

20 March 2023

Baby P

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Monday, 20 March 2023

(10.30 am)

(In the presence of the jury)

MRS CLAIRE HOCKNELL (continued)

Examination-in-chief by MR JOHNSON (continued)

MR JUSTICE GOSS: Mr Johnson.

MR JOHNSON: Mrs Hocknell, we'd got to 448, please. I think we had just dealt with that particular tile, which is the giving of an adrenaline bolus recorded by [Dr A].

HOCKNELL: Yes.

JOHNSON: So if we move on, please, at 449 to Lucy Letby's nursing note timed at 12.47. If we could just click on that, please.

That's her record of the same event; is that right?

HOCKNELL: Yes.

JOHNSON: Then at 450, please, we've got the record on the computer, signed and countersigned by Dr Burke and Lucy Letby.

HOCKNELL: Yes.

JOHNSON: Then at 451, that same information recorded on the resuscitation record.

HOCKNELL: Yes.

JOHNSON: Then at 452, the scribe wrote -- and if we just have a look at this, please, at the original, please.

So this is a running record. As we can see, that started with CPR at 9.50 that morning. If we scroll down, please, Mr Murphy, we can see that we're dealing at this stage with the CPR that started at 12.28.

HOCKNELL: Yes.

JOHNSON: And we're dealing at this specific point with the adrenaline number 5 at 12.50, where it also says, "CPR stopped".

HOCKNELL: Yes.

JOHNSON: If we scroll up the page again, please. We can see CPR at 09.50, followed by -- which then restored spontaneous calculation. We see CPR at 11.30 and this is the third set of CPR on this specific day, which is Friday, 24 June.

HOCKNELL: Yes.

JOHNSON: So that's tile 452. Continuing with the sequence, at tile 453, [Dr A]'s record of an adrenaline bolus being given.

HOCKNELL: Yes.

JOHNSON: Followed at 454 by Dr Burke and Nurse Lucy Letby recording the administration of a bolus of 20ml of sodium chloride.

HOCKNELL: Yes.

JOHNSON: That is also recorded by the scribe in that note that we just looked at at tile 455?

HOCKNELL: Yes.

JOHNSON: And in the clinical notes at 456, by [Dr A]?

HOCKNELL: Yes.

JOHNSON: ROSC, if we click on this because it came up on Friday, I now know the answer, was an abbreviation that I don't think we had worked out on Friday. "Restoration of spontaneous circulation", I think, is what it stands for.

At 457 next, please, the resuscitation record records the recommencement of compressions.

HOCKNELL: Yes.

JOHNSON: And this is then a WhatsApp message from [Nurse E] to Lucy Letby at the same time at 458?

HOCKNELL: Yes.

JOHNSON: That reads:

"Hope you're having [an] okay day."

So back to the carousel, please, and at 459 [Dr A] recorded the administration of sodium bicarbonate, which is recorded in the IV and subcutaneous infusion prescription chart at 460 by Dr Burke.

At 461, there is also a record of that, or a bolus of that, noted by Dr Burke and Lucy Letby?

HOCKNELL: Yes.

JOHNSON: And also on the resuscitation record at 462?

HOCKNELL: Yes.

JOHNSON: At 463, [Dr A], at 12.55, records a second fluid bolus of 12ml per kilo?

HOCKNELL: Yes.

JOHNSON: And at 464 we have the observation chart at 13.00 hours, together with the intensive care chart and the fluid requirement at 465 at the same time.

HOCKNELL: Yes.

JOHNSON: Thank you. At 466, also at 13.00 hours, do we have the neonatal unit intensive care chart equipment settings with data recorded by Lucy Letby?

HOCKNELL: Yes.

JOHNSON: If we just, just to sort of recalibrate ourselves, look at that please, and get the original.

Here we have 13.00 hours and we can see a number of readings recorded. And if we go all the way to the bottom we can see Lucy Letby's initials against those three columns which are timed at 13.14 and 15.00 hours respectively.

HOCKNELL: Yes.

JOHNSON: Thank you.

At 467, please, do we have [Dr B]'s notes concerning a conversation that she had with Dr Rackham, the transport consultant from Arrowe Park?

HOCKNELL: Yes.

JOHNSON: And at 468, at 13.03 hours, some door swipe entry data for [Dr B] coming into the neonatal entrance?

HOCKNELL: Yes.

JOHNSON: Followed by the same record, 2 minutes later, at 13.05, tile 469?

HOCKNELL: Yes.

JOHNSON: And also the same door being passed through by Lucy Letby at 13.05, tile 470?

HOCKNELL: Yes.

JOHNSON: At 471, at the same time, 13.05, is there a note of dobutamine being administered to [Baby P], signed by Dr Cooke and countersigned by both Lucy Letby and Christopher Booth?

HOCKNELL: Yes.

JOHNSON: Followed at 472 by further door swipe data for Lucy Letby, timed at 13.06?

HOCKNELL: Yes.

JOHNSON: Then at 473, timed at 13.10, Lucy Letby's nursing note, which, as with all the other nursing notes, she made much later that evening at 21.18?

HOCKNELL: Yes.

JOHNSON: If we just look at that, please. That records that dobutamine was commenced, inotropes running via peripheral line in right arm?

HOCKNELL: Yes.

JOHNSON: At 474, timed at 13.10, do we have that dobutamine recorded by the scribe --

HOCKNELL: Yes.

JOHNSON: -- on those rough notes, as we do at 475?

HOCKNELL: Yes.

JOHNSON: But at 475 we also have a heart rate and other measurements recorded?

HOCKNELL: Yes.

JOHNSON: At 476 at 13.10, do we have [Dr A]'s note of the dobutamine being commenced?

HOCKNELL: Yes.

JOHNSON: Then at 477, [Dr B]'s notes concerning this particular resuscitation and the administration of dopamine and dobutamine?

HOCKNELL: Yes.

JOHNSON: At 478 do we have door swipe data for Angela McShane, followed at 479 by door swipe data for Dr Brearey?

HOCKNELL: Yes.

JOHNSON: At 480 is an infusion prescription for sodium chloride, signed off by Dr Burke and Lucy Letby?

HOCKNELL: Yes.

JOHNSON: Then at 481 in the nursing notes, Lucy Letby has made a note of that sodium bicarbonate. If we just look at that, please. It says:

"Sodium bicarbonate infusion commenced via second peripheral line in left hand."

So that appears to establish that there are two peripheral lines running into [Baby P].

HOCKNELL: Yes.

JOHNSON: At 482, at 13.25, did the scribe record the administration of sodium bicarbonate?

HOCKNELL: Yes.

JOHNSON: Then at 483, also at 13.25 hours, Lucy Letby made a further nursing note. If we go to that, please. Does that record:

"Hydrocortisone given via IO line along with metronidazole at 13.25"?

HOCKNELL: Yes.

MR JUSTICE GOSS: Did you say via the IO line?

MR JOHNSON: I thought I did.

MR JUSTICE GOSS: It's a different means of access. It's intraosseous, with which we're now familiar.

MR JOHNSON: Yes, thank you.

At 484 there is a further note made by Lucy Letby.

If we can go to this, please. Does that record:

"Some drugs via peripheral line, some via IO access"?

So precisely the point his Lordship has just made and then:

"Morphine discontinued as nil access to run. 10% stopped as [Baby P] receiving over fluid requirements through infusions. Right arm with inotropes in noted [maybe that should be 'is noted'] to be swelling and digits purple. Trace blood obtained from NG tube. [Baby P] pale."

So that again is a note made at 21.18; is that right?

HOCKNELL: Yes.

JOHNSON: At 485, is there some door entry data for Dr Burke?

HOCKNELL: Yes.

JOHNSON: At 486, a further door entry for Dr Burke?

HOCKNELL: Yes.

JOHNSON: Then the scribe, at 487 and 488, records the administration of the infusion of bicarbonate?

HOCKNELL: Yes.

JOHNSON: Together with the same information recorded by [Dr A]?

HOCKNELL: Yes.

JOHNSON: If we go to -- sorry, then at 489 through to 491, door swipe data between 13.27 and 13.30 for Dr Burke and [Dr B].

HOCKNELL: Yes.

JOHNSON: Whilst all that's going on, at 492 do we have a text or a WhatsApp message sent by Lucy Letby to [Nurse E]?

HOCKNELL: Yes.

JOHNSON: Just to remind ourselves, [Nurse E] had sent Lucy Letby a message a few minutes earlier; is that right?

HOCKNELL: Yes.

JOHNSON: At 12.50:

"Hope you having okay day."

This is 13.30, so 40 minutes later. What did Lucy Letby send to [Nurse E]?

HOCKNELL: "Another triplet collapsed."

JOHNSON: Is that followed almost immediately, at 493, by [Nurse E] replying:

"What? Is it okay?"

HOCKNELL: Yes.

JOHNSON: Do we then have four sets of door swipe data, a pair for Nurse Angela McShane and a pair for [Dr B]?

HOCKNELL: Yes.

JOHNSON: They are timed at 13.31 through to 13.36. At tile 498, timed at 13.38, are there some blood gas results for [Baby P]?

HOCKNELL: Yes.

JOHNSON: Followed by, at 499, at the same time, a manuscript record of those results made in the gas chart by Lucy Letby?

HOCKNELL: Yes.

JOHNSON: Again, we'll deal with these with the medics in due course, but also at the same time, tile 500, do we have notes made by [Dr A] recording some of these gas results?

HOCKNELL: Yes.

JOHNSON: Then at 501, timed at 13.41 and 26 seconds, did Lucy Letby respond to [Nurse E]'s question, "What?

Is it okay?" with a message?

HOCKNELL: Lucy Letby replied, "No, resus".

JOHNSON: 502, door swipe data for Angela McShane and then [Nurse E]'s response to that message coming about 5 minutes later saying:

"You looking after them? Okay since resus?"

HOCKNELL: Yes.

JOHNSON: Then door swipe data for Dr Ukoh at 504, timed at 13.58?

HOCKNELL: Yes.

JOHNSON: Followed by 14.00 hours by three tiles, 505 through to 507, recording [Baby P]'s vital signs, the fluid requirements and administration, what was being administered, and also the intensive care chart data, all manually recorded by Lucy Letby?

HOCKNELL: Yes.

JOHNSON: Thank you. At 508 and 509, is there door swipe data for both Dr Burke and Lucy Letby at 14.06 and 14.11 hours respectively?

HOCKNELL: Yes.

JOHNSON: Followed by a figure recorded by the scribe at 14.15 at tile 510, which simply reads, "68??" and then "(52)"?

HOCKNELL: Yes.

JOHNSON: At tile 511 is there door swipe data for [Nurse D] coming into the neonatal unit?

HOCKNELL: Yes.

JOHNSON: Followed, at tile 512, by some blood results recorded by [Dr B]?

HOCKNELL: Yes.

JOHNSON: Then at 513 a note made by a pharmacist, Alice Rafferty, concerning the administration of pancuronium?

HOCKNELL: Yes.

JOHNSON: At 514 did Dr Burke and Lucy Letby record at 14.30 the administration of Curosurf, a surfactant?

HOCKNELL: Yes.

JOHNSON: Then at 515, also at 14.30, [Dr A] recorded the administration of hydrocortisone?

HOCKNELL: Yes.

JOHNSON: At 516, at the same time, in her retrospective nursing notes did Lucy Letby make a note concerning the administration of surfactant?

HOCKNELL: Yes.

JOHNSON: And can you just tell us what she wrote, please?

HOCKNELL: "240 milligrams surfactant given. Stable on ventilator. Blood gases as charted."

JOHNSON: Thank you. At 517, 518 and 519 are there further notes made by [Dr A] and the scribe relating to the administration of metronidazole, hydrocortisone and Curosurf?

HOCKNELL: Yes.

JOHNSON: Then some door swipe data at tile 520, timed at 14.31, for Dr Brearey?

HOCKNELL: Yes.

JOHNSON: Then the WhatsApp conversation recommences at tile 521 with a message from Lucy Letby to [Nurse E], timed at 14.31?

HOCKNELL: Yes:

"I've got him. Everybody involved. They unwell. Waiting for transport."

JOHNSON: At 522 did [Nurse E] respond, "Bloody hell", followed by a social message at tile 523?

HOCKNELL: Yes.

JOHNSON: We then have door swipe data for [Dr B] at tile 524 timed at 14.45, but the WhatsApp conversation continued at 525 with a message from Lucy Letby to [Nurse E]?

HOCKNELL: Yes:

"Meant very unwell. Just grabbing quick drink. Got 2 IO access and chest drain. Gases are appalling. On triple inotropes. Not sure where we go from else."

JOHNSON: That's corrected in the next text, I think, to "here", "Where we go from here".

And then at 527 there was some social messaging from Lucy Letby to [Nurse E] at about -- I think it's actually about 7 seconds after that other message.

HOCKNELL: Yes.

JOHNSON: At 528, door swipe data recording the reappearance of Dr Brearey?

HOCKNELL: Yes.

JOHNSON: Then Lucy Letby sent some emojis, which probably speak for themselves --

HOCKNELL: Yes.

JOHNSON: -- to [Dr A] at 14.55?

HOCKNELL: Yes.

JOHNSON: We then have, at 530 through to 533, between the hours of 14.56 and 14.59, door swipe data relating to [Dr B] and to Lucy Letby?

HOCKNELL: Yes.

JOHNSON: Just putting the door swipe data into the context of the messages sent to [Dr A] and to [Nurse E], there have been three messages sent at 14.48 by Lucy Letby to [Nurse E], those emojis at 14.55 by Lucy Letby to [Dr A], and then Lucy Letby

comes into the unit at tile 533 at 14.59, in other words, 4 minutes after those two emojis that she'd sent to [Dr A]?

HOCKNELL: Yes.

JOHNSON: At tile 534 were [Baby P]'s vital signs noted on the chart, timed at 15.00, by Lucy Letby?

HOCKNELL: Yes.

JOHNSON: Did Lucy Letby then, at 535, make a note in the nursing notes?

HOCKNELL: Yes.

JOHNSON: Can you tell us what she recorded, please?

HOCKNELL: "Pigtail chest drain inserted by Registrar [Dr A]."

JOHNSON: At 536, also timed at 15.00 hours, did Lucy Letby record various data in the fluid requirements/intensive care chart?

HOCKNELL: Yes.

JOHNSON: Together with other information in the equipment settings chart at tile 537?

HOCKNELL: Yes.

JOHNSON: At 538 did the door swipe data record the arrival or re-arrival of [Dr B] back into the NNU entrance doors?

HOCKNELL: Yes.

JOHNSON: At 539 do we have [Dr A]'s notes, also timed at 15.00 hours, concerning his insertion of the pigtail chest drain --

HOCKNELL: Yes.

JOHNSON: -- which the jury may recall is actually shown in one of the radiographs that we saw on Friday?

HOCKNELL: Yes.

JOHNSON: Did [Dr B] at 15.00 hours, tile 540, record the arrival of Dr Rackham with the transport team?

HOCKNELL: Yes.

JOHNSON: Then at 541 through to 543, is there door swipe data covering the period 15.06 to 15.10 relating to Dr Brearey?

HOCKNELL: Yes.

JOHNSON: You have then put a tile in at 544 recording a further event related to [Baby P]; is that right?

HOCKNELL: Yes.

JOHNSON: That's followed at 545 by [Dr A]'s notes recording:

"Cardiorespiratory arrest, CPR commenced, 15.14."

That time is replicated by the scribe at tile 546; is that right?

HOCKNELL: Yes.

JOHNSON: We'll look at that, please. Up at the top, please, Mr Murphy. 15.14, "CPR" is underlined. We then have what we now recognise as a fairly predictable sequence of the administration of adrenaline and bicarbonate and other drugs, which are timed in steps.

HOCKNELL: Yes.

JOHNSON: At 547, did the door swipe data record Christopher Booth passing through the entrance doors at 15.14?

HOCKNELL: Yes.

JOHNSON: Then at 548, 15.15, did Lucy Letby make a note concerning the arrival of the transport team?

HOCKNELL: Yes.

JOHNSON: Go to that and you can tell us what she wrote, please.

HOCKNELL: "Transport team arrived. Consultant [Dr B] had liaised with them during the day. Further collapse shortly after arrival. Resuscitation as documented in medical notes."

JOHNSON: Do we then have a sequence of tiles, from 549 onwards, recording the administration of adrenaline, sodium bicarbonate and phenobarbitone?

HOCKNELL: Yes.

JOHNSON: And that runs through tiles 551, 551, 552, 553, 554, 555, 556, 557, 558, 559, 5560, 561, 562, 563, 564, 565, 566, 567, 568, 569.

At tile 570 we have door swipe data for Angela McShane?

HOCKNELL: Yes.

JOHNSON: At 571, the litany of drugs being given to [Baby P] recommences at 15.35. So that's tiles 571 and 572. At 573, what's recorded as -- if we look at 573, please.

We will be hearing from [Dr A] in a moment, but a relatively -- a sort of entry we've not seen before here:

"High dose adrenaline, 0.6ml."

Followed by the X-ray report at 574, which we saw with Dr Arthurs, Professor Arthurs, on Friday. Then the litany of resuscitation drugs recommences at 575 with adrenaline and at 576, 577.

Some door swipe data for [Nurse D] at 578, but the drugs again at 579, 580 and 581.

We then come to [Nurse E]'s response to Lucy Letby's message that she'd sent a short while earlier. The substantial message read:

"Meant very unwell. Just grabbing quick drink. Got 2 IO access and chest drain. Gasses are appalling, on triple inotropes. Not sure where we go from here."

And [Nurse E] responded at 582:

"Oh how sad! What about the third?"

HOCKNELL: Yes.

JOHNSON: Then door swipe entry at 583 and 584 for Dr Brearey and [Nurse D].

Meanwhile, the resuscitation drugs were still being administered. Atropine at 585 and 586, noted by Lucy Letby at 587.

HOCKNELL: Yes.

JOHNSON: Also noted by Dr Burke at 588?

HOCKNELL: Yes.

