the nursery, if there's a mask that's for that baby, it will be attached to the wall-mounted unit nearest to their position; is that right?

WILLIAMSON: Yes.

MYERS: I'm going to suggest the reason the mask came detached was that [Baby M] was rather more into the corner than you've drawn it, so it was rather awkward to try and pull it round. Do you recall that being the case or not?

WILLIAMSON: No, I just thought it dislodged as they tried to get it through the incubator doors, which frequently happens because it's a small space and you are trying to get a piece of equipment through the top end of the incubator.

MYERS: So it dislodging is not something that's unusual?

WILLIAMSON: No.

MYERS: But because it had fallen to the floor, it was necessary to get another one --

WILLIAMSON: Yes.

MYERS: -- so it was clean?

WILLIAMSON: Yes.

MYERS: And that's why you did that?

WILLIAMSON: Yes.

MYERS: And then events proceeded from there?

WILLIAMSON: Yes.

MYERS: Thank you very much for that.

With regard to the events in the nursery that day you recall at one point assisting Nurse Letby with a cannula for baby A, don't you?

WILLIAMSON: Yes.

MYERS: Do you recall whether there were parents in or around the nursery at that point or do you have no recollection?

WILLIAMSON: No recollection.

MYERS: Right. When [Baby M] collapsed, you were standing close to Mary Griffith and Lucy Letby, weren't you?

WILLIAMSON: Yes.

MYERS: And you've described to us that you took over the preparation of the dextrose infusion for [Baby L], didn't you?

WILLIAMSON: Yes.

MYERS: When you were asked about that last week -- sorry, on 16 February, you told us that you may have thrown out the bag that they had been preparing.

WILLIAMSON: Yes.

MYERS: And you've repeated that today that you may have done that?

WILLIAMSON: Yes.

MYERS: Just so the jury can understand, there's a reason why you may have done that, isn't there?

WILLIAMSON: Yes. Because I don't know whether they've taken fluid out to put fluid in or where they're up to in the procedure, so rather than risk confusing the matter, you just start again, you throw -- and start from scratch.

MYERS: It's your name and signature that appears on the infusion record, doesn't it --

WILLIAMSON: Yes.

MYERS: -- when it's actually mounted, so you need to make sure it's right, don't you?

WILLIAMSON: Yes.

MYERS: And so for that reason you may well have started afresh when the task was handed across to you?

WILLIAMSON: Yes.

MR MYERS: Thank you very much.

MR ASTBURY: I have no more questions. Does my Lord have any questions?

Questions from THE JUDGE

MR JUSTICE GOSS: Can you recall making up that infusion bag?

WILLIAMSON: I know I was stood outside in the corridor making it up at a trolley, so I did move myself. I remember making it up --

MR JUSTICE GOSS: Can you remember -- carry on.

WILLIAMSON: -- but not where I started from.

MR JUSTICE GOSS: Did you do that on your own?

WILLIAMSON: No, Ashleigh Hudson would have assisted me.

MR JUSTICE GOSS: Because we have heard it's a two-person job.

WILLIAMSON: It would either have been before or after. I have a feeling it was after I had sent her up the stairs to get the parents. So I may have had prepared the trolley but wouldn't have started until she'd got back down.

MR JUSTICE GOSS: Thank you. That's all.

I haven't checked the list.

MR ASTBURY: Possibility.

MR JUSTICE GOSS: You may be required again. So as I have said to you more than once before: please don't talk to anyone about anything to do with this case. Thank you very much for coming today.

(The witness withdrew)

Witness statement of MS ASHLEIGH HUDSON (read)

MR ASTBURY: We're going to read some evidence next, please.

MR JUSTICE GOSS: Yes, thank you.

MR ASTBURY: In my Lord's bundle it's at page 5. The numbers are in the bottom right on this occasion. It's a statement from Ashleigh Hudson, dated 14 February 2018. She says this:

"I have been asked for my recollections of 9 April 2016 in relation to the collapse of [Baby M] which took place in the neonatal unit at the Countess of Chester Hospital. To assist with my recollections, I viewed the nurses' notes for [Baby M] on 9 April 2016 though I do not appear on the notes.

"I worked a 7.30 am to 8 pm shift that day in the neonatal unit. I had been on duty the previous day so I was aware that [Baby M] and his brother were admitted to the unit but I'd had no involvement in their care. I was [her recollection] designated two to three babies to care for in nurseries 2 or 3."

My Lord, we've seen the representation of that:

"During my shift on 9 April 2016 I did not have any interaction with [Baby M]. At approximately 4 pm, I was in either nursery 2 or 3 when I heard a shout for help from nursery 1. I recognised

the shout to be from Lucy Letby and she shouted something like, 'Can I have some help please?' It was clear that the need for help was urgent, but there was no panic in her voice, which is normal, and something we all try to do to avoid alarming parents and others who may be on the unit. I immediately ran to nursery 1 and when I got to the door, I could hear the alarms going off [and she put in brackets] (heart rate monitor and oxygen saturation monitor) from inside. From the door, I could see that Lucy and Mary were at [Baby M]'s incubator and were commencing resuscitation. I cannot remember who was doing what task but they were both there. I think that possibly Belinda was also present in the room.

"Resuscitation is a task that requires two people: one to carry out the chest compressions and one to operate the Neopuff, which gets air into the baby.

"Lucy told me to crash bleep Ravi, referring to consultant Dr Ravi Jayaram. I knew that [Baby M] was suffering a cardiac arrest and not a respiratory arrest. I can't remember how I knew, whether someone told me or I knew because they were carrying out CPR. I went straight to the nurses' station and dialled 2222, which is the switchboard, and when they answered I said something like, 'Put out a crash call to paediatric consultant, cardiac arrest on neonatal'. The operator then repeated it back to me for accuracy and I hung up.

"Ravi immediately rang back asking for information. I told him [Baby M] had collapsed but I didn't know why. He asked me to get more information while he made his way to the unit, so I ran back to nursery 1 and asked them what had happened. Lucy replied something like, 'We don't know, he's just suddenly collapsed, no warning'.

"I returned to the phone and told Ravi that we didn't know what had happened and that it had been a sudden event. I told him they had started CPR and were drawing up adrenaline. Ravi replied that he was on his way. I then returned to nursery 1 and told them that Ravi was on his way.

"At that point someone, I can't remember who, asked me to run upstairs and get the parents. I went upstairs and asked [Baby M]'s dad to come with me. I took him downstairs via the staff back stairwell. A midwife brought mum down in a wheelchair, arriving a couple of minutes later.

"The resuscitation of [Baby M] was ongoing and I offered my help, but I was told I wasn't needed. Clearly, despite the emergency, we still have responsibility for other babies in the unit, so I stayed outside preparing drugs for another baby with Belinda.

"Whilst the resuscitation continued in nursery 1, I could see that Mary and Lucy were present. There was also a number of doctors present, one of which was Ravi, but I can't remember who the others were. The parents were also in the nursery, but I didn't see who was speaking to who."

That concludes her statement, my Lord.

MR JUSTICE GOSS: Yes.

Witness statement of DR CASSANDRA BARRETT (read)

MR ASTBURY: If we could go forward to page 2, please, in the bundle. I'll read the statement of Cassandra Barrett.

Her statement is dated 3 February 2020. She says as follows:

"I have been asked for my recollections of a baby by the name of [Baby M] who was born at the Countess of Chester Hospital on 8 April 2016. In order to assist my recollections, I have accessed [Baby M]'s medical records, though it is apparent I do not feature in the records so anything I say is purely from memory.

"I attended the birth of [Baby M] on the 8th. I remember this was a twin birth and that it was uneventful with no issues identified that I remember.

"On 9 April 2016, I was the neonatal senior house officer on call, working a short day, which is an 8.30 am to 4.40 pm shift. Primarily, I was working upstairs on the post-natal ward doing the baby checks. I was holding the neonatal crash bleep, which meant that I would attend any delivery, but as I had been working upstairs I hadn't been downstairs on the neonatal unit prior to the events described below.

"I do remember that at around 4 pm I was sat at the computer at the nurses' station on the neonatal unit. The station is next to nursery 1 with just a wall separating the station from nursery 1. As I was sat there I heard a shout for help come from nursery 1. The shout came with a sense of urgency and I know it was from a member of staff, but I don't know which member of staff it actually was and I don't remember the actual words used. I made my way into the nursery where I saw a number of staff members already present and beginning CPR on [Baby M], who was in an incubator in the top right-hand corner of the nursery as you enter it.

"I do not know how many other babies were in the nursery, but I do remember that [Baby M]'s brother was in an incubator next to him. The only member of staff I can say who was present was Dr

Tony Ukoh, who was the registrar. Dr Ukoh must have been on the unit when the call went out, possibly on a ward round, as he got to nursery 1 slightly before or at the same time as I did.

"There were nurses present but I cannot remember who they were. I'm unable to name any of them, partly through a lack of memory but also due to the fact I may not have known their names in the first place. I have no memory of which nurses were on duty that day.

"I could see that [Baby M] was pale and floppy with no respiratory effort and a low heart rate. I would describe him as looking very, very unwell. He was being Neopuffed to inflate the lungs and, because there was very little heart rate, they began CPR. During this procedure Dr Ukoh began to intubate [Baby M] and at some point I took over the task of giving chest compressions whilst the nurses drew up the medication.

"Eventually, six doses of adrenaline were given and two doses of bicarbonate. The consultant was called quite early on so at some point Dr Ravi Jayaram arrived. I can't remember the details of [Baby M]'s condition and how serious it actually was, but I do recall that the collapse was so serious that there were concerns (possibly from me, but possibly from others as well, I can't remember) that [Baby M] might not survive it.

"Eventually, [Baby M] stabilised and then recovered quickly. His heart rate increased and colour returned to him. I did not stay for long after this as my shift had ended some time earlier. I do not think I had any further involvement with [Baby M] after this event until I carried out his newborn baby checks before he was discharged home."

That concludes that statement. May I recall next, please, Dr Ravi Jayaram.

DR RAVI JAYARAM (recalled)

Examination-in-chief by MR ASTBURY

MR ASTBURY: Could you state your name, please, for the record?

JAYARAM: Ravi Jayaram.

ASTBURY: Before we begin, doctor, on a couple of occasions I have been guilty of not slowing you down so please bear in mind (overspeaking) --

JAYARAM: I will do my best to try and slow down.

ASTBURY: You've been invited along today to deal with events on 9 April 2016, which was a Saturday. And we understand that you were the on-call consultant for the NNU at Chester.

JAYARAM: That's correct.

ASTBURY: The incident involved a baby by the name of [Baby M].

Had you had any contact with [Baby M] before the events around 4 o'clock that --

JAYARAM: Not to that point, no.

ASTBURY: You've told us before about handovers when you're the on-call consultant. Do you have any recollection of the handover that afternoon?

JAYARAM: No, it was a Saturday, is that correct?

ASTBURY: Yes.

JAYARAM: On the Saturday I would have been the consultant on call so we wouldn't have had a formal handover at 4 because it's minimum staffing, but I'd have heard about him in the morning, but I don't recall having any specific contact.

ASTBURY: So it's distinct from a weekday where there's a consultant --

JAYARAM: Yes.

ASTBURY: -- through the day and then you have --

JAYARAM: And then someone takes over at 4 o'clock.