JOHNSON: Together with sodium bicarbonate at 589?

HOCKNELL: Yes.

JOHNSON: Replicated by the scribe at 590.

At 591 and 592, the seventh dose of adrenaline.

HOCKNELL: Yes.

JOHNSON: Followed by, at 593, [Dr A]'s notes that he will take us through when he gives evidence when you have finished. Then Lucy Letby's notes timed at 16.00 hours, tile 594, recording the administration of dopamine, dobutamine, adrenaline and bicarbonate.

HOCKNELL: Yes.

JOHNSON: Did the scribe then at 595 also at 16.00 simply write "Stop"?

HOCKNELL: Yes.

JOHNSON: That coincides with, at 596, [Dr A]'s notes timed at 16.00 hours, reading:

"Resuscitation stopped at 16.00. Returned to parents. See notes by Dr Rackham."

HOCKNELL: Yes.

JOHNSON: At 597, is there a note made by Lucy Letby relating to this event --

HOCKNELL: Yes.

JOHNSON: -- which was, of course, the death of [Baby P]? Can we go to her note, please?

HOCKNELL: "Consultant [Dr B] and Registrar [Dr A] present throughout. Consultant Gibbs and Brearey and SHO Burke also assisting at times. Decision made with parents to stop resuscitation efforts at 16.00. [Baby P] given to parents to hold."

JOHNSON: Thank you. At 598 you've put in a tile marking the time of [Baby P]'s death and then at 599 we go back to Lucy Letby's notes, which concern her communications with [Baby P]'s parents. Can we go to that, please?

HOCKNELL: "Parents present and updated throughout. Aware of how ill [Baby P] was and that transport team were coming to take him to Liverpool Women's Hospital. Baptism offered and accepted. Parents held [Baby P] as he passed away and have spent time with him and sibling [Baby O] (RIP)."

JOHNSON: Thank you. At tile 600, timed at 16.12, is there door swipe data for Lucy Letby coming into the unit?

HOCKNELL: Yes.

JOHNSON: Then at 601, is there a retrospective note made by [Dr B]?

HOCKNELL: Yes.

JOHNSON: Followed by a series of tiles showing door swipe data between tiles 602 and 610, relating to Christopher Booth, Nurse Booth, Dr Brearey, Dr Cooke, and [Nurse D]?

HOCKNELL: Yes.

JOHNSON: Do we then have a WhatsApp sent by Lucy Letby at tile 611 timed at 17.04 to [Nurse E]?

HOCKNELL: Yes:

"Life is too sad."

JOHNSON: Followed almost immediately by a further message?

HOCKNELL: "Lost another and 3rd going to Women's."

JOHNSON: At 613 and 614 is there door swipe data entry for Drs [Dr B] and Brearey?

HOCKNELL: Yes.

JOHNSON: Followed by a series of messages from [Nurse E] in response, starting at 615 at 17.12.14, saying:

"OMFG! What the hell is going on?"

And 6 seconds later:

"Don't know what to say."

A further 7 seconds later:

"Will have a big hug for you when I get there."

Did Lucy Letby respond about 1 hour and 22 minutes later, tile 1618?

HOCKNELL: This is a message to [Dr A].

JOHNSON: I beg your pardon, yes.

HOCKNELL: "Just going to dress him and take footprints. Hope you are okay."

JOHNSON: Did [Dr A] respond:

"I'm okay, thanks. Are you? Just working through the handover."

HOCKNELL: Yes.

JOHNSON: There's then some door swipe entry for Lucy Letby coming back into the unit?

HOCKNELL: Yes. There's a further message to [Dr A] at 18.39:

"Yes, I think so."

Then a minute later:

"Not sure it's really hit me yet."

JOHNSON: Did [Dr A] respond with a sad face emoji and, "I know"?

HOCKNELL: Yes.

JOHNSON: Do we then have further door swipe entry showing that Lucy Letby went from the labour ward into the neonatal unit?

HOCKNELL: Yes.

JOHNSON: Is tile 625, timed at 19.00 hours, part of [Dr B]'s retrospective note --

HOCKNELL: Yes.

JOHNSON: -- relating to a very short summary of the treatment that had been given to [Baby P] together with the fact that [Baby R], the third triplet, was to be transferred to Liverpool Women's Hospital?

HOCKNELL: Yes.

JOHNSON: Thank you. At 626 and 627 we have further door swipe entry for Lucy Letby going into the neonatal unit from the labour ward?

HOCKNELL: Yes.

JOHNSON: Then does the messaging recommence at 628, about 2 hours later, just less than 2 hours later, 21.08.54, a text message from Sophie Ellis to Lucy Letby saying:

"Hey Luce, hope you're okay. Heard poor little [Baby P] has been to Liverpool. What happened?"

HOCKNELL: Lucy Letby replied:

"Hi, if you've got chance, ring the portable unit phone and I'll speak to you. Too much for a text."

And then a further message:

"Actually, you are at the races. Sorry, I forgot. Don't worry about ringing. Will text you tomorrow."

JOHNSON: Is there then a retrospective note made by Lucy Letby 8 minutes later at 21.18 at tile 631?

HOCKNELL: Yes, I think this is actually when she made the notes on the computer.

JOHNSON: All right. This is at the time when she's -- let's look at the entry itself, if possible, please, just to get the timings of it. If we look at the original, please.

This is the total note, isn't it?

HOCKNELL: Yes.

JOHNSON: If we can scroll down a bit -- up a bit further.

HOCKNELL: It's a continuation.

JOHNSON: It's a continuation of the note at 21.18?

HOCKNELL: Yes.

MR JUSTICE GOSS: I think if you scroll up... I'd noticed that there was... Anyway.

MR JOHNSON: We can always revisit it if it becomes relevant, it's in evidence.

This records, doesn't it, that lines, ET tubes and chest drains remained in situ as did -- but the intraosseous access was removed as the needle had penetrated through [Baby P]'s limb?

HOCKNELL: Yes.

JOHNSON: Do we then have a message from [Dr A] at 632, asking:

"Have you been seen yet?"

Timed at 21.19?

HOCKNELL: Yes. Lucy Letby replies --

MR JUSTICE GOSS: Sorry, just pause for a moment. The display is running behind. There we are. We are back on again now.

MR JOHNSON: The question from [Dr A] was, "Have you been seen yet?" at 21.19. This is the response from Lucy Letby.

HOCKNELL: "Yes. Just got back. Heard all the crash bleeps going off. I made a fool of myself whilst there."

JOHNSON: He then said:

"I asked them to be quick for you."

And then Sophie Ellis replied:

"Okey dokey, hope you're okay."

So that's a response to, "Too much for a text, ring on the ward phone" --

HOCKNELL: Yes.

JOHNSON: -- and then, "Sorry you're at the races".

Then [Dr A] responded:

"Which bleeps? We had a paed trauma call."

HOCKNELL: Yes. Lucy Letby replied to Sophie Ellis:

"You don't want to hear about it. Enjoy your night."

JOHNSON: Then [Dr A] sent a message:

"How did you make a fool of yourself?"

HOCKNELL: And Lucy Letby replied:

"Did you really? They said someone had asked for me to be seen ASAP and they knew what had happened today."

There's a further one:

"Crash call for trauma."

JOHNSON: Did Sophie Ellis send a message with a question:

"Similar to [Baby O]?"

HOCKNELL: Yes. Lucy Letby replied to [Dr A]:

"Everyone talking about it whilst I was there."

Sent a further message:

"I fainted."

JOHNSON: And then to Sophie Ellis in answer to, "Similar to [Baby O]"?

HOCKNELL: She replied, "Yeah".

JOHNSON: Sophie Ellis then sent a message saying:

"Oh God! What time was this?"

Followed by [Dr A]:

"I asked them to see you quickly as a favour, but I didn't give any details about today. Maybe someone from the unit also called."

HOCKNELL: Yes and then Lucy Letby replied to Sophie Ellis:

"Went off about 10."

JOHNSON: [Dr A] then sent:

"Oh. Are you okay now?"

HOCKNELL: Lucy Letby replied:

"Thank you. It did the job. Maybe the coordinator told them."

Then again:

"Bit Ricky."

And then corrected:

"Bit shaky but okay. Writing my notes."

JOHNSON: Sophie Ellis to Lucy Letby:

"Bless him. Any signs before? Sorry for the questions, I'm worried."

HOCKNELL: Lucy Letby replied to [Dr A]:

"They were reluctant to let me go as on my own."

She then replied to Sophie Ellis:

"Just blew tummy up and had apnoeas. Downward spiral, similar to [Baby O]."

And further:

"Least [Baby R] has gone."

JOHNSON: [Initials of Baby R], [Baby R]?

HOCKNELL: Yes.

JOHNSON: Did [Dr A] then send a message:

"You could have bleeped me. I'm almost a responsible adult."

And then did Sophie Ellis ask a question:

"Has [Baby P] gone to Liverpool"?

HOCKNELL: Yes. Lucy Letby replied to [Dr A]:

"I did think about it but thought you would be in resus."

"I'm okay anyway."

Then Lucy Letby replied to Sophie Ellis:

"No, he passed away. [Initials of Baby R] has gone."

JOHNSON: [Dr A] asked:

"Do you need a lift home?"

HOCKNELL: "No, I'll be okay, thanks. Not finished yet anyway. Have you finished?"

JOHNSON: And he said:

"I can wait, it's no problem. Yes, finished just yet a free mins ago."

Which may mean "a few mins ago".

HOCKNELL: Lucy Letby replied to [Dr A]:

"Can you give me 10 min?"

JOHNSON: He replied, "Okay". Then did Sophie Ellis send a message saying:

"I'm so sorry, Luce"?

HOCKNELL: Yes.

JOHNSON: Do we then have a note made in the family communications note at 20.00 hours?

HOCKNELL: Yes.

JOHNSON: Can you deal with that for us, please?

HOCKNELL: The remainder of the summary is:

"I have dressed [Baby P] at their request and taken photos of [Baby P] and [Baby O] together. Support ++ given to parents and extended family. Time spend on Lavender Suite as a family. Mum discharged and parents have gone to Liverpool Women's Hospital to be with sibling [Baby R]."

JOHNSON: Did she then send a message to [Dr A] at 22.03?

HOCKNELL: Yes, "I'm done".

JOHNSON: Did Lucy Letby's mum Susan Letby then send a message saying, "Are you okay?"

HOCKNELL: Yes. Lucy Letby replies to Susan Letby:

"Yes, thanks. Bed in a min."

JOHNSON: Did [Dr A] send a message saying:

"Just outside the front door"?

HOCKNELL: Yes. And Lucy Letby replied to [Dr A]:

"Yes, 2 secs."

JOHNSON: Did Susan Letby then send a message:

"Night. God bless"?

HOCKNELL: Yes. A short while later Lucy Letby sent a message to [Nurse E]:

"Sorry I didn't say bye. Just wanted to get home. Got all sorted in A&E quite quickly thankfully."

JOHNSON: Did she then sent three kisses to Sophie Ellis at tile 677 at 22.18 hours.

HOCKNELL: Yes.

JOHNSON: Did [Nurse E] then respond at tile 678, 22.37:

"No worries. Glad got sorted. Hope manage to sleep. See you in the morning."

HOCKNELL: Yes. Lucy Letby replied to [Nurse E]:

"Hope your night okay."

JOHNSON: Did Lucy Letby then send a series of social messages to [Dr A] between 23.24 and 23.38 at tile 680?

HOCKNELL: Yes.

JOHNSON: Then at 681 at 23.39, a further message?

HOCKNELL: Yes:

"Thanks for the lift and for talking to A&E."

JOHNSON: Did [Dr A] respond at 682 at 23.46:

"I couldn't have you walking back in the dark after a rubbish day, mini needlestick and an A&E faint. I help A&E out with many paed's problems and they said they would try and speed things up for you"?

HOCKNELL: Lucy Letby replied:

"Thank you, appreciated."

JOHNSON: [Dr A] then responded:

"Did you talk to Belinda about allocation for tomorrow?"

HOCKNELL: Lucy Letby replied:

"Yes, she's going to try and give me a lighter workload but said will have to see how it goes overnight with 30-weeker and twins delivering. Only 5 of us on too."

JOHNSON: At 686 were there some work-related but not relevant to [Baby P] messages sent by [Dr A] to Lucy Letby?

HOCKNELL: Yes.

JOHNSON: Followed by at tile 687, 2 minutes after midnight:

"What are you doing? I can't concentrate on anything."

HOCKNELL: Yes. Lucy Letby replied:

"Wanting to."

And then a crying face emoji.

JOHNSON: [Dr A]:

"Did in car. Must have looked a right mess when I got in."

Is there then some private messaging relating to a third party, which isn't relevant, passing between the same two people?

HOCKNELL: Yes.

JOHNSON: Followed by a further message from Lucy Letby at 00.09 at tile 692?

HOCKNELL: Yes:

"Okay. I keep thinking of them both in cot together. So peaceful, yet beyond words for awful it is."

JOHNSON: And did [Dr A] respond at 00.17, tile 694:

"I know. Dad was pushing them back to you in CLS when I was looking for the needlestick guide. He stopped and thanked me. I gave him a hug. It seemed the only thing to do."

HOCKNELL: Lucy Letby replied:

"So sad. The family all thanked me when I took E in dressed. And I know age doesn't make it any easier/harder but such a lot to go through at a young age."

JOHNSON: And [Dr A]:

"I don't know how it would [that may be 'be'] possible to get over losing a child, let alone two."

HOCKNELL: Lucy Letby replies with a crying emoji:

"I think my head may explode."

JOHNSON: [Dr A]:

"What happens about the needlestick now? Do you have to do anything else?"

HOCKNELL: Lucy Letby replied:

"I've got a few bits of paperwork that I have to take to occupational health and they'll advise on what to do next. Had a Hep B booster."

JOHNSON: [Dr A], "Ouch".

HOCKNELL: Lucy Letby replied, "Yup".

JOHNSON: And then there was some social messaging between 00.39 and 01.03; is that right?

HOCKNELL: Yes.

JOHNSON: Thank you. At tile 705, there's a marker, in effect, in for the very final event on the indictment, which relates to [Baby Q] at 09.10 the next morning, Saturday morning.

HOCKNELL: Yes.

JOHNSON: And whilst we will hear that Lucy Letby was working that day shift, but at 706 did the messaging recommence between Lucy Letby and [Dr A] at 12.26 with a message from Lucy Letby?

HOCKNELL: Yes:

"Nice lunch break. Told my mum about needlestick and got a huge lecture about not being careful enough, overworked, doing too much, et cetera."

JOHNSON: Then an emoji in response, which speaks for itself, followed by a message at tile 708:

"That's not what you need. She'll be concerned that you're not looking after yourself. Huge lectures aren't fun, are they?"

HOCKNELL: Lucy Letby replied:

"My parents worry massively about everything and anything. Hate that I live alone, et cetera. Didn't know whether to tell them or not but thought I better had in case anything comes of it. Lectures are not fun."

She further replies:

"Moved out of 1 yet?"

JOHNSON: And he responded:

"Yes."

Followed by at tile 712, 12.50:

"How long do you get for lunch? Ward round half done. Now back to 30."

Then there's a further message which is partially corrected in the next message, so I'll read them together:

"It sounds hard for all of you. I'm sure letting go of our child (probably the most precious thing in your life) is difficult, especially if you don't stay local or do a highbrow renowned for bad conditions and potential risks. What did you tell mum?"

And the next message, the correction:

"Done -- don't."

Followed by:

"Highbrow -- job."

HOCKNELL: Lucy Letby replied:

"Had half hour for lunch. I'm sure you'll be back soon. I know. I feel bad because I know it's really hard for them especially as I'm an only child and they mean well, just a little suffocating at times and constantly feel guilty. Told her I was fine, accidents happen, wasn't anyone's fault, just one of those things and bloods, et cetera, all precautionary."

JOHNSON: Is the next event in the sequence a Datix form completed by Eirian Powell?

HOCKNELL: Yes.

JOHNSON: Then is there a Datix form at 718 dated Thursday, 30 June 2016?

HOCKNELL: Yes.

JOHNSON: If we can go to the form itself if possible. This is completed by Lucy Letby. We saw in the case of [Baby O] that there was a Datix form as well, didn't we --

HOCKNELL: Yes.

JOHNSON: -- which was corrected by Dr Brearey? The reported date there shown as 30/06/2016, the open date, 01/07/2016, submitted at 20.50. Then moving down, please, the coding type:

"Clinical incident in the neonatal unit: delayed treatment. Did this incident occur as a direct result of staffing levels? No. Risk grading result: near miss. Actual harm: none, no harm caused. Potential for harm: moderate potential harm."

The incident date 24/06/2016. The time given is noon:

"Description of the incident: infant had sudden acute collapse requiring resuscitation. Sodium bicarbonate infusion was required. Nil sodium bicarbonate (other than resuscitation drug boxes which were already in use) available.

"Action taken: bottle obtained from children's unit. Delay in getting due to staff assisting with infant care needs."

HOCKNELL: Yes.

JOHNSON: That's that Datix form. Then on the anniversary, and so it's the next and final tile in this sequence, on the anniversary of [Baby O]'s death, 23 June 2017, at 23.46 hours, did Lucy Letby make a Facebook search for "[Surname of Babies O, P & R]"?

HOCKNELL: Yes.

MR JOHNSON: Thank you. I don't know whether there are any questions.

MR MYERS: No.

MR JUSTICE GOSS: Thank you.

MR JOHNSON: We're going to move on to the neonatal unit review.

(Pause)

MR JOHNSON: Is everybody ready? Thank you.

So looking at the front sheet of this one then, please, Mrs Hocknell, do we see that it bears your name, version 2.2, and it relates to events 1 and 22, [Baby O] and [Baby P]?

HOCKNELL: Yes.

JOHNSON: Does it follow the same conventions as all the other documents of this type?

HOCKNELL: Yes.

JOHNSON: Thank you. Do we see, looking at page 2 of 14, that there set out is the population distribution chart, together with the corresponding designated nurses at the start of the day shift on 23 June?