ASTBURY: So you had been on throughout the day?

JAYARAM: Yes, I had.

ASTBURY: Had anything been brought to your attention regarding [Baby M] through the day?

JAYARAM: No, not at all.

ASTBURY: Do you recall receiving a crash call that afternoon?

JAYARAM: According to the notes, yes.

ASTBURY: You have seen our presentations before.

JAYARAM: Yes.

ASTBURY: I'm going to ask you to have a look, please, at tile 151 just to keep our chronology, which suggests that you were bleeped at 16.04 that afternoon. Is that consistent with your recollection?

JAYARAM: It is, yes.

ASTBURY: Having received that bleep, do you recall what you were told at that stage before you attended the NNU?

JAYARAM: I don't remember what specific message, verbatim, I was told, but I was told that [Baby M] had suffered a cardiorespiratory arrest and resuscitation had been commenced and would I attend.

ASTBURY: Right. That sort of information, does that affect how quickly you get to the scene?

JAYARAM: Yes, you get there ASAP. If it was a Saturday, I have to admit I don't recall whether I was on site or at home or whether I was actually in the hospital elsewhere. So when we're on call on weekends, we'd go in in the morning, do the ward rounds, and then be available for calls at short or long notice depending on the urgency.

ASTBURY: Okay. When you did arrive, do you recall what you found?

JAYARAM: Yes. So when I arrived, [Baby M] was receiving cardiopulmonary resuscitation. I recall that Dr Ukoh, who was one of our locum registrars, was leading things and Nurse Letby was there and other people, although I don't recall who. Dr Ukoh handed over to me what had happened to that point. [Baby M] was receiving cardiopulmonary resuscitation, Dr Ukoh had intubated.

ASTBURY: I'm going to take you to your note in a moment. Just before we do that, do you recall anyone else being present when you arrived?

JAYARAM: There will have been other people. I don't recall who was there.

ASTBURY: Did [Baby M]'s parents arrive at any point?

JAYARAM: [Baby M]'s parents were present. I don't know if they were there at the time I arrived, but I remember them being there and I also remember [Baby M]'s aunt being there as well because I remember having a conversation and she told me that she was a pharmacist. It's one of those things I just remembered.

ASTBURY: Okay, it sticks in the memory. All right.

I cut across you. You had started to tell us what, I think, Dr Ukoh then did. If you have a clear recollection, more than happy, but if you'd rather go through your notes --

JAYARAM: I would rather do it from the notes for being more accurate.

ASTBURY: I wonder in that case could we go, please, to tile 210, Mr Murphy.

It's dated 8 April. But I think everybody agrees, having seen the note before and after, that's just an error on your part in making the note.

JAYARAM: I assume it was.

ASTBURY: But we all agree this was 9 April. Is that written at 17 --

JAYARAM: Written at 17.40.

ASTBURY: All right. We've heard from other doctors, and it may be your practice, that when there's an incident like this, the priority is treating the patient and the notes (overspeaking) --

JAYARAM: Absolutely. The notes are -- it's important to do the notes as soon as is possible. But other things in terms of clinical care, communication with parents and staff, takes priority.

ASTBURY: So if you wouldn't mind, could you take us through your note and what you recall as a consequence?

JAYARAM: So I received the call at 16.04 and arrived at 16.15.

[Baby M] was a twin born at 33 weeks. He'd been stable throughout the day. It was handed over that slight abdominal decision tension and some increased aspirates had been noted but he had been stable. Then he suddenly became apnoeic and bradycardic at 16.02. CPR was commenced. Dr Ukoh intubated him at 10 minutes. And by the time I arrived, he'd already had three doses of adrenaline given and --

ASTBURY: Pause there, please. The physical resuscitation that he was receiving, the CPR, what does that tell you?

JAYARAM: That tells me that number 1, [Baby M] was not breathing for himself. And number 2, that his cardiac output was not

sufficient to pump blood around the body to supply the organs of his body. So in this situation, obviously if there is no heartbeat, it's fairly obvious that the heart isn't pumping, but if the heart rate is low, effectively it has the same effect. So the purpose of CPR in this situation is to oxygenate and ventilate the lungs, to get oxygen in and carbon dioxide out, and then to essentially simulate the heartbeat and make the heart actually pump blood around the body to try to activate the brain and the rest of the organs.

ASTBURY: CPR, you've noted, started immediately. And then you went on, I think, to intubation?

JAYARAM: Yes. Well, Dr Ukoh intubated him. Now, intubation is never an essential thing. An airway can be managed with a T-piece and mask or a bag-valve-mask, but intubation in this situation is useful because it means the airway is more secure and it can free up hands to do other things.

ASTBURY: Okay. Is that a measurement at the end of the line?

JAYARAM: After where it says adrenaline?

ASTBURY: No, "Intubated by Dr Ukoh". I think that then says, "Reg at..." and I can't see what --

JAYARAM: Sorry, "At 10 minutes". So 10 minutes into the -- post the arrest.

ASTBURY: Thank you.

MR JUSTICE GOSS: So before you arrived?

JAYARAM: Yes.

MR JUSTICE GOSS: Right.

MR ASTBURY: Eleven minutes after the bleep?

JAYARAM: Yes.

ASTBURY: Then I think it says, "When I arrived" -- is that adrenaline times 3?

JAYARAM: That means by the time I arrived, three doses of adrenaline had already been given (overspeaking) 1 in 10,000, which is the standard preparation that would be used in a resuscitation.

ASTBURY: We've heard that there's a resuscitation trolley --

JAYARAM: Yes.

ASTBURY: -- with premade cartridges, is that right --

JAYARAM: Yes.

ASTBURY: -- available in the event there's an emergency --

JAYARAM: Yes.

ASTBURY: -- and they are premade and immediately accessible?

JAYARAM: Yes, and we know the doses that we give based on the weight of a baby.

ASTBURY: Next, please, is that sodium --

JAYARAM: Sodium bicarbonate.

ASTBURY: 3.5ml.

JAYARAM: Yes, and that would have been 8.4% sodium bicarbonate.

ASTBURY: Remind us again briefly why sodium bicarbonate is important?

JAYARAM: In this situation, the aim of CPR is obviously to try and maintain a circulation whilst we are trying to get to a situation where spontaneous unassisted circulation can take place. In a situation where initial resuscitation and adrenaline has not been effective, we have to think, why isn't it effective.

In these situations, when there's been a period of poor oxygenation of the organs of the body, a situation develops called acidosis, usually a metabolic acidosis, and that happens because the cells of the body rely on anaerobic respiration, which is basically the way that they can continue to work without oxygen. A byproduct of anaerobic respiration is lactic acid and in a situation where there's a metabolic acidosis that can impair cardiac function. So in a situation where we get this far in and adrenaline hasn't worked, we have to think, well, is one of the reasons adrenaline isn't working at this stage because the baby is so acidotic that we actually need to try and get round that acidosis.

So sodium bicarbonate is an alkaline fluid and the idea is to try and neutralise the acid and bring the pH, the body's acid levels, acid/base levels, back into the normal range.

ASTBURY: Could we pause there, please? I'm going to ask Mr Murphy just to go to tile 171, please. I'm going to ask you to look, with those points you have just made, Dr Jayaram, at the blood gas record. It was taken at 16.22, so within 8 minutes of your arrival and during this --

JAYARAM: During the resuscitation.

ASTBURY: So it's the fifth entry down I'm sure you can see. It's dated and timed. It's a capillary sample, we understand?

JAYARAM: Yes.

ASTBURY: If you could talk us through those entries, please, in the context of what you just told us.

JAYARAM: No problem. So if we look at the first column, the pH, which is 7.00. A normal bodies pH, if you do it as an arterial gas, would be between 7.35 and 7.45. Capillary gases are a different way of taking bloods. Often, the pH range is slightly lower than it would for an arterial blood, but a pH of 7.0 suggests a significant overall acidosis. So in this situation we can say that [Baby M] was acidotic.

When we look at an acidosis, there are basically two systems in the body that can regulate the acid/base balance: the lungs, so we talk about the respiratory component, and the metabolic system, which is mainly your kidneys but there are other things in the blood as well that can affect the metabolic side of things.

If we look at the pressure of carbon dioxide, that's 10.6 kilopascals. Normally a CO₂ would be between 5 and 7. Sometimes in premature babies we do let the carbon dioxide run a little bit higher but that's a significant respiratory acidosis and that reflects that [Baby M]'s breathing wasn't as effective as it should have been.

The PO₂ of 3.34 is low, but on a capillary sample that's difficult to interpret because blood, as soon as it moves from the arteries to the capillaries, gives up its oxygen immediately, so we are relying more on looking at the oxygen saturation on the monitor.

The sodium bicarbonate level is low and the base excess is minus 11.7. Base excess is a difficult concept to get your head around, but it is essentially a reflection of the metabolic component of the acid/base status. And again, it's usually between about minus 4/plus 4, there or thereabouts.

It's looking for trends really. If we look at the gas at the top, say the 12.43 gas that's there from the 8th, that is a fairly normal capillary gas. If we look at the one at 16.22 we can see there's a significant metabolic acidosis. This is what one would expect to see during a period of cardiorespiratory arrest.

ASTBURY: This is at the time --

JAYARAM: This is during (overspeaking) yes.

ASTBURY: What does this tell you about [Baby M]'s health at that point?

JAYARAM: Well, it tells us -- what we don't know is obviously what the gas was 2 minutes before that, 4 minutes before that, or at the time of arrest.

ASTBURY: It's a snapshot?

JAYARAM: The snapshot tells us that he is very, very unwell.

He's got a metabolic acidosis, which suggests that he has not been getting adequate delivery of blood and oxygen to his tissues and a CO₂ of 10.66 is higher than it should be.

Now, one could argue is that because he wasn't being ventilated adequately? But if you are not getting blood perfusing to the lungs, you'll never have a normal CO₂ during a resuscitation. The fact that his pH wasn't any lower than 7 in this situation is a good thing, but this is the blood gas of a very, very unwell child. And we'd call this a mixed acidosis.

The other thing that's important is that we can see that the lactate, at the far right, was 9.8. So I mentioned that when cells are starved of oxygen, they rely on anaerobic respiration and a byproduct of anaerobic respiration is lactic acid and we can see that his lactate was high in this situation.

ASTBURY: Okay. Thank you. So that's interpreted that for us.

Can we go back to your note, please, at 210.

If we scroll down a little, Mr Murphy, please. We'd reached, I think, the sodium bicarbonate entry --

JAYARAM: Yes.

ASTBURY: -- leading us to the -- is sodium bicarbonate an alkali?

JAYARAM: Sodium bicarbonate is an alkali? We gave that --

ASTBURY: Is that to adjust the pH --

JAYARAM: Yes. It will never be 100% effective because obviously there's ongoing anaerobic respiration. It's really just to try and bring the pH of the body up to try and improve the conditions to make the myocardium, the heart muscle, more able to beat spontaneously.

ASTBURY: Thank you. Now, you've (inaudible: coughing) -- are these matters that were brought to your attention?

JAYARAM: Yes. These weren't noted by me, these are things that were told to me, that he'd had some bilious nasogastric aspirates and his abdomen had been distended throughout the afternoon.

ASTBURY: The next bullet point, please.