HOCKNELL: Yes.

JOHNSON: So this, just to remind us all, is the shift on which [Baby O] died?

HOCKNELL: Yes.

JOHNSON: We start at 08.00 with material relating to other children and specifically we see that in blue font are entries relating to the children JD, MB and PN.

HOCKNELL: Yes.

JOHNSON: JD was a third child in nursery 2 with [Baby P] and [Baby O]?

HOCKNELL: Yes.

JOHNSON: MB was a child in nursery 3 for whom [Nurse C] had responsibility?

HOCKNELL: Yes.

JOHNSON: And PN was a child in nursery 4 for whom [Nurse C] had responsibility?

HOCKNELL: Yes.

JOHNSON: Moving over the page, on to page 3 of 14, do we see the material relating to [Baby O], as always in these documents, is in yellow-shaded boxes?

HOCKNELL: Sorry, for [Baby P] it's in the slightly orange --

JOHNSON: Sorry, yes.

HOCKNELL: Because of two babies being referenced.

JOHNSON: You're quite right. I am confusing myself. So we have [Baby P] in orange, salmon pink, whatever you want to call it, and [Baby O] in the yellow-shaded boxes?

HOCKNELL: Yes.

JOHNSON: On page 4 of 14, the same colour-coding conventions apply?

HOCKNELL: Yes.

JOHNSON: We see that the first collapse at 14.40, first event, line 98, is preceded by [Baby O] being given medication and there was the administration of an infusion at tile 97, which was signed for by Lucy Letby and co-signed by Samantha O'Brien?

HOCKNELL: Yes.

JOHNSON: Thereafter, on the next page, we see the event at 15.50, marked at line 130?

HOCKNELL: Yes.

JOHNSON: We see that so far as the dealings with [Baby O] were concerned on that page, they're almost all medical entries, ie by doctors, with the exception of the nursing note at 15.03, which concerns the intubation of [Baby O] at 15.03.

HOCKNELL: Yes.

JOHNSON: So just to remind us all of the context of this event, the one at 1.30, this is the event where [Dr B] said that she met [Dr A] on the stairs, one or other of them had just been upstairs to update the parents?

HOCKNELL: Yes.

JOHNSON: At page 6 of 14, a series of events relating to [Baby O], almost exclusively relating to his CPR and events being undertaken to restore his heart rate and breathing?

HOCKNELL: Yes.

JOHNSON: There is one entry on the fluid balance chart of [Baby P] at line 145?

HOCKNELL: Yes.

JOHNSON: At page 7 of 14 we have several entries relating to [Baby O]?

HOCKNELL: Yes.

JOHNSON: Three of which correspond to entries made by Lucy Letby at tiles 181, 183 and 199?

HOCKNELL: Yes.

JOHNSON: At page 8, the most important event on page 8, at line 227, being the death of [Baby O] at 17.47. In the immediate time before that we see that there is a solid block of entries between 17.15 and 17.43, at lines 203 to 225, relating to the attempts to save [Baby O]'s life.

HOCKNELL: Yes.

JOHNSON: After [Baby O] had died, we see that there are further entries between 228 and 231, one of which is Lucy Letby's record in the nursing notes at 229 of the resuscitation being discontinued at 17.47?

HOCKNELL: Yes.

JOHNSON: We then have, at line 235, the clinical notes of Drs Cooke and Gibbs concerning an examination of [Baby P] that was undertaken at 18.00 hours in the immediate aftermath of [Baby O]'s death.

HOCKNELL: Yes.

JOHNSON: Over the page on to page 9 of 14, there are some entries relating to [Baby O] and the investigations that were undertaken and notes made in the immediate aftermath of his death.

HOCKNELL: Yes.

JOHNSON: At 255 and 256, there are two entries relating to [Baby P], timed at 18.35 and one with no time, which is a nursing note made by Lucy Letby?

HOCKNELL: Yes.

JOHNSON: Then over again on to page 10 of 14, do we have the population distribution together with the nursing responsibilities set out in the standard plan form?

HOCKNELL: Yes.

JOHNSON: And we can see, of course, that there had been some movement since the beginning of the shift?

HOCKNELL: Yes.

JOHNSON: So [Baby O] had gone into nursery 1 from -- you've recorded -- approximately 14.40 until essentially the time of death?

HOCKNELL: Yes.

JOHNSON: Thank you. Continuing, we have the night shift. At the beginning of handover, 19.30 onwards, we see that Lucy Letby was still on the unit and we will remember from looking at the nursing note about half an hour ago that she was there until well after 21.00 hours and then there's the texts about being given a lift home by --

HOCKNELL: I think that's the --

JOHNSON: That's the following day, I'm getting confused, sorry.

Let's go back to the chart.

At 291 through to 296, we see a series of nursing notes made by Lucy Letby, the first five of which relate to [Baby P], 291 to 295?

HOCKNELL: Yes.

JOHNSON: We see that Lucy Letby was involved with another child at about the time of handover at 296, making an entry on the child JD's nursing records at 19.57?

HOCKNELL: Yes.

JOHNSON: And indeed at line 304, at 20.02, concerning communications she'd had with that child's family?

HOCKNELL: Yes.

JOHNSON: Thereafter, there are continuing entries relating to [Baby P] down to line 318?

HOCKNELL: Yes.

JOHNSON: Then over the page, we can see that other medical and nursing staff were dealing with [Baby P] from the beginning of this page, page 12 of 14, at 20.33, and Lucy Letby was updating records relating to [Baby O] at lines 327, 336 and 343?

HOCKNELL: Yes.

JOHNSON: Moving to the final page of this document, please, two entries at 22.00 hours, lines 374 and 375, made by Sophie Ellis relating to [Baby P].

Then the final note relates to [Baby O] at 06.10, made by Kathryn Percival-Ward, now known as Kathryn Percival-Calderbank?

HOCKNELL: Yes.

JOHNSON: At the end of that night shift/beginning of the day shift, we see that [Baby P] had remained in nursery 2 overnight with Sophie Ellis?

HOCKNELL: Yes.

JOHNSON: Sophie Ellis had one other child for whom she was the designated nurse in nursery 1, the child [Initials of Baby R] --

HOCKNELL: Yes.

JOHNSON: -- [Baby R]? And [Baby Q], his name appears there as well?

HOCKNELL: Yes.

JOHNSON: Thank you very much.

I don't know whether are --

MR MYERS: No, thank you.

MR JOHNSON: There are no questions, thank you very much.

My Lord, we need to deal next with the neonatal review --

MR JUSTICE GOSS: For the day shift of the 24th?

MR JOHNSON: Yes.

That concludes Mrs Hocknell's evidence because Kate Tyndall will deal with this document.

MR JUSTICE GOSS: Right. Thank you very much.

MRS KATE TYNDALL (recalled)

Examination-in-chief by MR JOHNSON

MR JOHNSON: Welcome back, Mrs Tyndall. If you'd just identify yourself for the sake of the recording, please?

TYNDALL: I'm Kate Tyndall, intelligence analyst.

JOHNSON: Thank you. Just before we move on to the review schedule for [Baby P], can we go back to [Baby O]'s sequence of events, please, and go to tile 401. You may recall that this caused a slight confusion in that it showed as a Facebook message, but showed as going between Lucy Letby and I think it was [Nurse E].

TYNDALL: Yes.

JOHNSON: Is that right?

TYNDALL: Yes.

JOHNSON: And I think between us, we mistakenly corrected it to a WhatsApp, but in fact the Facebook part of it was correct and it was the recipient who was misidentified; is that right?

TYNDALL: Yes.

JOHNSON: So this wasn't [Nurse E], it is [Dr A] at 21.33 on Thursday, 23 June, saying, "Home at last", from Lucy Letby?

TYNDALL: Yes, that's correct.

JOHNSON: So that has now been corrected in the digital version?

TYNDALL: Yes.

MR JUSTICE GOSS: So if we were to look at tile 401 in our iPads, it would come up like that?

MR JOHNSON: It would.

MR JUSTICE GOSS: Good.

MR JOHNSON: Can we move back to the review schedule for what's called event 23, [Baby P], which relates to what happened on 24 June.

Looking at the front sheet, do we see that the normal conventions for these documents, as set out previously in many cases, apply equally to this one?

TYNDALL: Yes.

JOHNSON: Moving, therefore, to page 2, this of course is after the death of [Baby O]. We see on page 2 that [Baby P] was in nursery 2?

TYNDALL: Yes.

JOHNSON: His brother, [Baby R], was in with him at the beginning of this day shift?

TYNDALL: Yes.

JOHNSON: His designated nurse was Christopher Booth?

TYNDALL: Yes.

JOHNSON: [Baby Q], a name that we will encounter in a few days, was in nursery 1, being looked after by [Nurse D]?

TYNDALL: Yes.

JOHNSON: And otherwise, the locations of the nursing staff and the babies is there set out?

TYNDALL: Yes, correct.

JOHNSON: Going to Saturday -- is it Saturday?

MR JUSTICE GOSS: Yes.

MR JOHNSON: Saturday, 24 June. Do we see there, set out on page 3 of 14, the first entry relating to [Baby P], as often is, highlighted in yellow? It's timed at 8 o'clock and reflects the nursing note made by Lucy Letby covering the beginning of that shift.

TYNDALL: Yes.

JOHNSON: We then see on the hour, every hour, data recorded by Lucy Letby for [Baby P]?

TYNDALL: Yes.

JOHNSON: Moving on to the second page, there at line 48 do we see an event marked, followed by lots of yellow highlighted lines, relating to various sources of information and the times of that information where it's recorded, making up pretty much about two-thirds of what remains on that page beneath the line?

TYNDALL: Yes.

JOHNSON: Of that information, we see data recorded by Lucy Letby at lines 58, 60, 71 and 78?

TYNDALL: Yes.

JOHNSON: That total page covers 38 minutes of time?

TYNDALL: Yes.

JOHNSON: The fifth of 14 pages covers 31 minutes of time. Most of the entries, or about half the entries probably, on that page relate to [Baby P], as opposed to all the other children put together, and we see that of those entries two relate to -- are made or signed by Lucy Letby?

TYNDALL: Yes.

JOHNSON: Moving on to page 6 of 14, this covers about 50 minutes of time. A lot of entries relating to [Baby P], three of which are also made or contributed to by Lucy Letby?

TYNDALL: Correct.

JOHNSON: Page 7 of 14. A lot of the entries on this page relate to [Baby P], three are contributed to by Lucy Letby, many of the entries are unattributed in the sense that they are the scribe, as we saw in the sequence of events, who didn't record their identity on the paper.

TYNDALL: Correct.

JOHNSON: The event timed at 12.28 on this page. The next page, which covers the time 12.34 to 12.55, so a period of 21 minutes, all but one entry on this page relates to [Baby P]?

TYNDALL: Yes.

JOHNSON: Many of those entries made or contributed to by Lucy Letby?

TYNDALL: Yes.

JOHNSON: Page 9 of 14, a fairly similar picture in the sense that most of the page is highlighted, many of the entries relating to [Baby P] are also contributed to by Lucy Letby, who of course was his designated nurse?

TYNDALL: Yes.

JOHNSON: Page 10 of 14, a fairly similar picture. A lot of entries relating to [Baby P] between 14.15, being the earliest

entry, and 15.00 hours, being the latest, many of which are contributed to or made by Lucy Letby?

TYNDALL: Yes.

JOHNSON: At page 11 of 14, we see a period of time between 15.14 and 15.35, so 21 minutes, and again the vast majority of the entries relating to [Baby P] as opposed to any of the other children in the unit?

TYNDALL: Yes.

JOHNSON: Many contributed to by Lucy Letby?

TYNDALL: Yes.

JOHNSON: Then page 12 of 14. Above the time 16.00 hours, recorded as the time of [Baby P]'s death, at line 336 we see that all but two entries for children on the unit between 15.35 and 16.00 relate to [Baby P]?

TYNDALL: Yes.

JOHNSON: Again, several of them are contributed to by or made by Lucy Letby?

TYNDALL: Yes.

JOHNSON: Following [Baby P]'s death, we then see the balance of the entries made within the time parameters you've already told us about from 16.00 onwards.

Turning over to page 13, running down to 21.18 hours, that time of course recorded -- it's outside the normal parameters but is recorded in this document because of the conventions that dictate that entries relating to [Baby P] should appear in this document?

TYNDALL: It's entries made by Lucy Letby.

JOHNSON: And it's made by Lucy Letby, thank you.

On the final page we see that on the 24th, at about 10 pm -- I think this was a piece of data I was looking for earlier on screen but couldn't find, we see that the nursing notes, Lucy Letby closed down the nursing notes at line 386 at 22.00 hours?

TYNDALL: Yes.

JOHNSON: And then made a short entry concerning communications with [Baby P]'s parents at lines 387 and 388 between 22.00 hours and 22.01?

TYNDALL: Yes.

JOHNSON: Finally, so far as this document is concerned, we see the population distribution and the corresponding designated nursing staff?

TYNDALL: Yes.

MR JOHNSON: Thank you very much.

Cross-examination by MR MYERS

MR MYERS: Just a couple of things, please, Mrs Tyndall.

First of all, just to remind ourselves, we've heard that a lot of the entries for [Baby P] over the period we've just looked at are made by or contributed to by Lucy Letby.

TYNDALL: Yes.

MYERS: But of course she's his designated nurse for that period on that shift, isn't she?

TYNDALL: Yes.

MYERS: Can I just look at one entry. If we look on the neonatal review, please, at line 34 on page 3 of 14.

That's the entry. In the neonatal review it's got for 09.00 on the observation chart, "Observations taken", and Lucy Letby's name is there. Do you see that?

TYNDALL: Yes.

MYERS: And obviously Lucy Letby, we know, is the designated nurse on this shift. I just want us to look at the actual chart itself, which is at tile 22. It'll come up on the screen.

If we go behind that and have a look at the chart.

We can see 24 June is across to the right-hand side.

Can you see that, Mrs Tyndall?

TYNDALL: Yes.

MYERS: If we look at the entry for 09, we can see we have got 09, 11 and 13.00, but if we scroll down to the bottom to see the actual signature, it's covered slightly by the number, but if we just enlarge that, just down at the bottom, it's just underneath J and T.

Just to assist you, we'll probably hear more evidence on this later with this count, so it's just so we can have this in mind. We can see there part of a signature underneath the J and the T -- the J and the 2 on that chart.

TYNDALL: Yes.

MYERS: Do you see that?

TYNDALL: Yes.

MYERS: As I say, we'll get some more evidence on that in a little bit, but that's actually the signature that goes with that 09.00?

TYNDALL: Yes. Without seeing -- that could be an error on my part.

MYERS: If we scroll back out a moment, please, just to see the bottom of that line, just to see the other signatures in that line. Can you see across to the left-hand side, on the other side of the SE signature, which might be Sophie Ellis, we see RM; can you see that?

TYNDALL: Yes.

MYERS: Are you aware there was a student nurse with Ms Letby over this period called Rebecca Morgan?

TYNDALL: Yes.

MYERS: All right, I have identified what we can see under the J and the 2 for 09.00 and we will probably get a bit more evidence on it as we go along.

MR JUSTICE GOSS: It's certainly not LL and it would be consistent with RM.

TYNDALL: Yes.

MR JUSTICE GOSS: I'm only stating the obvious.

TYNDALL: I apologise, it's an error on my part.

MR MYERS: I don't say that as any criticism. It's just if it's relevant as to who took those observations. In fact, it does look like it might be RM. That's where I was going with that.

MR JUSTICE GOSS: It certainly appears to be her initials and I've written that down on my review chart.

Thank you.

Thank you for that, Mr Myers.

MR JOHNSON: We have got some hard copy documents to give to the jury. There's a set that I don't think has come into court yet for [Baby P]. There's also a single document that was omitted from the [Baby O] section, so perhaps we can at least distribute the [Baby O] ones, which should be behind divider 20 in jury bundle 2.

(Pause)

This is J23638, so it goes right at the beginning of divider 20. It should be the first page behind divider 20.

(Pause)

Before the next witness is called, my Lord, I think we're going to have to reconfigure the court.

MR JUSTICE GOSS: Yes, we are. That's perfect for having the ten-minute break. Then it'll be [Dr A]?

MR JOHNSON: Yes.

MR JUSTICE GOSS: So we'll have our ten-minute break now, please.

(11.54 am)

(A short break)

(12.04 pm)

[DR A] (recalled)

Examination-in-chief by MR DRIVER

MR DRIVER: Could you state your full name for the recording again, please?

DR A: [Dr A].

DRIVER: [Dr A], you are here today to give evidence primarily in relation to the baby [Baby P]. As I understand it, is this correct, you were responsible for [Baby P] immediately after his birth?

DR A: Yes, I was.

DRIVER: Could we please, Mr Murphy, go to tile number 7, behind which we'll see notes made by you, [Dr A]. Are these a record of his condition when you first had responsibility for him?

DR A: Yes, that's right.

DRIVER: Could you tell us, please, the quality of his condition upon birth?

DR A: [Baby P] was born in very good health. He needed very little intervention after delivery.

DRIVER: What was the extent of that limited intervention?

DR A: He cried spontaneously, he was active, he didn't need any active resuscitation at the time of delivery.

DRIVER: Thank you. Can you assist us as to his oxygen levels?

DR A: Just down at the last line visible on that page...

DRIVER: If you could scroll down the page then, please.

DR A: His heart rate was 120 beats per minute, his oxygen saturation was initially 60% and that came up to 100% with five inflation breaths, then a little bit of oxygen required, and then at 6 minutes of life, he was in normal room air.

DRIVER: So at that point, within 6 minutes, he was not receiving any respiratory support at all?

DR A: No.

DRIVER: Thank you. Mr Murphy, do we have the next page behind this tile? If we go to tile 8 then, please.

It is a continuation of your same note, which now informs us of what you saw when you examined the baby; is that correct?

DR A: That's right, yes.

DRIVER: Could you take us through that note and expand upon it where relevant?

DR A: Certainly. [Baby P] was pink, he was well perfused. His heart rate was normal at 134 beats per minute. His temperature on arrival in the neonatal unit was acceptable and his heart sounds were normal.

He was in room air, with oxygen saturations of 98%.

The femoral pulses at the top of his each leg were both palpable and the capillary refill time by pressing on his skin -- I have not recorded there centrally or peripherally, it would have been central -- is less than 2 seconds. Respiratory rate was 25-30 breaths a minute and he didn't have any signs of respiratory distress, there was no additional work being needed to breathe.

His abdomen was soft and non-tender. There were no masses, no palpable liver, kidney, kidney or spleen and he had active bowel sounds. His genitalia looked normally and the tone of his limbs was poor but present, his grasp reflex was normal, and the plantar reflexes from his feet were both normal.

DRIVER: Looking at those component parts, putting them together, what was the global position?

DR A: For a 33-week gestation baby, [Baby P] was in very good health.

DRIVER: Were there any negative indicators apparent to you at this point in time?

DR A: From this he will have been a few minutes old. We will have made a decision, based on the gestation of all three triplets, about what happens next. He has a normal breathing pattern but because he's been born by caesarean section there may well still be some fluid present on his chest having not been delivered normally.

That could contribute to respiratory distress syndrome, a little bit of extra work of breathing later on.

DRIVER: So what, if any, measures were contemplated to address that potential?

DR A: There was a collective decision to start all three babies on antibiotics for presumed infection and then I recall that all three babies were started on CPAP to help support their breathing.

DRIVER: Who was party to that collective decision?

DR A: There were three registrars present, one for each baby.

It was [Dr B]'s week of neonatal cover so I think we will have, all four of us, discussed it together and then made a uniform decision.

DRIVER: From your recollection, you've just described in detail [Baby P]'s condition, was there anything of concern with either of his siblings?

DR A: For [Baby O] I can say probably not. For the third sibling, I don't recall.

DRIVER: So absent any negative indicator in relation to [Baby R], was this decision to put them on antibiotics purely precautionary?

DR A: Absolutely.

DRIVER: If we look down the page, please. Is this a summary of your impression?

DR A: Yes. The impression is presumed sepsis, respiratory distress syndrome, and then to start establishing feeds, but that's not a priority at this moment.

Then the plan was to start CPAP with a residual pressure of 5.5 centimetres of water. IV fluids at 60ml per kilogram per day, IV antibiotics, the vitamin K injection that's given to all newborn babies. Then a blood gas measurement to be followed by a chest X-ray.

DRIVER: Dealing with the impression, firstly, what was the basis upon which sepsis was presumed?

DR A: I don't recall. It must have been something to do with mother's health.

DRIVER: Respiratory distress syndrome. What gave you that impression?

DR A: So faster breathing or increased work of breathing, and I suspect that it wasn't [Baby P] that this decision was made upon, it was a collective decision for all three babies.

DRIVER: Thank you. So in that regard, how does your approach differ when dealing with the twins or triplets or even quads, I suppose, as opposed to dealing with a singleton baby?

DR A: If there is suspected to be an illness in one of the babies of an infective cause, they've all shared a common maternal blood supply, so you would treat all three babies in the same way.

DRIVER: Thank you. You noted the desire to establish feeds but you told us a moment or two ago that that wasn't a priority. And then you took us to the plan which included CPAP and the provision of intravenous fluids.

What is the relationship between the management of a newborn's respiratory needs and its nutritional needs?

DR A: So the muscles used for breathing and feeding are the same. If you have increased work of breathing, you will not be able to take an adequate volume of milk feeds and you would then destabilise the breathing and you wouldn't get adequate nutrition anyway.

DRIVER: So to which need do you give priority?

DR A: Breathing always first. And knowing that the breathing is taken care of by CPAP and with this baby being only -- well, certainly at this point less than an hour old, to give IV fluids whilst the breathing stabilises and whilst the work of breathing is observed to be normal, we wouldn't push a baby to take feeds orally if there were concerns about the breathing.

DRIVER: So going down our plan to point 3, and intravenous antibiotics, of course the triplets were born early and if I were to remind you that their mother had been given steroids prior to their birth, does that help inform or remind you as to the basis as to why they were prescribed antibiotics?

DR A: The steroids are given to help generate surfactant in the babies, to make their work of breathing easier when they are born, but it can also contribute to a slightly reduced response to infection in mum, so it would leave the babies more open to infection.

DRIVER: Are you able to assist as to the duration of the intended provision of antibiotics?

DR A: The blood cultures will have been taken at the time of putting the cannula in. Those results are usually available within 36 to 48 hours.

DRIVER: Thank you. We have what appear to be venous gas results; is that correct?

DR A: That's right.

DRIVER: Was there anything within those results to cause you any concern whatsoever?

DR A: They are normal results for a recently born baby. The pH is normal. PCO₂, the pressure of carbon dioxide, is up very slightly but this is a venous gas rather than a capillary gas that's normally taken, so this blood has already been through the peripheral circulation and is -- so I would accept a slightly higher carbon dioxide in that. Bicarbonate is normal. The base excess is only very slightly off normal; it's usually plus 2 to minus 2. The blood glucose is acceptable for a newborn baby and the lactate is very slightly elevated, but again this is a venous gas.

DRIVER: Thank you. So looking at those factors together, what was the quality of his gas results?

DR A: These are acceptable. This is a perfectly satisfactory gas for starting CPAP. This baby doesn't need ventilating mechanically.

DRIVER: And does your final note on this page inform us that you did indeed place him on CPAP?

DR A: Yes.

DRIVER: "To repeat in 90"; is that minutes?

DR A: It is.

DRIVER: Is that to repeat the blood gas test?

DR A: That's right.

DRIVER: Thank you. Can we return to the carousel, please. So that's mid-afternoon, 21 June 2016.

You had continuing involvement with [Baby P]; is that correct?

DR A: Yes.

DRIVER: Would you at every turn remind yourself of any relevant notes made by colleagues in between your direct involvement with the baby?

DR A: Yes.

DRIVER: If we could just look briefly, please -- Mr Murphy, I'm not sure this is on the carousel, but if you could put up page J23840, please, which are notes written the following morning, ie 22 June, by your consultant colleague, [Dr B].

Notes made at 11.45, 22 June. If you just appraise yourself of the contents there, [Dr A], without necessarily taking us

through the detail; [Dr B] will do so, I anticipate, in due course. But what's the quality of the baby's presentation as of the morning of the 22nd?

DR A: Overnight and into the following morning, [Baby P] has made no change. He's stable, he's on CPAP still. He's now in air, doesn't require any additional oxygen. His fluids are still being run through his peripheral cannula at the same rate and I think he is to be given a dose of caffeine in order to stimulate his respiratory drive. He's to have some blood tests later that day and a gas and this looks like progression. Nothing has happened that's a concern.

DRIVER: I'm grateful. Back to the carousel then, please, Mr Murphy. Let's go to 23 June and tile 64, which is a note made by your colleague Dr Cooke, who was, I think, at the time a locum senior house officer. Does that accord with your recollection?

DR A: That's right, yes.

DRIVER: Who had cause to examine [Baby P] in between your examinations of him at 10 am on 23 June. If we could just look at Dr Cooke's corresponding note in her distinctively neat handwriting. Have you previously reminded yourself of the contents of this clinical note?

DR A: I've not seen this note since the day in question, but I do recall the content of it.

DRIVER: If you care to refresh your memory from it before I ask you some general questions.

DR A: (Pause). Thank you.

DRIVER: I'm grateful. "No nursing concerns" speaks for itself, as does indeed, I imagine, "Observations normal".

Can you tell us what had happened with regards to the antibiotics that you and your colleagues prescribed to all three triplets?

DR A: It says:

"Presumed sepsis. Antibiotics stopped on the 23rd."

So the 36 hours of the blood culture incubation was completed, it's returned no positive results, and as [Baby P] is in good health with no new concerns, the antibiotics have been stopped.

DRIVER: Let's move to ventilation and respiration.

DR A: Self-ventilating in air, which means no additional support is required. Then feeding has progressed normally, as it does in those first few days of life, going from 60 to 75 to 90ml per kilogram per day, and this is now being administered by a nasogastric tube.

There's a trace of aspirates and this is donor-expressed breast milk. [Baby P] has passed urine and opened his bowels.

DRIVER: When we considered your note as of 21 June, for the reasons you explained to us (inaudible) respiration being given priority, he was to receive nutrition intravenously, but by now, is this right, on the morning of 23 June, he was being given expressed breast milk?

DR A: That's right.

DRIVER: Any indication as to the output? Output all good, it would appear, by the "PU/BO [tick] [tick]"?

DR A: That's right.

DRIVER: What about jaundice? Was that a factor at all with [Baby P]?

DR A: It's not been commented on, so normally if there is a concern about a colour change then a bilirubin would have been tested. It has been tested here and it's well below the treatment line. So this may well just have been added on to the normal biochemistry tests that are sent.

DRIVER: Would that just go with the territory (overspeaking) --

DR A: Very much so, yes.

DRIVER: -- baby? Thank you.

If we could go down the page to see what it was that your colleague saw upon examination. Just taking those points of examination together, is there anything within that to sound any alarms whatsoever?

DR A: No. That's a completely normal newborn examination.

DRIVER: Amongst other features of the plan, including, as one would expect, the continuation of the establishment of feeds, there was to be a cranial ultrasound test; is that correct?

DR A: That's right.

DRIVER: What's the final entry at plan, point 4?

DR A: "Vitamins and minerals prescribed."

DRIVER: Having commended Dr Cooke's handwriting --

MR JUSTICE GOSS: It's clearly "prescribed" (overspeaking) and it looks as though it's "vita and mins".

DR A: Normally for preterm babies they would get folic acid on a Friday and multi-vitamins once they've established feeding and then, at day 28 of life, they'd be given an iron supplement.

MR DRIVER: We can see your handwriting at the bottom of the page; is that correct?

DR A: That's right.

DRIVER: And does this correspond to plan point 3, cranial ultrasound?

DR A: It does.

DRIVER: Is this your subsequent review of that ultrasound?

DR A: Yes. So between the end of Dr Cooke's entry and this entry, maybe even slightly before Dr Cooke had seen [Baby P], I will have done the cranial ultrasound, I will have looked at the images, and this was just the opportunity for [Dr B] to look at them and we've written in there that there were no concerns about any intracranial problems.

DRIVER: So you and [Dr B] have considered the ultrasound, discussed what it contained, and you are together jointly happy with the results?

DR A: That's right.

MR JUSTICE GOSS: (Inaudible) "Normal appearance", is it?

DR A: "Normal appearance. No evidence of haemorrhage or dilatation."

MR JUSTICE GOSS: Which we've seen, that phrase, before.

DR A: Yes. There's no blood in any of the ventricles and the ventricles are all the right size. There's no abnormality.

MR DRIVER: Was this investigation made in consequence of any specific concern relating to [Baby P] or is this part of the protocols?

DR A: It's normal and usual for lower birth weight babies and preterm babies.

DRIVER: Thank you. Go back to the carousel, please, Mr Murphy, and if we could remind ourselves of the greater chronology here and remind ourselves that, sadly, [Baby P]'s brother, [Baby O], died at 17.47 hours on 23 July 2016.

If we just look at notes made that morning. If we could move forward in time, please.

You told us earlier how the management, clinical management, of twins or triplets is often, to some extent, influenced by anything that might pertain to their brothers or sisters. Do you recall whether anything in particular was done or looked at in relation to [Baby P] as a consequence of [Baby O]'s early demise?

DR A: There will have been a concern that there was an infective process going on and [Baby P] will have been re-examined and there would have been a very low threshold to start next line antibiotics.

DRIVER: Let's go to tile 134 then, please. Again to give time and the sequence context, [Baby O]'s death was at 17.47, and now at 18.00 hours, click behind, we'll see -- and if we go to the clinical notes, please -- that a colleague of yours, again it's Dr Cooke, of course it is, made a note of a review of [Baby P] undertaken principally by your consultant colleague, Dr Gibbs.

We'll hear in due course that this was done because of [Baby O]'s death.

DR A: Yes.

DRIVER: Could you summarise the results there for us, please?

DR A: [Baby P] has a temperature of 36.6 degrees. He's self-ventilating in air. His respiratory rate and heart rate are normal. He has been tolerating his nasogastric feeds. On examination he's active when handled, his perfusion is normal with a normal capillary refill time.

He has no -- a normal respiratory pattern. His chest sounds clear, his abdomen is full, mildly distended, but no...

MR JUSTICE GOSS: Tenderness.

DR A: No tenderness.

MR JUSTICE GOSS: "No murmurs", is it?

DR A: I wouldn't have thought so there:

"No masses. Bowel sounds active. Mild erythema at the base of the umbilicus. No swelling or exudate. Femorals..."

I would assume that that means femoral pulses, they were normal and his heart sounds were also normal.

MR DRIVER: Is "present", perhaps, after the word "femorals"?

DR A: Yes.

DRIVER: "Mild erythema at the base of the umbilicus."

Could you expand on that for us?

DR A: The umbilicus is a potential source of infection and the infection, if it is at the umbilicus, has a direct route into the major blood vessels because that's where baby has been attached to the placenta until recently. The umbilicus starts to dry out over a few days and then drops off but in that time the circulation and the cord is drying out, it becomes a potential route in for infection. Any redness or signs of flaring, so like a little flame sign around the umbilicus, is a potential skin infection that may travel.

DRIVER: The plan of action at this point in time?

DR A: So full blood count and CRP, looking for markers of infection or inflammation. A blood culture to see if any bacteria can be grown. Another bilirubin. Then to start cefotaxime a second-line antibiotic, and because of the erythema of the umbilicus, flucloxacillin has been started, which is used to treat cellulitis or skin infections. And the last point is abdominal X-ray because of the slight distension.

DRIVER: So these investigations and responses are in part because of [Baby O] and in part because of [Baby P]'s own presentation?

DR A: Yes.

DRIVER: Is that fair?

DR A: Yes.

DRIVER: Thank you. At tile 289, please. We'll go to the second tile behind it rather than the original notes. It's a note made by your colleague, Dr Ukoh, who will give evidence himself today, which evidences, now that we have moved forward in time,

Dr Ukoh's examination of [Baby P] on the morning of Friday, 24 June, which records, amongst other things, that the:

"Abdomen moderately distended/bloated. Soft."

And he was to be kept nil by mouth for now.

Dr Ukoh will assist us in that regard in due course I'm sure. Let's move now to your next direct involvement, please, which I think is at tile 295. So if we go to the original clinical note, please, Mr Murphy. Before we look at the detail, can you remember the nature of your duties on that day, that is to say Friday, 24 June?

DR A: Yes. I was the long day registrar, so I would have typically started working on the children's ward rather than the neonatal unit. I would have been responsible for the ward round on the children's ward and then overseeing any admissions that came through the admissions area.

DRIVER: We can see from this long note, which you have timed at intervals, that as per the note at 09.40, you were called to the neonatal intensive care unit; is that correct?

DR A: That's right.

DRIVER: Does the note suggest that, having been so called, you arrived at about 09.50?

DR A: Thereabouts, yes.

DRIVER: What was the reason given to you that invited you to attend immediately?

DR A: I don't remember the phone call itself. I remember being beeped and then by answering that beep I will have been asked to come. It wasn't a crash beep, so I finished doing or putting away the notes that I was dealing with at the time and then I made my way to the neonatal unit.

DRIVER: So not communicated to you as an emergency?

DR A: I think it was, "Can you come quickly?" but it wasn't, "Drop everything and run". I was there fairly quickly.

DRIVER: And please help us understand what it is that you saw and ascertained at about 09.50 or thereabouts?

DR A: [Baby P] was in nursery 2. He had the incubator space on the right-hand side and I think it was the furthest from the door, closest to the window. When I got there he had a heart

rate that was approximately 80 beats a minute and his oxygen saturations were approximately 60%.

He was being bagged by a Neopuff circuit and the pressures on the wall that was delivered through that circuit had an inspiratory pressure of 20 centimetres of water and a PEEP of 5. At that time he was being bagged in air.

DRIVER: Pausing there one moment, please, if you would help us understand. The heart rate at 80 is plainly lower than previous readings. How low a heart rate and how great a cause for concern is a rate of 80?

DR A: 80 is lower than I would expect of a baby of [Baby P]'s gestation and now age. It is likely that the heart rate has dropped because the oxygen saturations have dropped; one precedes the other.

DRIVER: How significant a drop in oxygen saturation level?

DR A: That's too low. Normally, I would be expecting the saturation to be above 92%.

DRIVER: He was being bagged already upon your arrival; is that correct?

DR A: That's right.

DRIVER: Were you content with that response and did you deem the levels of ventilation provided appropriate to the prevailing conditions?

DR A: I will have been given some information, and I don't recall what information or by who. And as with other babies, I will have gone to the head end of the incubator and taken over management of the airway. At this time his oxygen saturations were improved by using a device that lifts the tongue out of the way and makes the airway more patent.

DRIVER: Is that the --

DR A: It's a Guedel airway.

DRIVER: Thank you. Was that part of your management of the airway, as you --

DR A: I think it will have been me, but it will have been a very busy nursery at that time with people aiming to assist as much as they can.

DRIVER: So the use of the Guedel seemed to improve the effects of the already ongoing Neopuffing?

DR A: It's an adjunct. It's used for stabilisation but you wouldn't maintain a baby with a Guedel airway. So this is telling me that this baby needs to be intubated.

DRIVER: Hence you did so at the first attempt?

DR A: Yes.

DRIVER: The size of the tube?

DR A: A 3.0-millimetre diameter tube and it's secured at 8 centimetres at the lips.

DRIVER: You have told us previously that you were at this point an experienced intubator. Were you satisfied as to the appropriateness of the size of the intubation tube as per a baby of this size, weight and gestation?

DR A: It was the tube that I would have calculated based on his age and his weight. I recall that it was an easy tube to site and it was very easy to get it in and I was relieved to see that there was a good colour change on the capnograph indicator. I seem to remember that later on in the day I've replaced it with a 3.5 diameter tube.