JAYARAM: So I made the observation that he wasn't breathing spontaneously, which is why he was intubated and was having his breaths done for him. I commented that the heart rate was 60. Actually, what I recall is that although I have documented the heart rate was 60, my recollection -- and bear in mind this was a long time ago -- is on the monitor the electrical activity suggested a heart rate of 60, but actually there wasn't any detectable cardiac output apart from with CPR.

That's a situation we call pulseless electrical activity. So the electrical conducting system of the heart is working and you can pick that up on the ECG, but it's not effective in actually making the myocardium, the heart muscle, contract effectively to pump blood around the body.

ASTBURY: Electric pulses but no pumping as a result?

JAYARAM: Yes. And in some situations, even if the heart was pumping, the pumping of the heart was clearly inadequate so either way, the treatment and the interventions are the same.

ASTBURY: Okay. After you've noted -- you note the heart rate at 60 --

JAYARAM: Mm-hm.

ASTBURY: -- from the monitor that you've told us. What's the next entry, please?

JAYARAM: So what I said is I documented what happened through the rest of the resuscitation, so CPR continued at intervals.

[Baby M] received further adrenaline. He had another round of sodium bicarbonate as well. We also gave two boluses of normal saline. So normal saline is -- 0.9% saline is a fluid that essentially is isotonic, so it's the same concentration as the fluid that -- as blood, basically. The idea of giving fluid again in an arrest situation is that one of the things -- you have heard me talk before about Hs and Ts.

One of the things that can potentially cause arrest is hypovolaemia, not enough fluid being in the circulation.

Again, we give a bolus of saline on the assumption that one of the things that could be a problem here is the fact that there's not enough fluid in the circulation, let's bolster up the circulation. So he received two 10ml per kilogram boluses in the period --

ASTBURY: I'm going to interrupt you there, doctor. I'm sorry to do so. I'll come to the end of the resuscitation in a moment.

It's the entry after you've recorded the heart rate of 60 that I was interested in. Tell us what that says, please.

JAYARAM: "Good air entry with IPPV."

So IPPV means intermittent positive pressure ventilation, which is essentially what [Baby M] was receiving down the endotracheal tube. So he was basically having his breathing done. When I say there's good air entry, that means when I listen with a stethoscope I can clearly hear air going in and out of each lung. So again we know, whatever else may be going on in this situation, that there isn't an issue with the airway being blocked and there's not an issue, obviously, with the lungs because we can hear gas going in and out.

ASTBURY: So air, thus oxygen, going in and out of the lungs --

JAYARAM: Yes.

ASTBURY: -- but as you told us before, the acidosis suggesting it's not finding its way to the tissues?

JAYARAM: It's two things really: we can hear gas going in and out of the lungs and I haven't said what, but I would assume we would have been resuscitating in oxygen rather than just air at this point.

So the fact that we know that gas is going in and out of the lungs but we are not -- we are still not getting great oxygenation -- we've still got quite a significant respiratory and metabolic acidosis -- would suggest that there is an issue

here with blood actually perfusing the lungs to pick up that oxygen.

Now, that can happen because if the heart is not beating then clearly we can put gas in and out of the lungs but there's no blood going through to give up carbon dioxide for the lungs to blow out and there is no blood going into the lungs to pick up the oxygen that we're putting in.

The idea with CPR is you're trying not only to get blood around the body, but obviously you have trying to get blood from the heart to the lungs as well.

ASTBURY: Okay. You were telling us about the various doses of adrenaline and saline that [Baby M] received during his resuscitation. Did the resuscitation go on for some time?

JAYARAM: Yes, I think it was close to 30 minutes. And I recall this: that we were in a situation where, in spite of our interventions, we weren't really seeing any kind of response in terms of heart rate or spontaneous respirations. Generally, in this situation with resuscitation, one of the things we have to start considering is what is the likely outcome going to be of this resuscitation. And obviously what we want to do is get babies back round ASAP.

Generally, the longer a resuscitation goes on for, the less likely it is to have a good outcome, number 1, in terms of actually a spontaneous circulation returning, and number 2, in terms of subsequent neurodevelopmental outcome. And generally, in neonatology, we start thinking after about 20 minutes, what is the right thing to do here. And I recall discussing with [Baby M]'s family that at some point we might need to consider stopping resuscitation and thinking, are we actually going to turn things around.

I remember discussing with the team that we might have to do that. Now, these decisions are very, very difficult and they have to be a collaborative decision, all decisions around care of babies have to be collaborative decisions. You know, it's not my job as the senior person there to dictate what needs to be done and families need to be part of this decision-making process. And of course this is difficult because these are decisions that have to be made with very much -- not very much time.

And we'd reached a point where I thought, actually, we're going to have to think about withdrawing. Then for no -- I mean thankfully, but not because we'd made any one specific further intervention, [Baby M] suddenly recovered and his heart rate

came up and he started breathing and we could actually stop CPR in the sense that his circulation became adequate again --

ASTBURY: Okay.

JAYARAM: -- which I was glad about, but I wasn't sure what it was we'd done to suddenly make him better.

ASTBURY: Right.

JAYARAM: I think what we'd done is we'd -- our CPR had been effective in maintaining some kind of adequate enough circulation during that period of arrest and I'm very pleased that he recovered --

ASTBURY: Of course.

JAYARAM: -- but I couldn't really explain what had caused it and why he'd suddenly got better.

ASTBURY: During the course of that resuscitation, did you notice anything about [Baby M]'s appearance?

JAYARAM: Absolutely. I'd like to talk in a little bit more detail about this for various reasons because I haven't documented it in the notes, but in my statement I commented about a skin discolouration.

ASTBURY: I'm happy for you to do so, but could we bear in mind somebody's making a note of what you say --

JAYARAM: I will try. I'm trying to do better than usual.

So as commented in my statement, and I recall this very well, because [Baby M] was darker skinned, it was more obvious. There was -- he was generally pale, which one would expect in a cardiorespiratory arrest. There were patches of very bright pink, or certainly more obviously pink because it was on a darker skinned background, on his torso, that flitted around.

Now, I have mentioned these before in a previous testimony with a previous baby and the discussion I had with your colleague was that it was suggested that I had post hoc had a false memory, perhaps, of these.

This was based on the fact that I didn't comment on them in the medical notes. Why didn't I comment on it in the medical notes? I said last time that I wasn't aware of the clinical significance at the time. And I stand by that because it was brought to my attention last time in one of my statements that at some point, having spotted these things myself and other

colleagues having spotted these things, I wondered about what could be going on, did some research and found a paper about air embolism.

ASTBURY: We are going to come back to that in a moment, but can I just ask you a couple of questions about what you saw on this occasion.

JAYARAM: Yes.

ASTBURY: You have spoken about [Baby M]'s skin being a darker colour and therefore what you saw, the pink?

JAYARAM: Yes, these sort of pink blotches, for want of a description, better -- patches.

ASTBURY: I think you used the word flitting.

JAYARAM: Yes. They would appear and disappear and then other ones would appear and disappear.

ASTBURY: Okay. Whereabouts?

JAYARAM: I noticed them on his abdomen because that's the most obvious, sort of, bit of his body that you could see because the rest of his body had people covering his chest doing CPR. That's where I spotted them.

ASTBURY: All right. Did you see them at any point on any other part of his body?

JAYARAM: I don't recall, but I don't recall looking.

ASTBURY: How long, are you able to say, did they appear for?

JAYARAM: I noted them sort of when I got there, during the start of the resuscitation. I can't comment how long they continued to be there. Once circulation was restored and his heart rate came above 100, they vanished.

ASTBURY: Right, okay.

JAYARAM: They definitely weren't there afterwards.

ASTBURY: All right. Just returning to your note, just so that we can conclude your note, you've put that you discussed the situation with his parents.

JAYARAM: Yes.

ASTBURY: I don't want to miss this, so forgive me for just for a moment departing from what you were discussing. You explained to them on your note that there were potential problems with, what does that say, please?

JAYARAM: "Kidney function, blood pressure, seizures."

And those are all potential consequences of having had a period of poor oxygenation of the body's organs.

So one can anticipate problems with the kidneys because you can get kidney failure as a result of poor circulation and poor oxygenation. You can expect potentially problems with neurological symptoms, particularly seizures, fits, again, because of the period of acidosis and poor oxygenation of the brain and you can anticipate sometimes problems with maintaining blood pressure as well because, again, the heart muscle has been starved of oxygen and may not work as well as it would do normally too. These things don't always happen but they are things that could happen.

This is a discussion I had with [Baby M]'s parents after circulation was restored.

ASTBURY: Right. The priority being to restore circulation?

JAYARAM: Yes. Essentially, bring [Baby M] out of cardiorespiratory arrest or out of cardiac arrest.

ASTBURY: You have then noted the blood gas results --

MR JUSTICE GOSS: Just before you move on, could we just go back to the:

"D/W [discussed with] parents. Explained that..."

We haven't dealt with the first of that.

MR ASTBURY: Take us through that, please.

JAYARAM: There was this sudden collapse that led to his arrest, but I explained that I did not understand what had caused the arrest. I discussed, again thinking of things that can lead to arrest, it could have been due to infection because we always think about the possibility of infection in babies, although again there hadn't been anything to suggest infection brewing -- and usually in a situation with infection or sepsis, cardiorespiratory arrest would be the end point of more obvious deterioration leading up to it.

We talked about his abdominal problem because there had been this issue with him having had abdominal distension but certainly when I got there, unlike some other cases, his abdomen hadn't been hugely distended, and again, up to the point that arrest happened, and again bear in mind I wasn't there, there hadn't been any particular concern that his abdomen was so distended that it was impacting on breathing.

ASTBURY: Right. If we complete your note, and I'll go back to the point you were making a few moments ago. Scroll down, please, Mr Murphy.

JAYARAM: So the plan really was, obviously we'd restored circulation, which was a relief, beyond relief, and I was really pleased that we'd done that. It felt appropriate, even after the situation, we keep him ventilated because the important thing is to get the circulation back. It can take a bit more time for respiration to come back spontaneously. And it makes sense to maintain the airway and control the airway until we get an idea of which way things are going.

I felt it would be appropriate to do an X-ray of his chest and abdomen to see if there were any obvious problems in terms of lung collapse, pneumothorax, bowel obstruction. I felt that we needed more secure venous access and suggested that an umbilical arterial catheter and umbilical venous catheter should be put in.

I said that, based on what I'd said to his parents, and we know that myocardial function can be impaired, that we needed to watch what his blood pressure and urine output were doing, and think about inotropes.

Inotropes are medications that enhance the function of heart muscle and, if we needed them, then we could (inaudible) them. And again, keep an eye, have a low threshold for anticonvulsants. Anticonvulsants are drugs that we use if a baby is having seizures.

So really at this point, he was as good as we could be. And I would like to say at this point that I think that the team that actually resuscitated him did a very, very good job and the very fact that circulation was restored was a credit to what they did because it is unusual in a resuscitation that has had to go on for as long as this to get a return of circulation.

ASTBURY: Okay. Again, I just to finish your note before we go back to the point we were discussing.

JAYARAM: I commented on the chest X-ray that the endotracheal tube needed to be pulled back. An endotracheal tube ideally

needs to sit in the trachea. The trachea is the windpipe, it divides into two, the left bronchus and the right bronchus. I can't remember where it was on the X-ray, but I felt it needed to be pulled back. If it goes in too far it can go down into one lung or the other, usually the right lung, but I felt the trachea -- it needed pulling back. There wasn't anything else on the chest X-ray in terms of what the lungs looked like that caused me any concerns. And I commented that the bowel loops were distended but no intramural gas.