DRIVER: Thank you. So as of your arrival and attendance upon [Baby P], you have just explained to us how you took control of the management of the airway and how it would appear, from the indicators available to you, that it had been a success.

DR A: Yes.

DRIVER: Was that management of the airway the immediate priority?

DR A: Yes, it was.

DRIVER: We can see a list of blood gas results down the left margin of the page, which may or may not also correspond to 09.51 or may just happen to be there on your note.

But were these blood gas results taken at around this time?

DR A: I think these will be the exact times that were on the paper slips that were printed from the blood gas machine.

DRIVER: Thank you for that. What was the nature and/or quality of those results?

DR A: The gas at 09.51 is a poor gas. 7.15 as a pH is lower than the 7.25-plus that I would desire. Carbon dioxide is elevated. The bicarbonate is normal. The base excess is much larger than I would expect. Blood glucose is normal. The lactate is much higher than I would have expected.

DRIVER: Considered individually and/or taken together, what did these results inform you of?

DR A: So this is a metabolic gas. This is a metabolic acidosis with also some components of a respiratory acidosis.

DRIVER: Did those results inform you of anything additional to that which you had observed by his condition and his respiratory struggles upon your arrival?

DR A: This is a gas that suggests over the previous 15 to 30 minutes, [Baby P] has been working hard, in part with his respiration, but actually there's a lot of metabolic information there.

DRIVER: Did that steer your immediate course?

DR A: It will have directed me to make sure that the airway is secure and stable and I would imagine that given that lactate, a fluid bolus will have been considered.

DRIVER: And accordingly, what did you do? If we continue to look down the page.

DR A: [Baby P]'s been started on continuous mandatory ventilation; the pressures are there on the right-hand side. They are normal settings for a baby of his age and size.

He is in 75% oxygen with a mandatory rate of 60 breaths a minute. At 10.15 he's been given some bicarbonate and that will be because the subsequent gas at 10.06 has a lower bicarbonate value than the one at 09.51. And the lactate is increasing.

DRIVER: Let's take that chronologically then. You have managed the airway in the way you've described and then, some 15 minutes or so later, there was a subsequent set of blood gas results. Did they indicate satisfactory improvement or did they give you further cause for concern?

DR A: No, [Baby P]'s continuing to deteriorate. The carbon dioxide level has increased. The base excess has increased and the lactate has increased. Subsequently his glucose has also increased but that's likely a stress response to the other components that are there.

DRIVER: So notwithstanding what you deemed to be satisfactory management of the airway, he went backwards rather than forwards?

DR A: Yes.

DRIVER: And in consequence, what, if anything, did you do?

DR A: So at 10.15 -- no, sorry, adrenaline was given at 9.55, 10.02, 10.08, 10.15 and 11.10. But the doses there will be given because of the poor heart rate, poor perfusion, and that will have led to a secondary sort of poor respiratory drive, which is why he's on continuous mandatory ventilation.

DRIVER: You have just explained to us the reason why adrenaline was deemed to be required. Can you remind us as to the purpose of the use of bicarbonate in this context?

DR A: Bicarbonate is used in metabolic acidosis and it's either given as a half correction or a full correction dose and that's based on the pH and the bicarbonate level on the gas.

DRIVER: We can see is it at 10.15, and possibly additionally at 11.10, there's what you termed a loading dose of morphine; is that right?

DR A: That's right.

DRIVER: What's the purpose of that?

DR A: Morphine is used to sedate babies who are being ventilated.

DRIVER: Just for comfort?

DR A: It's so that they can tolerate the tube. Without that degree of sedation, and there's a little bit of analgesia that goes with it, it may be uncomfortable to have that tube there and baby may well then fight that ventilator.

DRIVER: So pain relief and comfort and making more compliant?

DR A: That's right.

DRIVER: Thank you. Before we leave this part of your note we can see a list of digits to the right of the page, is that the level of ventilation?

DR A: Yes. The inspiratory pressure, the peak inspiratory pressure, the peak end expiratory pressure, the fraction of time,

TI, on inspiration. The ventilator setting for oxygen is 75% and the mandatory respiratory rate is 60 breaths per minute.

DRIVER: Thank you. We can see another entry just before you time the next set of events at 11.30. Your final entry prior to that is timed at 10.46. What was the impression, what was the position in relation to [Baby P]'s apparent direction of travel as of 10.46?

DR A: So this is an improvement. His pH has improved and I think that may say 7.829, in which case his pH has become slightly too alkaline. His carbon dioxide level has is reduced because of the ventilation. His base excess has improved compared to the previous gas and his lactate there, I think, is 10.5, which is a slight improvement on the previous gas from 25 minutes ago.

DRIVER: His gases were improving a little. Do you recollect how [Baby P] appeared to you at this point, 10.46?

DR A: I don't have a picture of him in my head. I do remember that the room was incredibly busy. There will have been lots of equipment around for intubation and making sure that his venous access was adequate. There will have been a lot of attention being paid to the bedside monitors and there will have been quite regular checks on breathing, heart rate, blood pressure.

DRIVER: At the very least the blood gas results, as considered at 10.46, tend to indicate something of an improving position?

DR A: Yes.

MR JUSTICE GOSS: The lactate reading --

DR A: Yes?

MR JUSTICE GOSS: -- what do you think it is?

DR A: I think that that is either 10.5 or 13.5. I can't tell whether the margin line...

MR DRIVER: Perhaps Mr Murphy can zoom in.

DR A: That does look like 13.5.

MR JUSTICE GOSS: How does that compare?

DR A: That's slightly worse than the previous gas at 10.06.

Lactate is going to be a slow marker to improve because the components of the gas that demonstrate a metabolic acidosis need to be corrected first and then the lactate will stop being

produced. A lot of this will then be down to perfusion and the amount of sort of circulatory output that [Baby P] has.

MR DRIVER: Whilst we've got the note blown up, could you return your attention to the pH, please?

DR A: It does look like 7.829.

DRIVER: Mr Myers is helpfully showing me the same data on a different document, which tends to suggest that that measurement there is 7.229.

DR A: In which case that's -- compared to the previous gas this is markedly improved and I would be quite happy that the respiratory component is much better, the pH has started to normalise. It will take some time for the lactate to follow the direction that the bicarbonate has taken after the bicarbonate has been administered.

DRIVER: So taking a step back, based on the blood gas results in any event, how did things appear to be moving as of 10.46?

DR A: This indicates that over the last 20 to 25 minutes, the blood gas measurements are improving.

DRIVER: Forgive me, please, I'm just looking at the measurement report, which confirms that which Mr Myers helpfully pointed out to us, that the pH reading at this point is 7.229.

DR A: Thank you.

MR JUSTICE GOSS: It looks like a 2 has been overscored on to another number underneath the 2.

DR A: It does.

MR JUSTICE GOSS: And that's consistent with the other thing, so Mr Myers is right in his assertion it's 7.229.

MR DRIVER: [Dr A], the jury will have this in due course but don't have it just yet. In that file in front of you, that's the very one, behind divider 21, there is a bundle of documents towards the back of which, five from the back, is the measurement report, which in the bottom right-hand corner should have, in red ink, stamped J23961.

DR A: Yes.

DRIVER: Is that the report from which your note is derived?

DR A: That's right.

DRIVER: So for the avoidance of all doubt, if any still remains, the pH level?

DR A: 7.229.

DRIVER: And the lactate level?

DR A: 13.5.

DRIVER: So now that you have that report in front of you, do you wish to, in any way, revise or refine your evidence as to his general position and the direction of travel as of 10.46?

DR A: As of 10.46 this is no longer a respiratory acidosis.

The ventilation has taken care of the carbon dioxide.

The component of this gas that is making him acidotic is metabolic and that is based on the bicarbonate readings, which are now lower, and a lactate which suggests that those cells are struggling to metabolise normally.

DRIVER: I'm grateful. Let's move on in time to the next episode, as it were, and if we leave this screen on in this way, we can read it clearly. There are half a dozen or so clinical -- lines of clinical note timed at 11.30. Just remind yourself of what it is you noted and then describe to the jury what occurred from 11.30 onwards.

DR A: At 11.30 there was an episode of desaturation and bradycardia. In response to that, cardiopulmonary resuscitation was recommenced.

DRIVER: Pausing there, you used the word recommenced. We saw immediately above the introduction of adrenaline and the like in response to his poor condition. Was there as part of that, that earlier episode, that from about 09.51 onwards, was there cardiopulmonary resuscitation involved in that?

DR A: I don't recall that, but certainly having said recommenced it would suggest that there had been even a brief period of CPR.

DRIVER: In any event, CPR certainly was involved at 11.30 onwards?

DR A: That's right.

DRIVER: Can you describe that episode to the jury, please?

DR A: So [Baby P]'s heart rate will have been less than 60 beats per minute and that in the context of a lower oxygen level, he will have either been bagged through the tube using a Neopuff circuit or -- no, he will have been bagged through the Neopuff because the tube was removed at that time. He was given adrenaline at 11.32 and then pancuronium -- sorry, 11.32, with the adrenaline at 11.30.

DRIVER: Pancuronium is a profound relaxant; is that correct?

DR A: That's right.

DRIVER: Was that given to, again, make the baby compliant with the ventilatory intervention?

DR A: Yes. So pancuronium will have been given because [Baby P] will have appeared to have been fighting the ventilator.

He will have been putting in breaths against it or not taking breaths alongside the ventilation. Pancuronium was given because it takes a few minutes to become active but it lasts for about an hour and a half.

DRIVER: We can see from your notes that the duration of this episode was relatively brief, that is to say from 11.30 to 11.36 approximately.

DR A: Yes.

DRIVER: Obviously. And how did it go?

DR A: So the medications and the CPR have been successful and at 11.36, [Baby P] has restored his own spontaneous circulation and I would imagine he has re-synchronised with the ventilator.

DRIVER: That ventilation, as previously applied, was that recommenced thereafter?

DR A: Yes. I would expect given that as the previous gas had shown good ventilatory response, he will have been recommenced on the same settings.

DRIVER: If we continue down the page, please. At 12.08, was there a further set of blood gas results considered?

DR A: Yes. This is 30 minutes since the end of CPR and he had been restored to continuous mandatory ventilation. At this point the pH is very good, it's sort of within normal limits if not slightly too much. And the carbon dioxide level is a little lower than I would wish. His bicarbonate is remaining roughly in the same place. And his base excess again is a little bit worse

than the previous gas. In response to the carbon dioxide being a little bit low I've reduced the inspiratory pressure on the ventilator from 23 down to 20. That gives a little less inflation pressure and so it stops him blowing off as much carbon dioxide, so I'm going to allow him to retain a little bit more.

DRIVER: So some fine-tuning of the ventilatory assistance?

DR A: Yes.

DRIVER: Moving to your next note, timed at 12.28, and the final note on this page.

DR A: "12.28. Desaturation and bradycardia again. CPR commenced."

As part of this, the capnograph has been reattached to the endotracheal tube and there's poor colour change on it. The tube was removed and [Baby P] was bagged just using the Neopuff circuit placed over his mouth and nose.

DRIVER: We'll come to the remainder of your note in a moment and we've been here in your evidence previously, but please remind us what significance you would have attached to the poor colour change on the ET capnograph at this juncture in all these circumstances.

DR A: In the time since... Poor colour change suggests there's not very much carbon dioxide passing up through the ET tube. You'd normally expect the capnograph to blanch and flush with each breath and that's not happening. The first bit of kit that gets looked at is the tube itself as it might be coated by secretions, it may be blocked by mucus. So the tube has been removed and then conventional bagging has been done with the Neopuff circuit.

MR DRIVER: My Lord, we're about to move on to another period of CPR and the like and there are more episodes to deal with. Is this a convenient point, please?

MR JUSTICE GOSS: Yes, certainly.

[Dr A], we'll break off there and resume again at 2 o'clock.

2 o'clock, please, members of the jury.

(12.59 pm)

(The short adjournment)

(2.00 pm)

MR DRIVER: Could I invite Mr Stansfield's assistance to distribute the paper bundles in relation to [Baby P]?

There's one for his Lordship there and 12 for the jury.

There's one already in the witness box folder, as we know.

(Handed)

These will go behind divider 21 in due course but perhaps you might benefit from just keeping them at hand for the moment whilst we refer to them from time to time.

[Dr A], we were just looking on screen at your notes corresponding to results obtained and/or considered at 12.08, which include a base excess reading, according to your notes at least, of minus 13.4; do you see that?

DR A: Yes, I do.

DRIVER: I don't think we have the corresponding printout for this particular set of results. If you look at the paper bundle in front of you and go to the third document, to the back, which is a blood gas record chart on which various sets of results have been recorded for [Baby P]. Do you have that? It's stamped J23979 in the bottom right corner.

DR A: Yes, I do.

DRIVER: Thank you. If we look at the corresponding entry for 12.08, that is to say the penultimate entry on this document, we can see it largely corresponds to the data that you recorded on the clinical notes that we have on screen. I say largely because there is a discrepancy between the base excess as recorded in your note as compared to that recorded on the blood gas record document within the bundle, yours being a note of minus 13.4 and the author of this document recording the same entry at minus 11.4.

DR A: That's correct, yes.

DRIVER: Other than that, they appear to correspond, the sets of data. As a matter of interest, which reading is more concerning, a base excess of minus 13.4 or one of minus 11.4?

DR A: Minus 13.4 is more concerning, but anything above minus 2, or greater than minus 2, is abnormal.

DRIVER: Thank you. So having just alluded to that apparent discrepancy and observing, as I have already, that as far as I am aware the original document is not available, you continued to take us through the narrative of events and we had got as far as the tube -- removal of the tube at or around 12.28 because that was a potential cause or contributor to the problem.

DR A: Yes.

DRIVER: And [Baby P] was bagged via Neopuff. I think we have to jump to tile 420 to see the remainder of your clinical note.

Click on the original document, please, Mr Murphy.

Do you recognise this as a continuation of the note that we left --

DR A: Yes, it is.

DRIVER: -- immediately before lunch? So did you re-intubate the baby?

DR A: Yes.

DRIVER: You already anticipated this earlier in your evidence by noting the difference in size between the first tube and the second.

DR A: This one is the next size of tube up and I will have noted when I put the 3.0 in that it was a good fit.

This will have been more of a snug fit.

DRIVER: Thank you. Was the event of re-intubation at 12.32?

DR A: Yes.

DRIVER: And what did you do immediately thereafter?

DR A: Following that, I was happy that the airway was secure and, by the notes here, [Baby P]'s heart rate was still not improving, so he's been given adrenaline through a peripheral cannula and then a number of adrenaline boluses given through that cannula at the corresponding times.

DRIVER: Thank you. Just for one second returning to the original ET tube, you've explained to us the reasons or some of the reasons why you withdrew it. Do you recall whether or not, as a matter of fact, you checked it?

DR A: I don't recall checking it.

DRIVER: Thank you. Let's return to this episode then. Your notes suggested all episodes of desaturation and bradycardia were accompanied by -- could you read the rest of the note for us, please?

DR A: "... profound colour change and poor central and peripheral perfusion."

DRIVER: What, if anything, was that profound colour change and poor central and peripheral perfusion --

DR A: It suggests what his heartbeat and his cardiac output were insufficient to maintain normal colour, either within the central circulation and more extreme at the peripheral, both fingers and toes.

DRIVER: We saw earlier a reference to the desire to consider -- take and consider a chest X-ray.

DR A: Yes.

DRIVER: Was that done at this point?

DR A: That looks as though it happened at around about 12.30 and it showed a right-sided lateral pneumothorax, so there will be a partial collapse of the lung on the right-hand side and this was decompressed by putting a small cannula into that space to relieve the air and allow the lung to re-inflate.

DRIVER: So that problem, as identified on the chest X-ray at 12.30, was immediately upon consideration addressed?

DR A: The X-ray machines have a small screen on them and because he was acutely unwell at the time, we will have looked at the X-ray on the screen rather than wait for it to be uploaded to the system and look at it on a PC.

DRIVER: Thank you. Let's continue down your note if we may.

What was the next course of action?

DR A: At 12.51 another bicarbonate was administered. That will have been in response to a low bicarbonate or a metabolic component to his later gas.

At 12.55 another bolus of 10ml per kilogram of normal saline. Then because of concerns about blood pressure and cardiac output, dobutamine was started at 13.10 at a rate of 20 micrograms per kilogram.

Fifteen minutes later, at 13.25, another bicarbonate dose was given and that was after [Dr B] had had a telephone conversation with Dr Rackham -- I'm not sure whether Dr Rackham was on site at that time or whether he was travelling.

DRIVER: Dr Rackham, we know, is the transport consultant.

DR A: He was.

DRIVER: Was there any improvement in [Baby P]'s circulation, firstly, post the decompression of the right-sided pneumothorax?

DR A: The decompression of the pneumothorax with a cannula is a very temporary measure. It will have allowed the air to be released, it will have allowed the lung to re-inflate and fill the gap that was occupied by air previously. That will need addressing in a little bit.

The infusions that were started will have had some effect initially but it will be more in watching what happens to the trend of his blood pressure and heart rate and then also by looking at how he appears visually.

DRIVER: How was he doing during this period between 12.50 and 13.25?

DR A: My only memory of this bit is that it was very, very busy, both in looking at [Baby P] and seeing how he was progressing -- and I think at that point I will have been setting up ready to put a chest drain in as a definitive treatment for his pneumothorax.

DRIVER: Was that something that had already been discussed with Dr Rackham?

DR A: It may well have been. Leaving that cannula in to decompress the pneumothorax is, as I said, only a temporary measure, it will need something more durable.

DRIVER: Thank you. Let's continue down the note then, please.

DR A: So at 14.30 metronidazole and hydrocortisone were both given. Hydrocortisone will have been because of concerns about cardiac output and blood pressure.