Intramural gas is what we see in NEC, necrotising enterocolitis, where there's essentially inflammation of the wall of the intestine and you see little bubbles of gas in there. It didn't look like there was any evidence of that.

Distended bowel loops in this situation, given at the start of resuscitation [Baby M] was receiving breaths via a mask rather than the tube, we aim -- we do that to get gas in and out of the lungs, but obviously some of it is going to go down the oesophagus, the food pipe, into the stomach and into the intestine. But I wasn't worried that they were so distended that they were causing trouble.

Can I just have a look at the X-ray review sticker?

ASTBURY: Of course.

JAYARAM: Essentially there was -- it was also commented that, apart from the ET tube needing pulling out -- so it wasn't too far down, it was just at the carina. The carina is the point where the trachea divides into two.

So it was actually in an appropriate position, but there is a risk if it is at the carina it could go down too far and I said to move it back a centimetre, really just to be sure that it wasn't going to slip down the wrong way. And I commented that the gastric tube was also in the right position in the stomach.

ASTBURY: I think that concludes your note. If we can scroll down and check that, please, Mr Murphy. Yes.

You told us about the appearance on [Baby M]'s abdomen that you saw and you referred back to evidence that you'd given already in this trial. You mentioned that you'd seen it before. Can you remind us, please, where you had seen this appearance before?

JAYARAM: Am I allowed to use the names of babies? This is very similar to what I'd said I'd seen with [Baby A], whose collapse was very similar to the collapse that [Baby M] had in the sense that he was a stable baby who suddenly became apnoeic and bradycardic and didn't respond as one might expect to

appropriate and timely interventions and there was that discolouration there as well.

ASTBURY: Okay.

JAYARAM: Now, I mentioned about understanding the clinical significance of it and why didn't I document it in the notes. Because, as I say, at the time the priority was dealing with the actual situation, explaining things to his parents, working out his post-resuscitation care.

The other thing, really, is that I suppose, as doctors, we operate within certain rules of engagement, on a certain playing field, and we think through things that could be going on. So whenever this happens, I think through: could this be infection, sepsis, could this be hypovolaemia, could it be a pneumothorax.

But --

ASTBURY: That's what you're doing with your plan?

JAYARAM: With your plan.

ASTBURY: You're running through the possibilities.

JAYARAM: So in terms of when I and colleagues started to think, well, what's going on, because it's not just babies I have seen but babies that colleagues have seen who have seen the similar thing, we then started to say, well, you know, this is something different, what's unusual. And actually, the time that I was prompted -- and in retrospect I wish I'd actually thought about looking for this a lot earlier, but the time I was prompted to do this was actually in June 2016.

ASTBURY: I'm going to interrupt you. I think you were asked that question on the last occasion.

JAYARAM: Yes.

ASTBURY: You went away and you found an email --

JAYARAM: Yes.

ASTBURY: -- in which you'd sent the relevant article you'd found to a colleague and that's how you settled on the date?

JAYARAM: Yes. I can tell you the events around this as well because I was quite -- I'm trying to think of the appropriate word. I was quite confused in the initial testimony because I was being told that I absolutely knew the clinical significance

of this because I'd said in a statement we'd looked at these cases and found this.

One has to remember that that statement was done, at the very earliest, 2017. And actually, when one looks at the statement, there's no specific dates as to what happened when, and I think an assumption was made as to when I'd found that. What prompted me to do this was in June 2016 when after a number of further unusual, unexpected and inexplicable events on the neonatal unit, the whole consultant body sat down and thought, we really have to try and work out what's going on here.

One of the things that came up in discussion was, could this be air embolus. I can't remember who suggested it, but it prompted me. That was a meeting we had on 29 June 2016. It prompted me that evening to do a literature search where I found the paper that was referred to. I then, the following morning, 30 June, emailed the link to that to colleagues because that paper described this skin discolouration that myself and colleagues had seen.

And I actually remember the evening before, sitting on my sofa at home with the iPad, looking and researching that, and I remember reading that description and I remember the physical chill that went down my spine when I read that because it fitted with what we were seeing.

ASTBURY: Just dealing with what you saw, Dr Jayaram, before [Baby A] had you ever seen anything like that before?

JAYARAM: Never.

ASTBURY: Have you personally ever seen it since?

JAYARAM: No.

MR ASTBURY: Thank you. I have no more questions for you, doctor. If you could wait there.

MR MYERS: My Lord, there are a variety of matters I need to deal with. I'd be grateful if we could take our break now and then continue. Maybe about 15 minutes, if we could have that, or a bit longer.

MR JUSTICE GOSS: Of course. We'll say five to then.

Do you have a clock in your room? One of you will have a watch.

(In the absence of the jury)

MR JUSTICE GOSS: Mr Myers, we're losing time. If you need more than 15 minutes, just send a message through.

MR MYERS: We might need a little longer.

MR JUSTICE GOSS: I don't want you to be under any undue pressure.

(11.41 am)

(A short break)

(12.03 pm)

MR MYERS: Thank you for the time, my Lord.

MR JUSTICE GOSS: Jury in, please.

(In the presence of the jury)

Cross-examination by MR MYERS

MR MYERS: Dr Jayaram, you see a lot of babies in any one year, don't you?

JAYARAM: That's correct, yes.

MYERS: You review a lot of babies, don't you?

JAYARAM: That's correct.

MYERS: You told the police about the discolouration you tell us you saw on [Baby M] in your interview with the police in July 2017?

JAYARAM: Yes.

MYERS: How did you manage to remember that, casting your mind back to April 2016 when you were dealing with [Baby M]?

JAYARAM: Because it was such an unusual thing to see and we'd seen it on [Baby A] and other colleagues had seen similar discolourations on other babies. And these are the things that are memorable, we remember the more unusual things. We deal with a lot of sick babies and sick children, there are -- and some of these are critical events. I'll be honest, some of them I don't remember, but this was particularly unusual and it was also memorable in the context of other events that were happening around and had been happening around that time. I can't give you an absolute, "This is why I remember this". There are some things I remember and some I don't; this I remembered.

MYERS: You told us that you saw similar discolouration on [Baby A] on 8 June 2015?

JAYARAM: Yes, that's correct.

MYERS: That's 10 months before this date?

JAYARAM: That's correct.

MYERS: And you told us previously that people on the unit were talking about rashes that you understood they'd seen on [Baby B] --

JAYARAM: That's correct.

MYERS: -- in June 2015 and [Baby D] in June --

JAYARAM: Although I hadn't dealt with those two babies.

MYERS: No. So let's be clear about this: certainly before June 2016, the significance of unusual discolouration on children was well-established, wasn't it?

JAYARAM: Define significance. We'd seen a number of children who'd had unexplained events, including collapses leading to cardiorespiratory arrest, and some of them had had discolouration. We hadn't thought until that point to try to put it all together to try and explain what this discolouration was. We'd considered things such as sepsis, et cetera, but nothing else up until that point.

MYERS: Let's focus on discolouration. You have told us it was unusual, it stood out.

JAYARAM: That's correct.

MYERS: You have told us you saw pink blotches; correct?

JAYARAM: That's correct.

MYERS: And flitting, appearing, disappearing; yes?

JAYARAM: Correct.

MYERS: You noticed them on the abdomen, most obviously?

JAYARAM: Correct.

MYERS: You don't remember about other parts of the body.

Findings that, you tell us, chimed with events as much as 10 months beforehand? Do you agree?

JAYARAM: I agree.

MYERS: So highly significant; do you agree?

JAYARAM: Significant -- yes, they're significant, but in terms of the clinical significance in the context of those events at that time, they were not significant as a whole. And looking at the bigger picture, which has led to us all being here, subsequently the significance became more clear.

MYERS: It was absolutely clear to you that discolourations, if they were happening, were things of significance by the time you saw them on [Baby M], wasn't it?

JAYARAM: Well, we'd noticed the pattern. We'd seen it before.

MYERS: It was significant, wasn't it?

JAYARAM: It was significant.

MYERS: Yes. And it would be a significant detail to include with regard to his presentation if that's what you saw, wouldn't it?

JAYARAM: Which is why I mentioned it in the statement.

MYERS: It would be a significant detail to include in your clinical notes if you saw it, wouldn't it?

JAYARAM: I disagree because at the time there were far more important things because the important thing was dealing with his situation of cardiorespiratory arrest. I had no anticipation at that time that I would be sitting here discussing this with you at that time -- several years later, which is why it wasn't documented.

MYERS: I'm not going to suggest you are incompetent, Dr Jayaram, but I am going to suggest it would be incompetent to miss out a detail like that from clinical notes if you saw it.

JAYARAM: I would disagree because we see many things and we don't document absolutely everything. And it was not the priority at the time. I mean, are you suggesting that again, as previously, I didn't see it and I'm perhaps confabulating this?

MYERS: Let's have a look at what you put in your notes. Could we put up, please, tile 210, Mr Murphy? You have put 8 April. In fact it's the 9th.

JAYARAM: Yes.

MYERS: These are notes you wrote up retrospectively --

JAYARAM: Yes.

MYERS: -- when you had time to reflect on what you'd seen; is that correct?

JAYARAM: That's correct.

MYERS: And of course the colour or discolouration of a child is a relevant finding clinically, isn't it?

JAYARAM: It is.

MYERS: And the colour or discolouration of [Baby A] is something that was already very strongly in your mind at this time, wasn't it?

JAYARAM: At the moment of time of this arrest, it wasn't in the forefront of my mind because my priority here was dealing with [Baby M]. And to be perfectly honest, Mr Myers, regardless of the discolouration, whether it was there or not, whether you choose to believe what you have chosen to believe that it wasn't there and I perhaps have a misguided memory, I cannot explain why this event happened. I can think of no obvious, typical, common or less common pathological reason for this happening.

MYERS: A potentially significant colour or discolouration is something you'd expect to be included in clinical notes; do you agree?

JAYARAM: In many ways I wish I had written it down.

MYERS: Do you agree -- listen to the question, please, Dr Jayaram -- that potentially significant colouration or discolouration is something you'd expect to find in clinical notes?

JAYARAM: Ideally, yes. I would argue -- I would disagree that it is incompetence.

MYERS: And this is already a discolouration that you had been aware of in other instances from 10 months before these notes, wasn't it --

JAYARAM: That's correct.

MYERS: -- you tell us; yes?

JAYARAM: That's correct.

MYERS: Let's see what you did put insofar as physical findings are concerned. I'm not going to read through all of these.

But if we start here, we have:

"At 16.02 abdominal distension and apnoea."

Is that you recording what had been reported to you?

JAYARAM: Yes, recording what had been reported to me, yes.

MYERS: So that isn't something that you actually saw when you first got there; is that correct?

JAYARAM: No, but later I commented that the abdomen was distended.

MYERS: But you were able, on reflecting upon this, to write down things that other people had told you about [Baby M], weren't you?

JAYARAM: It's a case of putting the background down, yes.

MYERS: And that's what was reported to you by others, isn't it?

JAYARAM: Yes.

MYERS: You're perfectly capable of writing down striking, significant, unusual details that you see, aren't you?

JAYARAM: I'm perfectly capable.

MYERS: If we carry on down. No reference to his colour at all this point in these notes?

JAYARAM: No, not specifically.

MYERS: If we go through --

JAYARAM: Although it's implicit that if a child is in cardiorespiratory arrest they'll be pale, they won't be pink.

MYERS: It would be all the more surprising if they were a different colour then, wouldn't it, if that's implicit?

JAYARAM: I beg your pardon?

MYERS: It would be all the more surprising if they were a different colour then?

JAYARAM: In terms -- sorry, I'm --

MYERS: You've just told the jury it's implicit.

JAYARAM: They won't be pink, they won't be the normal healthy colour.

MYERS: So that makes all these unusual colours all the more outstanding, doesn't it?

JAYARAM: To an extent, yes.

MYERS: All the more reason to record them in the notes (overspeaking) --

JAYARAM: Absolutely, I agree, and I wish I had.

MYERS: Carry on:

"Desaturation and bradycardia then..."

Does that say "arrested"? Just beneath --

JAYARAM: "Bradycardia and then arrested", yes.

MYERS: Just moving down to where we have the sodium carbonate entry, can you see that?

JAYARAM: Yes.

MYERS: It says:

"Bilious nasogastric tube aspirates. Abdomen distended."

Again, is that something that was reported to you?

JAYARAM: It was reported to me and that might be a comment of an observation I have made as well, I'm not sure.

MYERS: But in any event, there was plenty of opportunity you had to record any findings that you'd identified, wasn't there?

JAYARAM: In terms of recording these findings retrospectively, using the -- as I say, we operate within certain rules and expectations. Thinking through things that could have led to the arrest, at that time abdominal distension was recorded because it was potentially something that could have caused arrest because significant abdominal distension can make ventilation of the lungs harder and reduce venous return to the heart.

At that time I had no knowledge or suspicion that the discolouration could have been related to something else that could have caused cardiorespiratory arrest, which is probably why at the time I didn't specifically put it in the notes.

MYERS: You have dealt in the case of [Baby A] with a baby who you say had had an unexpected collapse, yes --

JAYARAM: That's correct.

MYERS: -- accompanied by the same sort of discolouration?

You're an experienced and capable doctor, aren't you?

JAYARAM: I would like to think I am at least vaguely competent, yes.

MYERS: You can draw comparisons with one striking case and another, can't you?

JAYARAM: Yes.

MYERS: Can't you?

JAYARAM: Yes.

MYERS: If we just move on to "discussed with parents". That sets out your discussions with [Parents of Babies L & M] and what your views were on what the cause could be, doesn't it (overspeaking) --

JAYARAM: I didn't say that I thought it was any of -- these are the things we have to think about.

MYERS: Yes. So you were thinking of cause, weren't you?

JAYARAM: We have to, subsequently.

MYERS: And if things are as you tell us, your mind would go back automatically to [Baby A] and the strange discolouration there, wouldn't it?

JAYARAM: Yes, and the situation with [Baby A] is we never found a cause.

MYERS: No. So --

JAYARAM: This was another baby that I was involved with that we'd never found a cause in conjunction with other babies that colleagues had dealt with that we'd never found a cause.

MYERS: This is something on your mind?

JAYARAM: Absolutely.

MYERS: So all the more reason to note similar discolouration as lurid as you've described to us, isn't there?

JAYARAM: Yes.

MYERS: Then why didn't you?

JAYARAM: Because I told you, at the time in this situation it wasn't the priority. And I wish I had because we wouldn't be sitting having this rather academic discussion now.

MYERS: It's not academic, she's on trial for murder, multiple charges of murder and attempted murder, Dr Jayaram.

JAYARAM: And as I say, regardless of whether there's any discolouration or not, and I'm not here to suggest who's done what, all I'm saying is that regardless of whether that's documented or not, this collapse does not make sense to me.

MYERS: You have documented in your notes things other people told you, haven't you?

JAYARAM: Some things, yes.

MYERS: How can it not be relevant to document striking physical signs on the body that you tell us you could see?

JAYARAM: Because in retrospect, the relevance is very, very clear. And at the time, although it was unusual, there were other events going on. You have to bear in mind that these situations are stressful and busy and it might look that 17.40 was a long time afterwards, but actually in the scheme of things there was a lot of stuff to do, and I will put my hands up and say I didn't write it and therefore it gives you an opportunity to cast doubt on my recollection. And I guess, and this is debatable, you have to rely on an assumption that I'm an honest person and, as you said in a previous testimony, I think you asked me do you have to believe everything I say. No, you don't have to believe everything I say, but bear in mind I'm here under oath, I am bound by the terms of the GMC Duties of a Doctor.

I have a duty of candour and I have to be honest. And I would not knowingly deliberately confabulate things.

And I somewhat resent the suggestion that you're making that I do that.

MYERS: If you had seen pink blotches that were flitting, appearing and disappearing on the abdomen in the circumstances you have given us and the history we have here, you would have documented it in this, wouldn't you?

JAYARAM: Well, I didn't, but I saw them.

MYERS: And you didn't document them because it's not what you saw at the time?

JAYARAM: So you're suggesting that I'm making this up, Mr Myers?

MYERS: I'm suggesting it's a detail that's been added to this later for whatever reason.

JAYARAM: No, it happened, Mr Myers, because I wouldn't add it otherwise. I don't really understand your logic. I can see it's not written there and, as I say, I see a lot of babies and there are many things that I don't remember.

There has been at least one baby we talked about here where I actually said I have no recollection, everything's from the notes. In this situation I do remember.

MYERS: You next go on to deal with the discussion with the parents, don't you?

JAYARAM: That's correct.

MYERS: You talk about:

"Explained sudden collapse led to arrest but no obvious cause."

You say that, don't you?

JAYARAM: That's correct.

MYERS: So your mind is turning to what the relevant factors could be that have a bearing upon on this?

JAYARAM: That's correct.

MYERS: The notes are your record of what you are thinking and (overspeaking) --

JAYARAM: At that moment in time, yes.

MYERS: -- when you come to write it up retrospectively afterwards?

JAYARAM: That's correct.

MYERS: "Could be due to infection or abdominal problem."

You say that don't you?

JAYARAM: It says that, yes.

MYERS: You consider that. If we go over the page, we agree there's no reference to discolouration at any point, is there?

JAYARAM: No. And the discolouration had cleared by the time circulation was restored.

MYERS: As you have reminded us with your evidence, when you dealt with [Baby A] you took clinical notes, didn't you, on that occasion?

JAYARAM: That's correct.

MYERS: And you wrote them up retrospectively, didn't you?

JAYARAM: That's correct.

MYERS: And you tell us that you had seen discolouration that was striking, unlike anything really you'd encountered before?

JAYARAM: That's correct.

MYERS: That was on 8 June 2015.

JAYARAM: That's correct.

MYERS: You failed to include that in your notes for [Baby A], didn't you?

JAYARAM: That's correct.

MYERS: When you wrote a statement for the coroner into [Baby A]'s death on 24 July 2015, you knew that the coroner is looking at an inquiry into cause of death, didn't you?

JAYARAM: That's correct.

MYERS: And you failed to include any description of discolouration in that too, didn't you?

JAYARAM: Because the statement was based on the notes and at the time, as I've said before, the significance of it was not in my understanding.

MYERS: You told police about what you say is this discolouration on [Baby A] and on [Baby M] when you had your first interview with them in June 2017, didn't you?

JAYARAM: That's when I told police, yes, because I hadn't spoken to them before.

MYERS: That is a detail I'm going to suggest that you'd certainly come up with by the time of the investigation that you hadn't had at the time you made these notes.

Do you understand that?

JAYARAM: Can you just reframe --

MYERS: Yes, first of all (overspeaking) --

JAYARAM: -- that for me, please, so I understand exactly what you're implying?

MYERS: I'm asking, Dr Jayaram, the details of discolouration, let me put it this way, don't appear in your notes or your statement to the coroner at the time because it's not what you saw.

JAYARAM: No, it is what I saw and the reason that at the meeting we had of senior consultants as a group to discuss all of these unusual events that I was prompted to do a literature search because myself and colleagues had seen this discolouration and that's why I did the literature search. It certainly wasn't a case of: let's look for something and, oh, we've found this, let's make everything fit with this. Because actually, that wouldn't be the right thing to do and there would have been no reason for me to look unless we'd seen this. I didn't look up that paper knowing that it would describe this discolouration that had been reported by myself and other colleagues.

MYERS: I'm going to ask you about discussions with colleagues.

In your evidence you have told us about events in -- is it June 2016?

JAYARAM: That's correct.

MYERS: And you say that you did -- are you saying you did a search for the literature then?

JAYARAM: Yes.

MYERS: And it caused you to have a physical chill, I think you said.

JAYARAM: That's correct.

MYERS: A physical chill is a dramatic detail you have put in just to give this more impact, isn't it?

JAYARAM: No, I'm describing exactly what I felt.

MYERS: When you gave evidence on 24 October in these proceedings you were asked about that paper and you accepted you found it shortly after [Baby D]'s death.

JAYARAM: No, I didn't, actually. You implied that, Mr Myers.

You made an assumption and there was no timeline on that statement at all. You quite vehemently told me that I knew about this paper at the time and you told me quite assertively that I knew about this paper at the time of the coroner's inquiry and I was quite discombobulated because it didn't make sense, which is what prompted me to go back and try and actually find out when I knew about it.

So actually, it was something of a relief to me and I didn't feel quite as -- it made sense that I didn't know about that until the end of June 2016. Now, feel free to disagree, but again that is the truth.

MYERS: Let me deal with what was said in evidence. It's in the transcript of 24 October at page 168. I was asking you this, Dr Jayaram:

"Question: Now, everyone had been -- when you say your colleagues as a group had been talking about these deaths so that research is conducted."

And I asked you:

"Question: Do you recall when it was you came across that paper?"

You said:

"Answer: I can't remember."

That's what you said at that time.

JAYARAM: I couldn't remember at the time.

MYERS: But I asked you:

"Question: But within days of [Baby D]'s death as you were discussing this; is that correct?"

I asked you that. You said:

"Answer: I think so. I can't be sure."

JAYARAM: Which is why I went to check. I think I remember asking you about timelines as well and you couldn't find --

MYERS: You said:

"Answer: I can. It may be in one of my statements. I can't remember exactly when.

"Question: All right, if it is.

"Answer: It was clearly not before [Baby D]'s death.

"Question: Plainly not. But it was some time shortly after, wasn't it?

"Answer: Yes. There were no other dates provided but you said yes. To be clear, first of all, that's the way that evidence was, that you're giving a commentary upon now. You say now it wasn't then?

JAYARAM: And it wasn't because I went to check. And I'll be honest, I felt quite intimidated at the time and under pressure and it was a leading question and I should have said, "I can't remember", and subsequently I went to find out.

MYERS: You may well have circulated that paper to colleagues in June 2016, but I'll ask you now gently, did you find it before then?

JAYARAM: The day before. I had not found it before then. I had not even considered looking before then until, as a group of consultants, we were trying to think through anything that could explain any of these events.

MYERS: You have a leading role in this unit together with Stephen Brearey, don't you?

JAYARAM: That's correct.

MYERS: You were the unit lead?

JAYARAM: That's correct.

MYERS: And Dr Brearey was the neonatal lead?