Metronidazole was a further treatment for any presumed infection as this was potentially still an episode that we were looking at caused by sepsis. And at that time also, the ventilator will have been detached from [Baby P]'s ET tube and a dose of surfactant, this 240 milligrams of Curosurf, will have been

given down the ET tube directly into the lungs, hence the batch number there beneath.

DRIVER: Thank you. Up until this point to what degree did breathing seem to be a fundamental component of his problems?

DR A: It was a major component. The work of breathing and the effect that that inefficient breathing was having on the blood gases and then subsequently, presumably, driving a metabolic component, there was no clearly identifiable cause as to what was going on. We were managing symptoms as they arose.

DRIVER: So the dominant symptoms were, to recap?

DR A: Difficulty in breathing, low cardiac output, low blood pressure.

DRIVER: Were you able to identify any apparent cause for any one of those dominant symptoms?

DR A: No.

DRIVER: Let's continue down the page, please, Mr Murphy.

At 15.00 -- you told us already, I believe, that pigtail chest drains were inserted. How did that go?

DR A: The procedure itself was very straightforward. Setting up for it and securing the chest drain was a work of only a couple of minutes. The landmarks of putting that chest drain in were easily identifiable.

DRIVER: What was of the objective behind that intervention?

DR A: That was so that if any further -- the pneumothorax means that there's some air leaking from lung into the chest cavity, it wasn't being contained within the lung completely. So the chest drain is there to allow any air that escapes to be directly let out to the outside world so that the lung can be completely inflated with air through the ventilator.

DRIVER: You told us that there was no apparent cause for any of the dominant problems, yet you've also alluded to the existence of a pneumothorax.

DR A: Yes.

DRIVER: Was that considered as a cause?

DR A: It's a potential cause. It will certainly have been playing a part in the respiratory part of the blood gases. When

that pneumothorax occurred is unclear and with a small pneumothorax, as this one appeared on that initial chest X-ray, I didn't want it to become any bigger, hence the drain being inserted, but I don't think this was the sole driver of all of the symptoms.

DRIVER: May it have been a consequence of the symptoms --

DR A: Potentially --

DRIVER: -- and your response to it?

DR A: Yes. The ventilation that [Baby P] had been receiving were not at very high pressures, they were at pressures at the upper end of normal. It is possible that in the part of the morning where [Baby P] had been fighting the ventilator, the pneumothorax may have occurred then.

DRIVER: Let's continue down the page, please. So we can see, as to the introduction of the pigtail drains, the lung re-expanded, did it?

DR A: Yes.

DRIVER: So that was successful?

DR A: Yes.

DRIVER: And this was reviewed or discussed with both Drs Rackham and [Dr B]?

DR A: That's right.

DRIVER: At 13.38 we have what appear to be further blood gas results; is that correct?

DR A: That's right.

DRIVER: Anything of significance as a result or the pattern of results?

DR A: The pH is acceptable. The bicarbonate -- sorry, the carbon dioxide is on the lower end of normal, if not slightly low. The bicarbonate continues to remain low.

The base excess is elevated. Then we have a blood glucose that is much higher than previous readings and that lactate continues to be running high.

Based on this gas, with that CO₂ being a little bit on the low side, the mandatory rate on the ventilator was reduced from 60

breaths per minute down to 50 breaths per minute to allow a little bit more carbon dioxide to be retained.

DRIVER: If we continue to look at your contribution to the clinical notes, we will need to go to our tile 545 to do so. If we could click on to the original note, please, timed at 15.14.

Did [Baby P] at about this point in time go into a cardiac arrest?

DR A: Yes, he did. At 15.14, CPR was commenced. Adrenaline was given at 15.15 and then 15.20. A dose of sodium bicarbonate -- this is, I think, a full correction rather than a half correction -- was given at 15.17.

His oxygen saturations remain between 50% to 60% in 100% oxygen given through the ventilator. Heart rate remained low. Chest compressions were maintained and they were continuous.

DRIVER: We know from your evidence about earlier events that the threshold of 60 or below for a heart rate is an automatic trigger to this sort of intervention or response; is that correct?

DR A: That's right.

DRIVER: And equally, his saturations levels, as recorded here, is another indicator of grave concern?

DR A: Yes.

DRIVER: So did the response protocol kick in and did you observe all established steps?

DR A: Yes. In the outline below, another dose of adrenaline at 15.24, bicarbonate at 15.29. Another adrenaline at 15.30 and 15.35, and a further note at 15.40.

DRIVER: It described as "high dose" there. Should we attach any significance to the adjective "high" in this context?

DR A: I forget what the actual calculated dose would have been but the fact that I have recorded it as high would suggest that, through either discussion with [Dr B] or Dr Rackham, we had decided that -- that was the dose that was decided on to try and generate a response.

DRIVER: Now the screen has scrolled down, we can see the continuation of the attempted use of adrenaline as part of the response. We can see that at 15.49, you record the introduction of atropine. What is the desired objective of that?

DR A: Atropine is another resuscitation drug. It's there to support cardiac output.

DRIVER: Thank you. Further adrenaline at 15.54. Then you make a note about the waveform monitor; is that correct?

DR A: That's right.

DRIVER: Can you interpret that for the jury, please?

DR A: Throughout the morning [Baby P] will have had chest leads attached at locations across the chest to pick up cardiac output and that's displayed on the monitoring screen above the incubator. At this time, at 15.54, there will have been the appearance of a waveform on the screen that's not corresponding to any discernible pulse or heartbeat and it's given the term pulseless electrical activity. There's electrical activity that can be seen on the screen, but it doesn't generate a response in the heart tissue to generate a pulse.

DRIVER: Thank you. In short, whatever the screen was indicating, there was no spontaneous heartbeat?

DR A: No, none.

DRIVER: What about his circulation?

DR A: There was no spontaneous circulation, either pulses in the femoral -- the pulses where you check just inside the nappy. And following on from that, [Baby P] is now taking gasps around the ventilator, so he's gone into a pattern of breathing that is... it's on the route to a terminal event. The air entry, listening to his chest, was good on both sides and corresponded to the ventilator, but despite this, [Baby P] was putting in breaths against the ventilator and despite the sedation that he had.

DRIVER: So were you satisfied that the tube was still in a good position?

DR A: Yes, I was.

DRIVER: And that there was no obvious blockage in either side of the airways?

DR A: This tube had recently been replaced and there were sounds of good air entry on both sides of the chest.

DRIVER: And yet notwithstanding all of those efforts, there was sadly no cardiac output --

DR A: No.

DRIVER: -- or consequential circulation? Dr Rackham made a visual examination of [Baby P] and did all those factors combine to drive you, the clinicians, to the sad realisation that resuscitation was futile from hereon in?

DR A: The resuscitation had been at around about 45 minutes at this point, with no cardiac output. [Baby P]'s pupils didn't respond to light, they were fixed and dilated, and at that point the senior clinicians halted resuscitation.

It was discussed with [Baby P]'s family.

DRIVER: Was that timed at 16.00 hours?

DR A: Yes.

DRIVER: [Dr A], you were involved directly in the care of [Baby P] from his birth, tragically, to his death.

Were you able to understand the course his life took over those few days?

DR A: No.

MR DRIVER: Would you remain there, [Dr A], and answer any questions asked of you?

Cross-examination by MR MYERS

MR MYERS: I'm just going to ask if we could put up tile 289, please, Mr Murphy. If we go to the notes behind that, please.

Do you recall, [Dr A], we took a review of the notes this morning that brought us up to the notes that we have here from Dr Cooke at 18.00 on 23 June?

DR A: Yes.

MYERS: You were taken through [Baby P]'s clinical history by the prosecution from the time of birth up to this entry. We know that you came on to the unit round about 9.50 the following morning, didn't you?

DR A: Yes, I did.

MYERS: In fact, as part of your review, did you also consider any material that had a bearing on his course prior to you coming on at 09.50?

DR A: I don't recall exactly which information was passed to me. This was a "come and attend the unit quickly", which I did, and when I got there, [Baby P] was in a position where he needed immediate intervention. There will have been some words of an explanation about what was going on, but I think the clinical situation in the room would have been apparent as to what was the priority.

MYERS: If we just scroll down to see what followed, we've got an entry at 18.00 on 23 June. The next entry we have, if we scroll down, is 9.35 on 24 June, which is an entry by Dr Ukoh, who we are going to hear from. That sets out a number of problems. Can you see that?

DR A: Yes.

MYERS: "Premature. Triplet 1. RDS, previous CPAP. Apnoeas/bradys. [Then] abd distension."

Which we take to mean abdominal distension.

DR A: That's right.

MYERS: We can also see two lines below that, the reference to NBM; can you see that?

DR A: Yes, I can.

MYERS: Which is nil by mouth?

DR A: Yes.

MYERS: That relates, in fact, to the way [Baby P] was apparently presenting or identified problems at the time of that entry by Dr Ukoh at 9.35?

DR A: Yes.

MYERS: And do you have any knowledge of what happened or how we get from what we've seen at 18.00 the day before to this state of affairs at 9.35 on 24 June?

DR A: No, I don't. I wouldn't have had time to look at this entry before I became involved in [Baby P]'s care.

MYERS: But do you agree that would certainly appear to be a deterioration in his condition from the way he'd looked at 18.00 the day before?

DR A: It does appear, yes.

MYERS: And this was the position before you were called to and attended the unit, isn't it?

DR A: That's right.

MYERS: I'm going to go next, please, to your note at tile 295.

Pop behind that, thanks, Mr Murphy.

I just want to scroll down to the entry which we have for 12.28. I'm not going to repeat all the detail you've gone into where there's nothing further to add from our perspective.

At 12.28 there's been a course of events and a course of treatment and a course of readings, then you put in:

"Desaturation and bradycardia. CPR commenced. Poor colour change on ET capnograph."

DR A: That's right.

MYERS: All right. We've dealt with that. You explained to us that one thought that went through your mind at this point was whether there could be any aspect of the tube being blocked.

DR A: That's right.

MYERS: And that's -- is that a kind of standard thought that a practitioner might have when faced with this situation?

DR A: Yes.

MYERS: You removed the tube, didn't you, in fact?

DR A: Yes, I did.

MYERS: But difficult to recall from this passage of time whether or not that tube was checked for secretions; is that correct?

DR A: It may well have been checked. It's certainly not recorded here. I suspect that the tube was removed and put down on to the trolley where all the intubation kit was. The priority was to get the next tube in to secure the airway.

MYERS: The poor colour change on the capnograph, does that suggest a problem with the breathing process for [Baby P], putting it at its simplest?

DR A: It suggests that there's not the -- not the required amount of carbon dioxide passing back up through the tube. Whether that's through blockage or poor effort...

MYERS: Right. We know also that there was a radiograph that was taken, which revealed a right-sided pneumothorax, don't we?

DR A: Yes.

MYERS: And just to assist with the time of that, I'm going to ask Mr Murphy to put up tile 400. We've got your entry there at 12.28. If we go behind this we can see the radiograph -- it says "X-ray" on this -- and the notes that go with it. I'm not expecting you to remember all these details, it's just to assist all of us this. It's timed at 11.57 that morning. Can you see that at the top?

DR A: Yes, I can.

MYERS: If we want to see Dr Wright's commentary -- and Dr Wright is the radiologist dealing with that.

If we scroll down, please. This says:

"There is a moderately large right pneumothorax."

So this is for your information and, to remind us, this is the first identification we have of that pneumothorax?

DR A: Yes.

MYERS: You agree, don't you, we can't say when that pneumothorax actually occurred?

DR A: No.

MYERS: But actually if we go back to your notes now at tile 295, go into that, just scroll back down. Pausing there, certainly by the time we get to 12.28, given the timing on the X-ray, the pneumothorax was already there at that time, wasn't it?

DR A: Yes.

MYERS: Could the pneumothorax, certainly prior to any treatment given to it, have been responsible for creating any problem with air circulating in the lungs?

DR A: It may well have done, yes.

MYERS: We don't know at what point the pneumothorax occurred?

DR A: No.

MYERS: But we know from what you've told us one matter that has gone through your mind with regard to this is whether or not the action of the ventilator might in some way have caused this to happen?

DR A: It's possible.

MYERS: And that's something that can happen when a neonate is intubated and ventilated, isn't it?

DR A: The process of intubation wouldn't cause this, I don't think. But if a neonate is fighting against the ventilator, trying to breathe out when the ventilator is putting a breath in, there is a chance there.

MYERS: And the intubation -- if we want to see when the intubation had been completed and ventilation began, just scrolling up that page, if we may, pausing there, if we count seven or eight lines down from where the entry begins we can see:

"Oxygen saturations increased following insertion of Guedel airway."

Then we move on to:

"Intubated at first attempt."

With the 3.0 ETT; is that correct?

DR A: That's correct.

MYERS: Would that have been some time shortly after 9.50 when you had attended on the unit?

DR A: I believe so, yes.

MYERS: All right. So if it is ventilation which has caused the pneumothorax, it wouldn't be before that point but it could be after that point?

DR A: Potentially.

MYERS: Potentially. If we scroll down a little further to the entries around about 11.30, we see with the -- the entry says 11.30:

"Desaturation/bradycardia. CPR recommenced. Adrenaline given at 11.30. Pancuronium given at 11.32."

DR A: Yes.

MYERS: You explained to us, pancuronium is given to -- is it to relax the baby?

DR A: It's a muscle relaxant.

MYERS: And probably given to try to stop [Baby P] from fighting against the incubator -- against the ventilator in this situation; is that right?

DR A: That's right, yes.

MYERS: Does it follow that if the pancuronium was given at 11.32, he is likely to have been more relaxed and not fighting against the ventilator after that point?

DR A: Yes.

MYERS: So if it's the ventilator which plays a part in causing the pneumothorax, it's probably some time between 9.50 and 11.32? That's what I'm looking at.

DR A: Possibly, yes.

MYERS: It's as far as we can get with that?

DR A: Yes.

MYERS: The next thing I would like to ask you about is this: was [Baby P] treated or was -- rather, was medication delivered essentially by means of an IO needle with [Baby P]?

DR A: Yes, it was.

MYERS: Do you recall whether, before an intraosseous needle could be found, it had actually been necessary to look around and fetch one from the children's unit because there weren't any on the neonatal unit? Do you have any recollection of that?

DR A: No, I don't, I'm afraid.

MYERS: I just want to ask you about some of the events that happened later that evening at the conclusion of the sad events that we've just been looking at now.

One of the staff involved in the care of [Baby P] and in the resuscitation was Nurse Letby; that's correct, isn't it?

DR A: Yes.

MYERS: Do you recall that a little while after the resuscitation had ended, she actually had to go to A&E because of a needle prick on her finger?

DR A: Yes.

MYERS: Do you recall whether that had happened round about the time that she had been helping with [Baby P]'s parents after [Baby P] had died?

DR A: I don't know that I -- I don't recall when it happened.

I gather that it was towards the end of the resuscitation.

MYERS: Was it hospital policy that if somebody got a needle prick or a cut from something in the course of a procedure, they would be expected to go to A&E to have their bloods checked?

DR A: Yes.

MYERS: I'm going show you some messages, they just deal with this, and then some messages that deal with the conclusion of the evening. So I'm going to go first, if we could, please, to tile 632. Tile 632 is a message from you to Nurse Letby saying:

"Have you been seen yet?"

What I will do is just go through some of these that run in sequence and then just confirm a couple of points with you.

DR A: Certainly.

MYERS: The next tile, tile 633, from Nurse Letby to you says:

"Yes, just got back. Heard all the crash bleeps going off. I made a fool of myself whilst there."

Next tile, 634, please, your message:

"I asked them to be quick for you."

And just pausing there, does that relate to Nurse Letby going to A&E to be seen there after she had received a needle prick to her finger?

DR A: Yes, I believe so. The neonatal unit was really busy because of the events of the day.

MYERS: If we just move down to 638, please. We'd seen that in a message to you at 21.20 -- sorry, I didn't give the times

although we can see them. Nurse Letby had made reference to making a fool of herself whilst there and at 21.23 you asked:

"How did you make a fool of yourself?"

The answer to that comes at tile 643, I'm going to suggest. Can we go to 643, which is at 21.24? She said:

"I fainted."

Do you recall that exchange of messages?

DR A: I didn't but I do now, yes.

MYERS: And this all relates to the trip to A&E to have her finger checked; is that correct?

DR A: I would imagine that there were probably some venous bloods that were needed.

MYERS: Yes. We're going to move forwards, please, to 21.42 and the end of the shift. Pausing there we've seen that Nurse Letby made the note, the nursing note, that relates to this event at 21.18. We've dealt with the trip to A&E. The next tile, 660. If we can go there, please -- 661, I apologise.

This is just dealing with Ms Letby going home. You sent a message, [Dr A], at 21.42 just asking if she needed a lift home; that's correct, isn't it?

DR A: Yes.

MYERS: Then just to follow these through, and it just deals with this, tile 662, please. Nurse Letby to you:

"No, I'll be okay thanks. Not finished yet anyway."

Then at 663, a few minutes later Nurse Letby to you:

"Have you finished?"

And then 664, please. You mention back to say:

"I can wait. It's no problem."

Then also at 21.51 at 665, please:

"Yes, finished just a few mins ago."

MR JUSTICE GOSS: It probably means "a few minutes ago".

DR A: Yes, probably.

MR MYERS: Thank you. The next one is 666 at 21.52.

Nurse Letby to you:

"Can you give me 10 minutes?"

And then 667, from you to her at 21.55:

"Okay."

Then just moving forwards, please, to 673, at 22.06, a message from you to Nurse Letby:

"Just outside the front door."

Is that a reference to picking her up from the unit?

DR A: I suspect so.

MYERS: Yes, all right. Then, please, if we go to 682. This is a little later, 23.46, and a message from you to Nurse Letby, simply saying:

"I couldn't have you walking back in the dark after a rubbish day, mini needlestick and an A&E faint. I help A&E out with many paediatric problems and they said they'd try and speed things up for you."

Is that a message you sent after you collected Ms Letby, dropped her off at home, and then were back home or back to wherever you were going yourself?

DR A: Yes.