JAYARAM: That's correct.

MYERS: Shortly after the death of [Baby D] in June 2015, Dr Brearey conducted a review of circumstances into those deaths, didn't he?

JAYARAM: He did.

MYERS: And you're aware that he did that?

JAYARAM: Yes.

MYERS: You knew he did that at the time, didn't you?

JAYARAM: Yes, that's correct.

MYERS: So shortly after [Baby D]'s death in June 2015, he conducted a review. To be clear, that wasn't a formal review involving an outside agency, was it?

JAYARAM: No.

MYERS: It's something he did looking at the case papers and the files?

JAYARAM: I believe so, yes.

MYERS: And he discussed it with you at that time?

JAYARAM: That's correct.

MYERS: And he identified Lucy Letby as a person of interest, didn't he?

JAYARAM: I think he noticed that Lucy Letby was the nurse looking after these babies, but that was it.

MYERS: Right. So as of June 2015, you and Stephen Brearey have some sort of interest in Lucy Letby, don't you?

JAYARAM: What do you mean by interest?

MYERS: Well, when he identified her as a person being present, he didn't do that as an idle detail, he was looking for a connecting link, wasn't he?

JAYARAM: I think we look for all sorts of connecting links we are not trying to look at cause/effect, just as -- which cot space the baby was in, which incubator they were in, which machines they were connected to.

MYERS: Right. The upshot of that was he raised with you the fact that Lucy Letby was present on those occasions.

JAYARAM: That's correct.

MYERS: And with that in mind, she became a focus of interest as events unfolded, didn't she?

JAYARAM: What do you mean by focus of interest? I would like you to expand on that.

MYERS: She'd been flagged up as somehow linked in some way.

JAYARAM: There was an association with her being present.

MYERS: Right.

JAYARAM: Nothing more at that stage.

MYERS: When you talk about events happening in June 2016 and physical chills and things like that, you and Stephen Brearey were already talking about Lucy Letby in June 2015, weren't you?

JAYARAM: In terms of an association, but as clinicians we have to think about all possibilities. We are taught to think about common things, less common things, very uncommon things, rare things. In the rules of engagement by which we work, we do not generally consider unnatural causes or deliberate things. And nothing like that at that stage was even being contemplated, it was simply an association, just as if there had been any other member of staff or any other piece of equipment, that would have been commented on.

MYERS: Ms Letby continued to work in the unit over the following 11 months, didn't she?

JAYARAM: That's correct.

MYERS: Whatever follows from Stephen Brearey's review and his discussion with you, she continued, didn't she?

JAYARAM: That's correct.

MYERS: Now, in this case, we've been going through the events in chronological order, Dr Jayaram, and we dealt with [Baby J] before the case of [Babies L & M], which took us from late 2015 to now in April 2016.

For various reasons, a case we didn't deal with in order was the case of [Baby K]; that's February 2016.

JAYARAM: That's correct.

MYERS: That's 2 months before this incident, isn't it?

JAYARAM: That's correct.

MYERS: We're going to deal with that next so you'll be coming back to give evidence about that and we'll be looking at it in detail. I'm just explaining that, so everyone knows we will be coming to look at [Baby K]. But [Baby K]'s case comes about 6 months after [Baby D], doesn't it, in terms of time, the events?

JAYARAM: Yes.

MYERS: They are February 2016, [Baby D] is June 2015.

[Baby K], her case is 2 months before these events with [Baby M], isn't it?

JAYARAM: That's correct.

MYERS: When you made your statement to the police dealing with [Baby K], and you made that statement on 17 April 2018, you explained to them that you went to the nursery where [Baby K] was -- and you put it this way:

"Because you were uncomfortable with the fact Lucy was in there with her."

JAYARAM: Yes, because by that stage, of course, we can only make reference to the babies that are being dealt with during this whole process. There were other events with that association. And I mean, I can talk about the events of [Baby K] now if you like or do you want to save it?

MYERS: Let's see how we get on with this because the point I'm making, I hope, is a fairly straightforward one. You are saying you told the police in February 2017 you walked into a nursery where [Baby K] was because -- and the words you used were "you were uncomfortable with the fact she was there".

JAYARAM: I was.

MYERS: Right. And --

JAYARAM: And the reason for that was because this association by then --

MYERS: Oh right.

JAYARAM: -- was more obvious and it was intuition. And when we discuss [Baby K], I will explain why in was glad -- it was good I walked in at that time.

MYERS: In fact, and we'll come to this, Ms Letby wasn't actually doing anything physically to the baby, was she?

JAYARAM: Do you want me to go into detail of that night now?

MYERS: The allegation is that there's a desaturation that follows or is in progress and she wasn't doing anything, yes (overspeaking) --

JAYARAM: Well, the alarm hadn't been raised.

MYERS: Right. But you walked in, let's be clear about this, and there was nothing physically happening to the baby, was there?

JAYARAM: When I walked in, the baby was desaturating.

MYERS: Was there anything physically happening to the baby?

JAYARAM: The baby's chest wasn't moving --

MYERS: Being done to the baby then by Ms Letby?

JAYARAM: At the moment I walked in, no. She was standing by the incubator.

MYERS: Let's put these things together. Ms Letby, you're telling us, had been a person identified with a potential link from June 2015 by you and Dr Brearey; yes?

JAYARAM: And other colleagues as well.

MYERS: Right. Other colleagues?

JAYARAM: Had noticed the association.

MYERS: Right. So all eyes on Ms Letby then?

JAYARAM: Well, clearly, yes, because there's an association.

MYERS: She continues to work there. We'll come to [Baby K] very shortly. You've identified your concerns then. If all of that is right, there is absolutely no way you would have failed to record what you say you saw with [Baby M] in April 2016. Do you understand that question?

JAYARAM: I recorded everything I recorded there and this was an unexplained collapse and I would disagree because we're looking

at the bigger picture and, at that moment in time, I recorded what I felt was relevant. Bear in mind many of these babies didn't have this pattern, there were other patterns.

MYERS: You have explained to the jury -- your explanation for not including the description of this rash in these notes is that it wasn't significant in the context of everything at the time; yes?

JAYARAM: Yes.

MYERS: But actually, now, we know that events concerning Ms Letby were significant at the time, weren't they?

JAYARAM: They were, but with regards to this skin discolouration, as I say, it was something that didn't -- I didn't...

You see discolouration, it's one of those things. It's only when I read that paper and it suddenly made sense.

MYERS: And the whole association, supposed association, with Ms Letby begins with the period when you tell us [Baby A] had his discolouration; yes?

JAYARAM: When he had his cardiorespiratory arrest and passed away.

MYERS: And the discolouration that he had?

JAYARAM: Yes.

MYERS: So that's well in your mind, isn't it, at the time of the events with [Baby M]?

JAYARAM: It wasn't top of my mind, the discolouration. The absolute -- what was top of my mind was the unusual -- again, another unusual unexplained collapse in an otherwise stable baby.

MYERS: I'll put it to you again, Dr Jayaram, that if you had seen a rash that looks the way you have described it to us on [Baby M] in April 2016, you would have recorded it in the clinical notes.

JAYARAM: Not necessarily. Because I didn't. That doesn't mean I didn't see it.

MYERS: Is Stephen Brearey still a colleague of yours?

JAYARAM: He is.

MYERS: Do you both work at the Countess of Chester Hospital Neonatal Unit?

JAYARAM: We both work at the whole paediatric department together.

MYERS: When did you last speak with him?

JAYARAM: I see him every day at work.

MYERS: So you are speaking with him as the trial is ongoing?

JAYARAM: I have no choice but to.

MYERS: And you're working alongside him?

JAYARAM: And all my colleagues, yes.

MYERS: And do you discuss the allegations we are dealing with in this case as time goes on during the trial with Dr Brearey?

JAYARAM: Since the trial has started we've avoided talking about these things because we're under instructions that we shouldn't, quite appropriately.

MYERS: You never mention it to each other?

JAYARAM: It has to be mentioned. It's an elephant in a room, but not in detail.

MYERS: Do you discuss the allegations against Ms Letby?

JAYARAM: We discuss how we're all doing and how we feel we're coping with --

MYERS: Do you discuss the evidence --

JAYARAM: We don't discuss the evidence --

MYERS: -- and the way it is going?

JAYARAM: -- because we've discussed all of this -- we've discussed all the evidence in the past.

MYERS: John Gibbs is a long-standing colleague of yours, isn't he?

JAYARAM: Yes.

MYERS: When did you last speak with him?

JAYARAM: I think last time I was here because he was here at the same time.

MYERS: Have you spoken with him at any point while this trial was running?

JAYARAM: Not face to face. I think I saw him around Christmas, but we had a superficial discussion.

MYERS: And other witnesses in this case who work at the Countess of Chester, nursing staff, people like that, do you discuss the case with them?

JAYARAM: We don't discuss the case. We discuss the impact it might be having on us and we support each other because it is extremely difficult at the moment to focus on what we need to be doing. I'm lucky enough to work with a team and people who are fantastic and who, through the adversity of all of this, have managed to continue to provide ongoing excellent care.

MYERS: And have you read any of the media reports of this case as it's been ongoing?

JAYARAM: I have deliberately, since my first testimony here, stopped reading any media reports and I avoid them as far as I can. It is inevitable, if I'm sitting in front of the television, that something will come up. But I have deliberately avoided, as far as I can, seeking out things.

MYERS: In any event, during the period that Lucy Letby was working in the neonatal unit after the death of [Baby D], her position there and any concerns is something that you were discussing with some of your colleagues, wasn't it?

JAYARAM: That's correct.

MYERS: Most pre-eminently, Dr Brearey?

JAYARAM: Well, not just Dr Brearey, but other colleagues, but as the leads for the department there were more discussions between us.

MYERS: And in fact all of that is well before June 2016, isn't it?

JAYARAM: Yes, however -- sorry, I mean, why do you -- I'm interested in why you were making that particular observation. I'm trying to understand what you're implying by that or suggesting. Can you be more explicit?

MYERS: I'll answer your question --

JAYARAM: Why is it important?

MYERS: -- I don't have to, Dr Jayaram (overspeaking) --

JAYARAM: I know you don't have to, but I'm curious. I guess I'm being slightly -- I suppose in my professional life we have two-way conversations and listen to each other.

And I'm just curious, really, to know why you're suggesting this and what you're suggesting, because it has ramifications for myself and my colleagues being able to do our day-to-day jobs.

MYERS: I am just establishing what you and your colleagues knew or thought you knew at the relevant periods we are dealing with, Dr Jayaram --

JAYARAM: Okay.

MYERS: -- and how that may affect the various issues we all have to look at in this case.

JAYARAM: Okay.

MR MYERS: Thank you, my Lord.

MR JUSTICE GOSS: Thank you.

MR ASTBURY: My Lord, no re-examination in respect of [Baby M].

MR JUSTICE GOSS: Right.

MR ASTBURY: I say that because of course we will be considering the case of [Baby K] in due course, so I don't want to revisit that. And also, the period after the last of those cases with which we'll deal in this case is also likely to be subject to evidence, so I'll not going to delve into that at this stage.

MR JUSTICE GOSS: Oh no, and Mr Myers didn't go into the detail. The one specific reason that he wanted to raise in that case, he raised, and you don't wish to ask anything arising out of that?

MR ASTBURY: As long as that's clear.

MR MYERS: That will be dealt with in detail in due course.

MR JUSTICE GOSS: Exactly. That's what I assumed.

Thank you very much.

All right, Dr Jayaram. That's it again until you're next called upon to come to court to assist, which will be relatively soon, I anticipate. You obviously know from the evidence that you've just given what your obligations are as a witness and you say that you've been abiding by those obligations. You'll appreciate the importance and why I have said to you, as I say to every other witness in your situation, not to talk to anyone about anything to do with this case.

JAYARAM: Absolutely.

MR JUSTICE GOSS: Right. I couldn't, and it wouldn't be appropriate to, say don't speak to colleagues with whom you work day in, day out and enquire about their welfare, but not about any of the details of this case.

All right? Thank you very much.

(The witness withdrew)

MR ASTBURY: My Lord, the next witness has the benefit of special measures.

MR JUSTICE GOSS: Right. About how long is this witness going to be?

MR ASTBURY: I'd have thought about 20 to 25 minutes, but my estimates are notoriously unreliable.

MR JUSTICE GOSS: I won't comment on that! Do you mind leaving the court for a few minutes?

We'll carry on and stick to our usual routine insofar as we can.

(In the absence of the jury)

MR ASTBURY: My Lord, can I just bring my Lord up to date with the rest of the day?

MR JUSTICE GOSS: Yes, certainly.

MR ASTBURY: [Dr A]. We only have some more evidence to read. Then two nurses who won't be terribly long in the witness box, we anticipate. I'm afraid we've run up against the buffers there because any more witnesses would have created severe logistical difficulties.

MR JUSTICE GOSS: Don't worry. In fact, I couldn't sit beyond 3.45 in any event, so it may be that we'll be finished before then, but we'd have to in any event.

MR ASTBURY: I think we're going to be finished some time before that.

MR JUSTICE GOSS: That's all right. It doesn't matter.

There's plenty to be doing. Thank you very much.

Just 2 minutes, please, thank you.

(Pause)

(In the presence of the jury)

[DR A] (recalled)

Examination-in-chief by MR ASTBURY

MR ASTBURY: Could you state your full name for the record, please?

DR A: It's [Dr A].

ASTBURY: Thank you. [Dr A], you gave evidence last week about your night shift at the NNU at Chester from the 9th into 10 April 2016 --

DR A: Yes.

ASTBURY: -- and in particular your treatment of a little baby called [Baby L].

DR A: Yes.

ASTBURY: You've come along today to assist us with your treatment on the same shift of his twin brother, [Baby M].

DR A: Yes.

ASTBURY: Do you have any recollection, individual recollection, of treating [Baby M] that night?

DR A: Unfortunately not, no.

ASTBURY: Have you in preparation for today had the opportunity to consult his notes?

DR A: I've seen two pages of notes written by myself over that night, but I haven't seen anything before or after that.

ASTBURY: All right. Thank you. Is it those notes that you've relied on in preparing your statement?

DR A: Yes.

ASTBURY: In that case could we go to tile 266, please, and if we could go behind that. Thank you. And scroll down.

Is that your handwriting, doctor?

DR A: Yes, it is.

ASTBURY: And your signature in the bottom right?

DR A: Yes.

ASTBURY: Thank you. So 21.35, still on 9 April, you've noted, I think, a family update?

DR A: That's right.

ASTBURY: It's by Dr Jayaram, but was this in your presence, hence your noting of the conversation?

DR A: Yes.

ASTBURY: Can you take us through what you recall of the note or conversation?

DR A: I don't recall the conversation itself, all I am using is this handwritten note which just says that we've updated father and maternal grandmother about what had happened that afternoon and the plans for what will happen over the coming night shift.

ASTBURY: Okay.

DR A: Then they were both taken through to the neonatal unit to see both babies.

ASTBURY: Thank you. The notes suggest a plan to extubate; is that right?

DR A: That's right.

ASTBURY: We've heard that, during the course of a collapse on the afternoon of 9 April, [Baby M] had had to be intubated.

Would you, as the registrar on nights, have familiarised yourself with events concerning [Baby M] during the day?

DR A: I would have assumed that that would have been covered during the handover and there may have been more detail from Dr Jayaram around this review with the parents or family members.

ASTBURY: Would it be important to familiarise yourself with what had gone on as you were taking over, presumably, care of [Baby M] on the unit?

DR A: Yes.

ASTBURY: All right. Further investigations were planned overnight. They had no questions. And as you've told us, they were taken through to the unit to see the children?

DR A: Yes.

ASTBURY: Does your next note, doctor -- sorry, go to tile 300.

Does your next note appear at a time in the early hours of 10 April?

DR A: I believe so.

ASTBURY: Let's have a look at that, please. If we scroll down, please. Do you recognise the note?

DR A: Yes.

ASTBURY: Is that your signature?

DR A: It is.

ASTBURY: Your handwriting?

DR A: Yes.

ASTBURY: It's headed "night review"?

DR A: That's right.

ASTBURY: Does that suggest that you'd have examined [Baby M] at that point?

DR A: Yes.

ASTBURY: Again, in the knowledge of the history, at least, over the last 12 hours or so?

DR A: Yes.

ASTBURY: Just read through your note, please, with us.

DR A: Okay. It's 10 April, 02.55:

"[Baby M] is settled and has been all evening. He has no abnormal movements. His heart rate and respiratory rate are normal and his blood oxygen concentration (being ventilated on air) is normal."

So he doesn't have an oxygen requirement and he is managing.

ASTBURY: Pausing there, bearing in mind what had happened the night before, any concerns within those readings?

DR A: No, these are perfectly acceptable readings. These are observations that are leading us towards taking him off the ventilator.

ASTBURY: Thank you. We'll come to that in a moment. Morphine stopped, is that?

DR A: Yes, so morphine had been stopped at midnight following the blood gas, which is listed below, and the morphine was stopped so that [Baby M] would have more respiratory effort of his own in order to allow him to be taken off the ventilator.

ASTBURY: So Dr Jayaram's plan that you've noted the night before, nothing's happened to derail that plan?

DR A: No.

ASTBURY: In fact, is this right, the readings are normal, so even at that stage the plan was to remove the tube that was intubating [Baby M]?

DR A: Yes.

ASTBURY: All right. You've put the most recent gas readings in.

DR A: Yes.

ASTBURY: Anything, please, to note there?

DR A: No, they are normal readings.

ASTBURY: All right. If we can pause there, please, and go back to tile 171, Mr Murphy.

I'm going to ask you to look at a blood gas reading from the night before. It's not yours, you weren't on duty, but if we can count five lines down, please, we have a blood gas at 16.22.

DR A: Yes.

ASTBURY: If you could have a look at that, please. Are you able to characterise the blood reading or the readings that are represented there?

DR A: Yes.

ASTBURY: Are they concerning?

DR A: Yes, it's a very poor gas.

ASTBURY: In comparison to the gases that you noted at 2.55, is there anything, any observation you'd wish to make?

DR A: The gas at 2.55 am is significantly better than this one.

ASTBURY: Less than 12 hours later?

DR A: Yes.

ASTBURY: Any significance in the time?

DR A: Not particularly. The gas itself shown here at 16.22 has a high level of CO₂ in this, that's what making it an acidotic gas. That's been removed by ventilation or some other means, such as the baby's breathing effort himself. Compared to this gas, the one at 2.55 or the one taken at midnight is significantly better.

ASTBURY: Right. Back to your note, please, Mr Murphy, behind tile 300. If we can scroll down, I think we'd reached the plan that you noted at the bottom. Could you read that to us, please?

DR A: Item 1 is extubate [Baby M] and put him on BiPAP and the BiPAP machine will be set with a backup rate of 30 breaths per minute. Then 1 hour later, take another blood gas to see how his ventilation is progressing and I have then said that I have reviewed the blood tests that have been taken recently. His renal function had improved and his gas had normalised.

ASTBURY: Right. Extubate to BiPAP?

DR A: Yes.

ASTBURY: What's the comparison between the invasive mechanical ventilation that [Baby M] was receiving and the BiPAP that was then envisaged?

DR A: BiPAP is still a method of ventilation that's supporting [Baby M] but he's putting in more of his own effort. It's a step down from being mechanically ventilated. And as you say, on BiPAP there's no invasive tube, it's done through a mask or a

nose fitting. There's no plastic that's inside his body for that.

ASTBURY: That's why you ceased the morphine, so he'd be in a better position to --

DR A: To drive his own breathing, yes.

ASTBURY: Without recollection, but looking at the direction of travel, extubation to BiPAP, what does that tell you about [Baby M]'s condition?

DR A: Based on the gas above and based on the observations of him throughout the early hours of the morning of the 10th, he was ready to have his -- to require less support with his breathing.

ASTBURY: Moving on, please, to the note towards the bottom of the page. If we can have that in full, please. Scroll down. Thank you.

At 03.20, is that your note again?

DR A: Yes, it is.

ASTBURY: Is that word "extubated"?

DR A: Yes.

ASTBURY: So would [Baby M] have been monitored between 02.55 and 03.20 before that decision was made?

DR A: Yes. It's likely that he was extubated at around 03.20, if not slightly before, and this is my review of what progress he's making. All of the electronic monitoring that he would have been on previously would still be in place.

ASTBURY: What progress is he making?

DR A: So he's been commenced on BiPAP. We've used a back-up rate of 40 breaths per minute rather than 30. His heart rate is acceptable at greater than 110 beats per minute and his respiratory rate is greater than 20 breaths per minute. These are perfectly acceptable readings.

ASTBURY: Thank you. Then on examination?

DR A: His heart rate is currently 110 beats per minute. His heart sounds are normal. His chest is clear, so his lungs fields sound normal. There's no evidence of respiratory distress and there are vesicular sounds, normal breath sounds, in all zones.

His abdomen is soft, non-tender, there's no masses, there's no evidence of an enlarged liver, kidney or spleen, and his umbilical venous catheter is well secured.

ASTBURY: Okay. Heading in the right direction?

DR A: Yes.

ASTBURY: Next note, please, towards the bottom of the page, Mr Murphy.

I think this is your final note of the shift.

DR A: Yes.

ASTBURY: Made at 7 am?

DR A: Yes.

ASTBURY: You've indicated that he's settled on BiPAP?

DR A: Yes.

ASTBURY: Could you take us through the rest of the note please?

DR A: Yes. This note is timed at 7 am. There are two blood gases that have been taken in the period that he's been on BiPAP. His pH is 7.27, which is acceptable. His PCO₂, the carbon dioxide in his blood, has risen slightly and we've decided or I've decided that we are going to move from BiPAP to CPAP. That was done at 6 am due to his pattern of breathing. So he's putting in lot of breaths himself and he doesn't look like he needs an inspiratory pressure to help him, he just needs a little bit of pressure remaining at the end of a breath so that he can clear carbon dioxide.

ASTBURY: So tell us, please, the difference between CPAP and BiPAP, if there is one.

DR A: There is. BiPAP gives a supporting pressure as the breath goes in and it gives a retained pressure as the breath goes out. CPAP just gives you a retained pressure at the end of a breath. It doesn't help with breathing in.

ASTBURY: Right. So again, forgive me, but what does that tell you as far as direction of travel in [Baby M]'s condition?

DR A: This is the next step down in respiratory support.

ASTBURY: Needing less and less?