MYERS: Just referring to the events at the end of that day?

DR A: Yes.

MR MYERS: All right. We've had those messages, [Dr A], and I just wanted to make sense of them with you.

Thank you.

Re-examination by MR DRIVER

MR DRIVER: Could I ask you a few questions about X-rays and the pneumothorax please. I think the one you were shown already, I think -- I hope, Mr Murphy, you can confirm -- is behind our tile 401, if we go there.

It's timed at 11.57. You looked at the radiograph itself and Dr Wright's analysis of it below, please, Mr Murphy, which identified the presence of a "moderately large right pneumothorax".

If we then move on in time to our tile 434, and click on to there, please. This is an X-ray that we know you reviewed because the next tile informs us of that. If we stay with the radiograph, the analysis from Dr Wright first.

This confirms that the ET and NG tubes were satisfactorily positioned. Now because of your intervention, a right-sided chest drain is in situ and we're given a description as to its location. Dr Wright noted there was a "shallow, residual right pneumothorax"

at that point.

Then, finally, if we go to the next one, which is behind our tile 574, there's a pigtail drain still in situ, timed at 15.36.53.

If we go to Dr Wright's reading of this radiograph:

"Tubes [again] satisfactorily positioned, presumed right chest drain in situ."

And by this point this time, according to Dr Wright's reading of the radiograph, the pneumothorax had fully resolved.

DR A: That's right.

DRIVER: And help us understand the second part of that sentence, please, if you could:

"There is no evidence of focal pulmonary pathology."

DR A: So the right-sided lung looks the same as the left. The intervention with the chest drain has relieved the air that was in the wrong place in the chest cavity.

DRIVER: Thank you. We know, of course, that resuscitation was stopped at 16.00 hours. You gave evidence to that effect a little earlier. So having refreshed your memory of the right-sided pneumothorax, the intervention that you took to address it, and the result in your opinion, did that right-sided pneumothorax account for [Baby P]'s demise?

DR A: No.

MR DRIVER: Does your Lordship have any questions for [Dr A]?

Questions from THE JUDGE

MR JUSTICE GOSS: I'm just trying to... Is there a record of the actual date of the X-ray that's behind tile 434 showing the shallow right pneumothorax? In other words, after the drain has been put in. I haven't got it immediately to hand. I'm looking at the report itself.

MR DRIVER: If Mr Murphy clicks on and we identify a J number, I'll be able to assist. 23931. Dr Wright's note says the examination date is 24 June 2016. There's the cursor there. Is that your Lordship's question?

MR JUSTICE GOSS: No, I want the time. The time of the taking of the X-ray, sorry. Because we've got the first one, the 11.57 X-ray, and the last one, 15.36, and then we've got it resolving after the drain is put in and I was wondering if we had a time for that X-ray.

MR DRIVER: The clinical note behind tile 435, which we can go to, it's the [Dr A] note. If we click on [Dr A]'s note we will see, I hope -- is that the right note -- that at 09.40, [Dr A] reviewed that X-ray. The note starts at 09.40, forgive me.

MR JUSTICE GOSS: Is that 15.00, the circled -- go back.

There. 15.00:

"Pigtail chest drain inserted using [something, something]."

DR A: "Aseptic technique."

MR JUSTICE GOSS: Then it's after that there's a reference to Dr Wright's report, I think, and correct positions.

But we don't -- the X-ray itself doesn't seem to be timed. That's the only thing. That's what I was looking for.

MR DRIVER: Would your Lordship allow us to come back to that?

MR JUSTICE GOSS: It's all right. It's obviously some time between 11.57 and 15.36, closer to 15.00 because that's when you made your note, [Dr A], or that's the time inserted. Unless you can assist us in relation to that.

DR A: The entry further up, where it's been decompressed with a cannula, I think that may correspond to the X-ray that we were just looking at.

MR JUSTICE GOSS: Can we go up then?

(Pause)

The chest X-ray at around 12.30?

DR A: That's right.

MR JUSTICE GOSS: Thank you. So I think at around 12.30.

MR DRIVER: My Lord, if there is any documentary material that provides us with greater certainty, we will agree it between the parties, I'm sure, and bring it back to the jury's attention, of course.

MR JUSTICE GOSS: Yes, thank you very much. I have no other questions, thank you, [Dr A]. You've actually answered the query I had there as best you can from the available documents.

That completes your evidence at this stage --

MR DRIVER: For today.

MR JUSTICE GOSS: -- but you will be coming back again.

What we'll do then now, members of the jury, because there are going to be some statements read next, am I right, Mr Driver, or not?

MR DRIVER: We'll move on to live witnesses as soon as possible so we can get through as many as possible today.

MR JUSTICE GOSS: Fine. We're going to have to reconstitute the court for that purpose?

MR DRIVER: We are.

MR JUSTICE GOSS: Do you need 10 minutes or will 5 minutes do? You can have 10 if you want. Because I think that -- I don't know how many witnesses... We're going to have to have another break as well later this afternoon, aren't we?

MR DRIVER: I think we've got more witnesses than time.

MR JUSTICE GOSS: Exactly. We're going to have at least one more break after this, so if you can do it in 5 to 10 minutes, we'll just check when you're ready, if you are ready after 5 minutes, but don't worry if you're not. Thank you very much.

I'll rise then.

(2.51 pm)

(A short break)

(2.57 pm)

DR ANTHONY UKOH (recalled)

Examination-in-chief by MR ASTBURY

MR ASTBURY: Could we begin, for the record, with your full name?

UKOH: Yes. My name is Dr Anthony Ukoh.

ASTBURY: Dr Ukoh, we've heard from you before. You've been invited along today to assist with your recollections of a shift on 24 June 2016 at the neonatal unit of the Countess of Chester Hospital and, in particular, your treatment of a little boy called [Baby P].

In preparing your statement for today, have you had an opportunity to review your notes?

UKOH: Yes, I've had a look at my notes and also of the actual statement that I made, yes.

ASTBURY: Good. May I ask you whether you have any independent recollection of [Baby O] on 24 June 2016?

UKOH: It's mainly with the help of my notes being how long the incident has been.

ASTBURY: Would it assist if we put the notes on the screen in front of you?

UKOH: Yes, that'd be helpful, yes.

ASTBURY: Could we go to tile 289, please, Mr Murphy?

We'll need to scroll down a little bit. Hopefully there we can see an entry at 9.35. Do you recognise the handwriting?

UKOH: Yes, that is my handwriting.

ASTBURY: Good. You've headed it "RWR"; is that "routine ward round"?

UKOH: No, that is registrar ward round.

ASTBURY: Apologies. You've timed it and dated it helpfully, and I think at the start of the note you've set out what you

understood to be the issues that [Baby P] had faced during the course of his short life.

UKOH: That is correct, yes.

ASTBURY: Thank you. We'll go through those, please. You have noted his gestation at birth and his present age.

Is that, "(1) prematurity"?

UKOH: Yes, that's a short form of prematurity.

ASTBURY: At number 2, you've recorded he was triplet number 1; is that right?

UKOH: That's correct.

ASTBURY: What's the entry in brackets, please?

UKOH: That is MCTA, which is a short form for monochorionic triamniotic.

ASTBURY: Thank you.

UKOH: It's the type of triplets that the pregnancy was.

ASTBURY: Is where the three triplets share the same placenta?

UKOH: That is absolutely correct, yes.

ASTBURY: Number 3, RDS, we've heard about, is respiratory distress syndrome; is that right?

UKOH: That's correct.

ASTBURY: And also you've noted that he had previously been on CPAP?

UKOH: Yes.

ASTBURY: You have noted at number 4 the occurrence of apnoeas and bradys, so bradycardias?

UKOH: Yes, correct.

ASTBURY: And you've also noted abdominal distension, number 5?

UKOH: Correct.

ASTBURY: Nothing in number 6?

UKOH: No.

ASTBURY: That summarises your position as you understood it to be; is that right?

UKOH: That's very correct, yes.

ASTBURY: Again, this is a process we're becoming familiar with.

V is ventilation?

UKOH: Yes.

ASTBURY: So correct me if I'm wrong, is that self-ventilating in air?

UKOH: That is correct.

ASTBURY: But notwithstanding that, there had been some desats and bradys?

UKOH: Yes.

ASTBURY: In your point 3, "Previous CPAP", does that suggest that [Baby P]'s no longer on CPAP and is (overspeaking) breathing for himself?

UKOH: That is exactly what I meant, yes.

ASTBURY: Feeding, is that F, nil by mouth?

UKOH: Yes.

ASTBURY: Then you've noted the rate at which he is receiving 10% dextrose. Then is that bowels open and passed urine, both ticked?

UKOH: That's correct.

ASTBURY: Thank you. We can go to the next page, please, Mr Murphy.

You then list the medications which [Baby P] was receiving. Is that first one crossed out?

UKOH: Yes, because that was what he was on before. He wasn't on that now when I had come to see him, so that is crossed out, yes.

ASTBURY: You then put "re-screened", is that?

UKOH: Yes.

ASTBURY: And a number 3?

UKOH: "Re screened on day 3."

ASTBURY: And then you've listed cefotaxime, which we know is an antibiotic?

UKOH: Yes.

ASTBURY: And is that "fluclox" an abbreviation?

UKOH: It's the short form of flucloxacillin, which is also an antibiotic.

ASTBURY: You've then examined [Baby P]; is that correct?

UKOH: Yes.

ASTBURY: You have noted he was mildly pale?

UKOH: Yes.

ASTBURY: Is that "zero recession"?

UKOH: Yes, that just means -- sorry, it's one of our shorthands for "no recession".

ASTBURY: Okay. Very briefly, please, recession being?

UKOH: Recession is difficulty in breathing, so recession is what you normally see when you look at the anterior chest wall, the front of the chest. So there was no recession at that point.

ASTBURY: So despite being in air, no apparent difficulty --

UKOH: In breathing.

ASTBURY: Thank you. I think that covers heart sounds, the next entry:

"1 plus 2 plus [is that] very soft systolic"?

UKOH: Yes, on listening to the heart, there was a very soft murmur, which is sometimes what we hear with the stethoscope, but it was very soft, so it may have been nothing. Sometimes you could hear that and sometimes it just disappears as well.

ASTBURY: Any cause for concern at that stage?

UKOH: Not with a very soft systolic murmur given he was only 3 days old. Nothing untoward.

ASTBURY: Underneath that, is that "LSE"?

UKOH: Yes, in is in reference to the systolic murmur and the LSE means at the left sternal edge. This is where the murmur was heard. So it wasn't everywhere, it was heard at a specific part of the chest wall, which again is showing that it's a probable innocent murmur, nothing really to worry about at that point.

ASTBURY: Does the word "moderately" also refer to that feature?

UKOH: No, that refers to the distension of the abdomen.

ASTBURY: Thank you.

UKOH: Which is the next -- the abd. So there was moderate distension and some bloatedness. However, the abdomen was soft, so it wasn't hard at that point.

ASTBURY: Would you have examined the abdomen as a consequence of what you saw?

UKOH: Oh yes. This is the reference down below, that it was soft, so that's the examination of the abdomen.

ASTBURY: Is that what you would hope to find in those circumstances?

UKOH: You mean the distension?

ASTBURY: The fact it was soft.

UKOH: Well, it could be soft, it could be hard as well, but it wasn't normal to find a moderately distended abdomen that is bloated. But it was soft, so sometimes you can have it quite hard as well and it's a bit more worrying.

ASTBURY: You noted that the capillary refill time was less than 2 seconds.

UKOH: Yes, which is normal.

ASTBURY: And the skin, to you, was slightly mottled?

UKOH: Yes.

ASTBURY: Thank you. Scroll up a little more, Mr Murphy, and we'll look at the plan, please, Dr Ukoh.

Number 1, is that "repeat bloods"?

UKOH: Yes, repeat bloods.

ASTBURY: Just take us through those abbreviations, please.

UKOH: That FBC is a full blood count, which is one of the routine tests to check for anaemia. The second one is U&Es, which is urea and electrolytes, again fairly common if you are on a drip. The CRP is the C-reactive protein, which is a marker of infection. And the next one is a gas which just tells you about the breathing, the oxygen levels and other gases. Then you have the lactate, which is what you can use to measure perfusion, being that the skin was slightly mottled. And then an ammonia as well.

ASTBURY: What's the ammonia?

UKOH: The ammonia is one of the tests that can be performed.

If you're thinking of a metabolic condition, it's one of those non-specific tests that you could do. And if it's raised, it could point towards something metabolic.

ASTBURY: Right. Number 2, is that:

"Trial for long line for TPN"?

UKOH: Yes.

ASTBURY: We've heard TPN is a means of feeding the baby when they're nil by mouth.

UKOH: Absolutely, yes.

ASTBURY: Then is number 3:

"Keep nil by mouth for now"?

UKOH: For now, yes.

ASTBURY: Then I think we can see your signature thereafter.

UKOH: Yes.

ASTBURY: Do you recall your overall impression of [Baby P] during your examination?

UKOH: Yes. My overall impression is this is a child we need to keep an eye on. However, at that point he wasn't particularly unwell. Being that he's premature and he had that distension, we

had to keep an eye on him, in particular in relation to a condition called NEC, necrotising enterocolitis.

ASTBURY: So that was the concern going forward?

UKOH: And also infection as well, yes.

ASTBURY: Okay. Anything else of note during the course of your examination before you left [Baby P] that morning?

UKOH: I wouldn't say -- apart from that, you know, there wasn't anything else that I can remember, no.

ASTBURY: Did you see him again shortly afterwards?

UKOH: I saw him again but that was in a different context.

ASTBURY: Tell us about that, please.

UKOH: So I cannot remember the exact -- where I was exactly, but it then became -- I would say maybe 20 minutes after I was called back to an alert that he was -- he had become quite unwell. So there was a sudden deterioration, he was nowhere like what he was after I'd seen him. So his oxygen levels had plummeted, his heart rate had also plummeted as well.

ASTBURY: Okay. Just breaking that down, you think it was about 20 minutes later, did you say?

UKOH: I think. This is just in relation to -- looking at the notes, putting that all together, because I can only say that was the case because I was examining his brother.

So I did put a note that I had to be called away from -- and it was around that time, it was at least 20 minutes that I made that time, yes. So roughly about that, yes.

ASTBURY: So his brother was [Baby R]?

UKOH: His brother was [Baby R], yes.

ASTBURY: You were saying you were with [Baby R] when you were called away?

UKOH: Absolutely, yes.

ASTBURY: You think about 20 minutes later. Do you remember where you were?

UKOH: Still on the same unit, I think, yes. Still on the same unit.

ASTBURY: And do you recall who called you or how you came to go back to [Baby P]?

UKOH: To be honest, I can't really remember. I can't really remember because it's been quite a while. I don't want to guess, yes.

ASTBURY: You started to tell us how different [Baby P] presented when you'd gone back after those 20 minutes or so. Just describe that to us, please.

UKOH: Yes. When I was -- when I saw -- you asked about [Baby P]?

ASTBURY: Yes, [Baby P], please. You told us you were called back to [Baby P] and I think you mentioned that he presented very differently than he had been presenting 20 minutes or so before. Just explain to us how he looked when you went back, please.

UKOH: When I'd seen [Baby P] about 20 minutes earlier he had a normal heart rate, his oxygen levels were fine, but on coming back -- when I was called back, his oxygen levels were, if I remember correctly, they were like 60% in air and his heart rate was 80 beats per minute, which is definitely not what it was when I was with him.

ASTBURY: I don't think you made another note, but did you, during the course of preparing your statement, have a look at [Dr B]'s note?

UKOH: Yes.

ASTBURY: We'll go to that in a minute then. Don't feel pressured to try and remember too much. Just from your own recollection, you told us that he wasn't well when you went back. Do you remember who else was there when you went back, if anybody?

UKOH: I remember definitely [Dr B] being there. I think she was also doing the ward round with me if I can remember, just -- and with the notes that I had, yes. I know there were some nurses in there but I can't remember who exactly they were.

ASTBURY: All right. We've heard earlier from [Dr A]. Do you recall whether [Dr A] was there at that point?

UKOH: Absolutely. Sorry, yes, he was there, yes.

ASTBURY: Do you have any recollection of how [Dr A] came to be there?

UKOH: [Dr A] was called by a nurse, one of the nurses who was also there. I just can't remember who it was.

ASTBURY: Do you remember anything, if you can't remember the name, anything about what the nurse was doing who had called [Dr A]?

UKOH: Again, this is just going by the notes, that is giving some kind of support with the bagging, so giving some face mask ventilation, which I also took over.

ASTBURY: Was that request for [Dr A] after both you and [Dr B] were present?

UKOH: Yes.

ASTBURY: So it was a request for a third doctor to attend?

UKOH: Yes.

ASTBURY: Was it a request by name or was it just for any other doctor?

UKOH: No, that was for [Dr A] in particular.

ASTBURY: You can't recall the name of the nurse who --

UKOH: No, no, I can't recall.

ASTBURY: You think it was whoever was doing the Neopuff at that particular moment?

UKOH: Yes. If I must say, why the nurse definitely wanted [Dr A] is that the day before [Dr A] had been involved with the sib, was heavily involved, that's the only reason why I could think we needed extra hands, that's the only reason why I could think the nurse wanted [Dr A] because there was a sib who unfortunately had a similar --

ASTBURY: By sib, do you mean sibling?

UKOH: Yes. He was heavily involved with that one, so that's the only reason --

ASTBURY: Did the nurse say that was the reason why they wanted [Dr A]?

UKOH: No, I just assumed. I just assumed, yes.

ASTBURY: Do you recall what you did when you went back to [Baby P]?

UKOH: Oh yes. Being that he had very low oxygen levels, his heart rate was low, I proceeded to give some face mask ventilations with the Neopuff. This is just giving some ventilation through a mask to support the breathing.

ASTBURY: Without going to [Dr B]'s note, which I promised you we would, do you remember anything else about what happened during the course of that initial event?