DR A: Yes.

ASTBURY: I think you then record another gas. Is that at 08.00?

DR A: Yes, there's a gas at 8. The pH is slightly down and that's because the carbon dioxide level has gone up. So I've suggested at that time we're going to increase that end breath pressure to 6 centimetres of water. I would assume it was at 5 centimetres of water before this.

ASTBURY: Okay. So that's the pressure that's maintained whilst exhaling --

DR A: That's right.

ASTBURY: -- the air? Then is that -- but staying on CPAP; is that right?

DR A: Yes.

ASTBURY: "Baby settled on CPAP"; is that right?

DR A: Yes.

ASTBURY: And just those last couple of notes, please.

DR A: "No respiratory distress and the plan is to review his progress on the ward round."

MR ASTBURY: Thank you. Thank you, [Dr A]. I have no more questions. If you could wait there for a second, please.

MR MYERS: My Lord, we don't have any questions for [Dr A]. I should say there are a number of witnesses who will be called over this period of the case, the prosecution have their reasons for calling them, but for whom we won't have questions and we didn't ask them to attend but I wouldn't want anyone to think we have asked witnesses to come just so they can be here.

MR JUSTICE GOSS: No, no. Mr Myers, I hadn't thought that.

MR MYERS: Thank you, my Lord.

MR JUSTICE GOSS: Thank you for making that clear.

MR MYERS: I won't say that every time. I just want to say it now.

MR JUSTICE GOSS: There's no need to. All right.

[Dr A], that completes your evidence. Thank you very much for coming back and giving further evidence.

MR ASTBURY: We expect to see [Dr A] again.

MR JUSTICE GOSS: We will be seeing you again. So I'll repeat what I said to you before: please don't talk to anyone about anything to do with this case.

DR A: Certainly.

MR JUSTICE GOSS: Thank you very much indeed. Just remain where you are. Thank you.

Right, members of the jury. I've been told, whilst we had that slightly longer break than I'd anticipated we would have when the screen was put up, I was told that it won't be a full afternoon this afternoon. But unless you would wish otherwise, we'll just have our usual hour now and you'll finish earlier this afternoon.

It's because of the staff. Shall we just have the 1 hour as usual? None of you would like a longer lunch break? No. Back at 2 o'clock. But it will be an earlier finish this afternoon. You've heard the difficulties about having clinicians coming and give evidence and the competing priorities for their attendance. Things are done as best they can.

Thank you very much. 2 o'clock then. Please remember your responsibilities as jurors. I'll remind you because I haven't reminded you for a little while: no communication with anyone about anything to do with this case and no research. Thank you.

(In the absence of the jury)

MR ASTBURY: My Lord, to minimise disruption, I was thinking after lunch to call the other witness who requires screens and save the staff having to take them away, bring them back, so we'll go a little bit out of order.

I don't think it'll make any difference at all to the presentation.

MR JUSTICE GOSS: If it's fine by everyone else, it's certainly fine by me. It makes good sense. So we'll do it like that.

MR ASTBURY: We'll leave them where we are and resume with the witness in place.

MR JUSTICE GOSS: Thank you very much. 2 o'clock then.

(1.03 pm)

(The short adjournment)

(2.00 pm)

(In the presence of the jury)

MS BERNADETTE BUTTERWORTH (recalled)

Examination-in-chief by MR ASTBURY

MR ASTBURY: If we start with your full name, please.

BUTTERWORTH: Bernadette Butterworth.

ASTBURY: Thank you. Nurse Butterworth, you have given evidence before --

BUTTERWORTH: Yes.

ASTBURY: -- but I think for today's purposes you've been reminded that you were working a night shift from 8 April 2016 into 9 April 2016?

BUTTERWORTH: Yes.

ASTBURY: And that was at the neonatal unit at the Chester?

BUTTERWORTH: It was.

ASTBURY: Did you, may I ask, at any time during the course of that shift administer insulin to a baby named [Baby L]?

BUTTERWORTH: No, I didn't.

MR ASTBURY: Thank you. Wait there, please.

MR MYERS: No questions, thank you.

MR JUSTICE GOSS: That completes your evidence. Thank you very much.

MR ASTBURY: May be back, we are not in a position to confirm positively yet.

MR JUSTICE GOSS: Right. I hope the witness won't be brought back to be asked just a single question.

MR ASTBURY: No. The circumstances of this case are such that --

MR JUSTICE GOSS: I know, but I'm just wondering in terms of convenience, if it is such a very narrow issue, obviously we're not prepared for it now, but there we are.

All right, thank you very much. Well, sorry.

Straight out again.

(The witness withdrew)

(Pause)

(In the absence of the jury)

MR ASTBURY: The next witness will not be coming back.

MR JUSTICE GOSS: Will not be coming back? Thank you very much.

(In the presence of the jury)

MR ASTBURY: I recall Valerie Thomas, please.

MS VALERIE THOMAS (recalled)

Examination-in-chief by MR ASTBURY

MR ASTBURY: Could you just say your name for the record, please?

THOMAS: Valerie Thomas.

ASTBURY: Thank you. Nurse Thomas, you've given evidence before.

We've heard that you were a nursery nurse employed at the Countess of Chester Hospital in the neonatal unit.

THOMAS: Yes.

ASTBURY: And that was the case certainly back in 2016?

THOMAS: Yes.

ASTBURY: And you've been reminded that you worked a night shift between 8 April of that year into the morning of 9 April that year?

THOMAS: Yes.

ASTBURY: I'd like to ask you, please, whether at any time during the course of that shift you administered a baby by the name of [Baby L] with insulin.

THOMAS: No, I didn't.

MR ASTBURY: Thank you.

MR MYERS: No questions.

MR JUSTICE GOSS: Thank you very much. That completes your evidence. I am told that you will not be required to give evidence again.

THOMAS: Right.

MR JUSTICE GOSS: If that changes, you will be notified, but I was told you would not be required again. But just in case -- and it must be the remotest of possibilities -- you are required and out of an abundance of caution, don't talk to anyone about this case or anything to do with this case until it's finished, please. Thank you very much indeed.

(The witness withdrew)

Witness statement of MS SAMANTHA O'BRIEN (read)

MR ASTBURY: My Lord, there are two statements we could read this afternoon.

MR JUSTICE GOSS: Thank you very much, yes.

MR ASTBURY: Beginning, please, with Samantha O'Brien, whose statement begins at my Lord's bundle, page 10.

In a statement dated 31 October 2017, she says this:

"I am making this statement in regard to my time working at the Countess of Chester Hospital where I was employed as a nurse in the neonatal unit.

"I started full-time work at the Countess in January 2016. I worked there until July 2017. All of my time at Chester was spent working in the NNU.

"I have been given copies of the nursing notes and would make the following comments.

"[Baby M]. I was not present for [Baby M]'s birth and did not care for him immediately. I came in for a night shift on 9 April 2016 and was assigned to be his designated nurse.

"I was told that he had been very poorly during the preceding day shift and had been placed on a ventilator for my shift. He improved quickly during the night I cared for him and he came

off the ventilator at 3.30 am and on to CPAP. I don't know the specific details of the collapse during the day as I was not present for his resuscitation.

"His designated nurse who I took over from, who had been on duty when I collapsed, was Lucy Letby. I think another nurse had been caring for him in the morning, but Lucy took over when he became poorly as she had an extra qualification.

"It is normal for nurses to conduct a handover between shifts and I recall Lucy describing it as a 'long resuscitation' when we talked about [Baby M]. She told me that they had been just about to stop their efforts when they got a heart rate. I don't recall being told why [Baby M] had collapsed. To my knowledge it was never found out."

That's the night shift of the 9th.

Witness statement of MS LAURA EAGLES (read)

MR ASTBURY: If I could move to page 14, please, in my Lord's bundle. It is a statement from Laura Elizabeth Eagles dated 27 February 2018. She says this:

"Further to my previous statement, I have been asked for my recollections of 10 April 2016 and, in particular, my recollections of a baby on the neonatal unit by the name of [Baby M].

"To assist my memory, I have viewed [Baby M]'s nursing notes for that day. I am aware that [Baby M] suffered a collapse on 9 April 2016. I did not work on the 9th so I have no memory of [Baby M] prior to the 10th.

"I would say that [Baby M] was in reasonably good health. He was still nil by mouth and he still had lines in providing medication and intravenous fluids. [Baby M] was still in nursery 1 and classed as intensive care.

"I note from my nursing notes that I have made no specific entries in relation to the way he looked. This would suggest that his appearance was fine as I will always make entries noting any abnormalities or concerns.

"I have been asked about the entry I made in the nursing notes at 17.38 in relation to apnoeas."

My Lord, I wonder if we could pause there and just put up the relevant nursing note, please. It's at tile 401, Mr Murphy.

In fact, it's timed at 17.28, my Lord. So the error is in the statement. But if we could look at the note, please, or certainly the first tile behind.

If I can read it for the record:

"Care taken over at 08.00. CBG at 08.00 not as good, so PEEP increased to 6.5 centimetres by [Dr A]. Repeat at 12.00 much improved. Has had 2 apnoeas, one needing vigorous stimulation and increased oxygen, and one needing Neopuffing. Commenced on caffeine by Dr Gibbs. Has been much better since. Resps remain between 20 to 30 per minute. Has been in air, 30% oxygen all day. Antibiotics given as prescribed. Cannula in right hand was puffy, so splint removed. Has flushed fine this afternoon. UVC in situ with TPN and lipid infusing. Limbs warm and pink. SBR remains below treatment line. Fluids increased to 90ml/kg, nil by mouth with minimal aspirates. Abdo non-distended. Passed urine. Bowels not opened."

Nurse Eagles continues:

"I have viewed this entry and I can state there is nothing unusual about anything within the entry. All this is normal for premature babies and [does] not cause alarm. [Baby M] was started on caffeine at this time, which is the normal treatment for this. There were no significant events in relation to [Baby M] on the 10th and, given the fact that he had come off the ventilator quite quickly after suffering his collapse, I am of the opinion that [Baby M] recovered well from the collapse less than 25 hours earlier. I can also state that no concerns were raised by [Baby M]'s parents during visits."

That concludes Nurse Eagles' statement, my Lord.

MR JUSTICE GOSS: Thank you.

MR ASTBURY: There's mention of Dr Gibbs in the note. We'll hear from Dr Gibbs tomorrow.

MR JUSTICE GOSS: But not available this afternoon?

MR ASTBURY: No.

MR JUSTICE GOSS: Right.

Well, it's even shorter than I'd anticipated. Just in terms of tomorrow, obviously Dr Gibbs tomorrow. And are we then moving on to the experts?

MR ASTBURY: Yes. Some more nurses to deal with, a discrete issue in respect of [Baby L], some more evidence read, and then we'll be moving on to Doctors Evans and Bohin.

MR JUSTICE GOSS: There we are. You know the pattern. So that'll be for tomorrow. All right? Thank you very much. Remember your obligations of which I reminded you briefly before the short break. 10.30 tomorrow morning then, please. Thank you very much indeed.

(In the absence of the jury)

MR JUSTICE GOSS: I presume you would like to --

MR MYERS: There will be a brief visit, my Lord, yes.

MR JUSTICE GOSS: Thank you very much.

(2.17 pm)

(The court adjourned until 10.30 am on Thursday, 23 February 2023)