UKOH: Yes. So when [Dr A] came over, he wanted to take over the airway so we let him do that. So he took over the airways, he then proceeded to intubate the baby -- so that's putting down a breathing tube. Unfortunately, the access, the access that the baby had, which is a cannula --

ASTBURY: This is intravenous access?

UKOH: Yes, that got lost. So in that sort of situation to give very important medication we needed to have some access. So because of how urgent it was, we proceeded on to find intraosseous access. So I sited one and [Dr B] sited on the other leg as well.

ASTBURY: When you described access as lost, just explain that to us, please.

UKOH: Sorry. There was a previous cannula which was through the vein, so this is what I mean, that it actually -- it wasn't working anymore --

ASTBURY: Okay. Were you aware why?

UKOH: Sometimes it happens, sometimes babies just lose their cannulas and you have to re-site it. I don't know particularly why that happened then, but you know that's what happened, and it was very important that we re-site it to give fluids and other important medication.

ASTBURY: As it happens, we've heard a little bit about -- is it intraosseous access?

UKOH: Yes.

ASTBURY: So you sited one of those accesses; is that right?

UKOH: Yes. It was being done simultaneously, if I can remember. So I sited one and [Dr B] sited the other on each leg.

ASTBURY: Okay. The purpose being to enable --

UKOH: Yes, to give drugs, fluids, yes.

ASTBURY: Did you remain at the resuscitation to treat [Baby P] after that access had been secured?

UKOH: After that, because there was already [Dr B], [Dr A], and because there was two babies that had to be seen on that morning ward round, I then proceeded on to carry on with the round.

ASTBURY: I did say we'd look at that note, I think you've probably covered it, but can we look at tile 625, Mr Murphy?

Obviously, this is not your note, this is, we understand, and we'll hear from her tomorrow, [Dr B].

But you mentioned, I think, eight lines down -- if you want to refresh your memory from that section, please.

This is the note that you told us about before that [Dr B] made of what happened once you had gone back to [Baby P] and which you had refreshed your memory from.

I just wanted to give you the opportunity again. You've actually, I think, given us quite a detailed account of what happened, but just to check you've not missed anything.

UKOH: Yes. (Pause). It more or less covers what I've just said.

ASTBURY: Okay.

UKOH: It more or less covers... There was a drop in sats, drop in heart rate. It also says, just a few minutes earlier, [Baby P] had been seen and the discussion was to do those bloods that I have just mentioned, so the gas, lactate, ammonia, CRP, and shortly after that [Baby P] deteriorated.

ASTBURY: Does that suggest that after your examination of [Baby P] at 9.35, and we ran through your plan and I asked you to explain ammonia, that is something you then discussed with [Dr B]?

UKOH: I think [Dr B] had already -- this is what you may have to find out from her directly. But yeah, I think we'd already discussed that, yes.

ASTBURY: It's just suggested by the note, but as I say, we'll hear from [Dr B].

UKOH: Yes.

ASTBURY: If we scroll down. [Baby P] deteriorated, Dr Ukoh started to bag, which is (overspeaking) Neopuff, as you've explained.

UKOH: Which is what I explained, the Neopuff.

ASTBURY: "Intravenous access was lost as not flushing."

UKOH: Yes.

ASTBURY: "Airway maintained whilst intubation had been prepared."

Then it goes on to describe the insertion of the intraosseous needle, first in left, then your name in brackets at the bottom, and then right and in brackets "Myself". So it's your recollection, is it, that thereafter you moved on to care for other babies in the unit?

UKOH: Yes.

ASTBURY: Right. Did you have cause to treat or see [Baby P] again during the course of that day?

UKOH: No, I did not.

MR ASTBURY: I have no more questions if you could wait there, Dr .

Cross-examination by MR MYERS

MR MYERS: Dr Ukoh, I'd like to look at the note that you made at about 9.35, which is at tile 289. If we just scroll down to your entry, please. We'll go there, Mr Murphy.

You explained to us the problems that you have listed at 1 to 5. At item 4 you have, "Apnoeas, bradys", and at number 5 you've got "Abd [or abdominal] distension". Do you know what period of [Baby P]'s life those apply to?

UKOH: Yes. Those applied within the -- because he was actually day 3 of life, so this was within the first -- so what I was referring to there was within the first 72 hours of his life.

MYERS: Right. Do you recall whether they relate particularly to any problems that had happened during the course of the night shift, the shift that had started from 8 o'clock in the evening the day before through to this morning? Can you recall whether they applied to that or not?

UKOH: I cannot fully recall, but because he wasn't on the CPAP anymore, I don't think it was something that occurred overnight because he would have been left on the CPAP machine.

MYERS: If we just have a look at the observation chart at tile 22 just with regard to what you say there. Just go into that. Pausing there, if we look overnight, can you see at the top, we're going to follow these columns down, where it says 23/6/16. The cursor is just there.

UKOH: Yes.

MYERS: You can see where it says 22, 22.00, just below and to the left of 23. Do you see the 22.00 where the cursor is?

UKOH: Yes.

MYERS: Then we've got 22.00, then 00 which is midnight, 02, 04 and 06, through to 08 on the 24th, the handover on the 24th. Do you see that period there?

UKOH: Yes.

MYERS: With that in mind I'm going to scroll down to the entries we have for how he was receiving air and down to the bottom part of the chart. If we look, just take a moment to look in on this, down the left-hand column in the handwritten entries you'll eventually see an entry saying "Optiflow"; can you see that?

UKOH: I can see that, yes.

MYERS: All right. Then if we go from left to right, go across to the Optiflow, there's nothing to start with, but we can see "Optiflow" above -- it's initialled "SE" down at the bottom, but can you see it says 4L or 4 litres?

UKOH: I can see that, yes.

MYERS: That's there for five of those entries.

UKOH: Yes.

MYERS: If we just scroll up, if we put the cursor on the first one and scroll up, we can see what time they apply to.

Can you see they run from 10 o'clock in the evening through to about 6 in the morning?

UKOH: Yes.

MYERS: So it's apparent he had to be put on breathing support round about 10 o'clock in the evening on the 23rd, didn't he?

UKOH: Yes.

MYERS: Although he was taken off it by 6 in the morning, we've seen that; is that correct?

UKOH: Correct, yes.

MYERS: So is it conceivable that would indicate some issue with regard to or some concern with regard to breathing overnight?

UKOH: Possibly, but the fact that they were less concerned to take it off in the morning, in my opinion, would mean that they weren't particularly that concerned. I mean, every premature baby may have the odd desat or brady, but for them to have taken it off that morning would suggest they were less concerned with his respiratory status.

MYERS: Yes. Whoever had taken that decision, it would suggest that by 6 o'clock they were less concerned; is that fair to say?

UKOH: Correct, yes.

MYERS: Yes. But as to specifically where you say in your note, if we go back to tile 289, where we've got apnoeas, bradys and abdominal distension, you have no particular recollection what period of those first few days of life that applies to, do you?

UKOH: No particular time, but I know it's prior to -- within that first 72 hours of life.

MYERS: Yes, all right. If we scroll further down into the second page with your examination, Dr Ukoh, there are certain things you've identified there I'm going to ask you about. Included there is the entry:

"Abdomen moderately distended/bloated."

Is that something which potentially may be a cause of concern?

UKOH: Yes.

MYERS: Where it says below that, "Skin slightly mottled", when you see that, is that consistent with what we've come to understand as poor perfusion around the baby?

UKOH: Yes, but the whole picture has to be -- because some babies might be (overspeaking) so the whole picture has to be taken into consideration.

MYERS: Was it your recollection also, looking where we've got "plan", just below that, that the lactate indicated possibly some sort of acidosis at this point?

UKOH: Yes. That lactate is what could help you to assess perfusion and also acidosis as well, that's correct, yes.

MYERS: So by the time you'd completed your review, you'd noted various problems or issues that had occurred within the first few days of life, that's right, isn't it? That's right at the start of your review. And then you'd identified on your examination abdominal distension, slight mottling and the potential of metabolic acidosis, would that be fair, from the lactate?

UKOH: At that point, I wouldn't say -- that lactate is actually a test, so it's not exactly saying -- it's only when it's done that you would be able to ascertain whether there's acidosis or not. At that point because it hadn't been done, I wouldn't know if the baby is acidotic or not.

MYERS: The ammonia test you referred to was because you were thinking whether there may be a metabolic condition?

UKOH: Correct, yes.

MYERS: So the type of things going through your mind that may be issues, you have said to us, were NEC?

UKOH: Yes.

MYERS: Infection?

UKOH: Yes.

MYERS: A metabolic condition of some sort, potentially?

UKOH: Sorry, the NEC is not a metabolic condition, but yes, one of the conditions.

MYERS: Yes, I'm not suggesting it is. The things in your mind are NEC?

UKOH: Yes.

MYERS: Infection?

UKOH: Yes.

MYERS: A metabolic condition of some sort?

UKOH: Possibly, yes.

MYERS: The fact is until tests have been done and you've established a problem, it may be difficult to be sure what the underlying problem is; is that fair to say?

UKOH: Correct, yes.

MYERS: That was the position before the deterioration that we know took place around 9.50 that day. We have a timing for that, Dr Ukoh, if that helps.

UKOH: Yes.

MYERS: When [Baby P] deteriorated, do you recall that you were involved in writing up his notes? Is that what you were doing or do you not know what you were doing?

UKOH: When he deteriorated, I was bagging him, I was assisting with his breathing.

MYERS: It's my fault. I wasn't very clear. Let me come back a bit.

UKOH: Okay.

MYERS: At the time that [Baby P] deteriorated, let me put it this way, were you in the same nursery, in nursery 2?

UKOH: I can't fully say that for sure because this is 6/7 years ago, but I was -- I believe I was examining his brother, [Baby R].

MYERS: Yes.

UKOH: So I believe -- because the way the nurseries are, you have different bays, so I can't remember whether it was the same bay, but I was definitely on special care.

I just can't be sure if I was in the same bay that [Baby P] was but definitely in the same unit.

MYERS: We know you made your statement to the police on 6 November 2018.

UKOH: Yes.

MYERS: And perhaps I can confirm this, that at that time it was your recollection it was possible that you were with [Baby R], [Baby P]'s twin, at that time, but you're not sure?

UKOH: Correct.

MYERS: Is that probably as accurate as we can get on that?

UKOH: Yes. I just mention that when I was seeing [Baby R], I made a note that I got -- I had to go away for an emergency, so [Baby R] was on the unit, so I must have been on the unit then, so that's the most I can actually -- what I can't remember is if they were in the same bay.

MYERS: Let me see if I can help with that. You certainly remember you were with [Baby R] then at the time you had to go and help with [Baby P]; is that correct?

UKOH: Yes.

MYERS: If we look at tile 258, we've actually got a diagram of who was where in the unit if this helps, Dr Ukoh.

If you take your time to look at that, can you see at the bottom of that diagram there's a yellow strip with "nursery 2" written in it?

UKOH: Yes.

MYERS: And a red arrow up to nursery 2?

UKOH: Yes.

MYERS: You see it's got in nursery 2, [Baby P], who we know was there. And [Initials of Baby R] who we know is [Baby R]. That's [Baby R]. So if [Baby R] was who you were looking after at the time, do you agree that places him in the same room as [Baby P]?

UKOH: Yes. Correct, yes.

MYERS: So you'd finished your review of [Baby P], you had moved to [Baby R], and then [Baby P] deteriorated; is that right?

UKOH: Correct, yes.

MYERS: Right. You were in the same room so you were able to assist fairly rapidly, weren't you?

UKOH: Yes, with the help of this now, yes.

MYERS: Your recollection is in fact one of the things you did very quickly was help with the Neopuff; is that right?

UKOH: Correct.

MYERS: And the nurse who was in there, do you recall whether she went to get further assistance?

UKOH: I can't remember who, but someone definitely asked for help and the nurse in there definitely I recall wanting [Dr A] in particular. So that was the sort of help that the nurse wanted.

MYERS: Then [Dr A] did come and join?

UKOH: Yes, very shortly came after, yes.

MYERS: And your understanding is [Dr A] had dealt with [Baby O], one of [Baby P]'s brothers, the day before, hadn't he?

UKOH: Yes, the day before, yes.

MYERS: One of the other things you did before you had duties elsewhere was to help with the intraosseous needle; is that correct?

UKOH: Yes.

MYERS: Can I just ask this: did they have the needles ready on the unit or did you have to go to the children's ward to get the needles that you used?

UKOH: I honestly cannot remember. All I know is I had it quickly. I can't remember whether it was on the unit or whether... But it didn't take that that long for it to come, there wasn't much delay. Sorry, I can't remember.

MYERS: I just wanted to see if you had any recollection where you got it from.

UKOH: No, I can't remember. I'm presuming it was on the unit, but I can't be sure.

MR MYERS: Thank you.

Re-examination by MR ASTBURY

MR ASTBURY: Just one matter in clarification, please, my Lord. Could I ask everybody to turn to jury bundle number 2 and the papers they have in this particular case behind divider 21.

Dr Ukoh, in front of you is a file. Could you go to divider 21, please?

UKOH: Yes.

ASTBURY: Could I ask you to turn the pages back so that you come to a form, I am sure, you'll be -- no, no, sorry, stay in the divider. Just the pages ahead, if you can turn them back. I'm going to ask you to go through and find these particular documents, which should be there, the observation charts the nurses completed. They're about halfway through.

UKOH: Okay.

ASTBURY: Take a moment to familiarise yourself with them, please.

(Pause). You've identified there are three of those observation charts; yes?

UKOH: Yes.

ASTBURY: To make the point, I'm going to ask you to go to the third one, please, which only has two entries on it.

This is [Baby P]'s observation chart up until 15.00 when he sadly or shortly before he sadly passed away. There's two entries on the third one of those observation charts?

MR JUSTICE GOSS: Have you got it? It's J23954. I'm kicking myself now because some time ago I was thinking we should have all these paginated, 1, 2, 3, 4, 5, 6, it'd be much quicker than having to trawl through the lot, but here we are.

MR ASTBURY: Hopefully everybody can see -- can you, Dr Ukoh -- those two entries for 14.00 and 15.00 in the top of the chart?

UKOH: Yes.

ASTBURY: Turn a page back, please. We know that's 24 June.

If we look at the top, we can count back on the 24th, the entries for 13.00, 11.00, 09.00, 06.00. Are you following?

UKOH: Yes, I am.

ASTBURY: And we can go all the way back to midnight, just into the 24th. It would appear that someone's written above midnight that's the change of date into the 24th. Okay?

UKOH: Yes.

ASTBURY: So we know that the columns from there to the right are all the columns for 24 June and then if we do the same exercise

and go to the left, we can see 22.00, 20.00, 18.00, 14.00, all the way down to zero again, which must be 23 June.

UKOH: Yes.

ASTBURY: And someone has written "23 June" above the zero when the date changes. So just bearing in mind some of the questions you were asked, now that we've established that's, say, 02.00 on 23 June, and if we go down on the form we can see, as was pointed out to you, that [Baby P] was receiving 4 litres of Optiflow at that particular time, so at 02.00 hours on 23 June. Can you follow that, doctor?

UKOH: Yes.

ASTBURY: I'm going to put it up on the screen, my Lord, in case anyone is not following, please.

The eighth column along from the left, Mr Murphy, if you could home in on that, please.

So that's the entry for 2 am on 23 June. So we can see that the entries before that would have been late on 22 June and the Optiflow carried on into the early hours of the 23rd; would you agree, doctor?

UKOH: Correct, yes, I agree.

ASTBURY: Thank you. Then if we just zoom out a little bit, please, the last entry for Optiflow is in fact 6 am on 23 June; would you agree?

UKOH: Correct, yes, I agree -- no, 6 am on the 24th.

ASTBURY: No, that's the point I was trying to make.

UKOH: 6 am on the 24th.

ASTBURY: Count back from --

MR MYERS: That was plainly my mistake, I recognise that.

It's exactly what I did, actually.

MR ASTBURY: I'm sorry for the long run up to the wicket.

MR JUSTICE GOSS: It was a very long run up, yes.

MR ASTBURY: The point is this, and I didn't want to jump to it if people didn't agree, that Optiflow for [Baby P] had come to

an end over 24 hours before you examined him on 24 June; do you agree?

UKOH: The Optiflow... Just bear with me one moment.

ASTBURY: I think you may be falling into the same error, doctor.

UKOH: Let me have a look, sorry. The Optiflow, from what I can see here, just purely looking at this, starts at 6 am --

ASTBURY: Yes.

UKOH: -- on the 24th.

ASTBURY: Well, no, because the date is written at the midnight when the date changes. That's what I was trying to point out with you. I'm sorry if I haven't done it very effectively.

If we go back to the midnight before, on the 23rd, that's the start of the day.

UKOH: You're right. You're absolutely correct, yes.

ASTBURY: Optiflow ends at 6 am on the 23rd?

UKOH: Yes.

ASTBURY: So it's some 27 hours before you examined [Baby P]?

UKOH: Yes.

ASTBURY: Would you agree?

UKOH: Yes. Looking back now, I hadn't... Yes.

ASTBURY: He had -- if we look at the entries through the 24th, he'd been in air all that time; is that right?

UKOH: Yes. Having looked at it quite closely, I can see, yes.

Normally, it would have been a bit more clearer than what it is. The way it's written it's not clear.

ASTBURY: That's why I tried to do it -- I think I may have confused it even more, I'm sorry. But there we go. So nothing but air for [Baby P] for those 27 hours before you examined him with his distended abdomen; is that right?

UKOH: Yes.

MR ASTBURY: Thank you. Sorry, that took longer than I thought it would.

MR JUSTICE GOSS: The consequence of that is that he hadn't been on Optiflow for 27 hours before you examined him.

UKOH: Yes. That is correct, yes.

MR JUSTICE GOSS: All right. Mr Myers -- it was just an easily made mistake when there's so much detail in all these documents. He was 24 hours out, it was the wrong day.

MR ASTBURY: There's nothing further, my Lord.

MR JUSTICE GOSS: All right. Thank you very much.

Dr Ukoh is not required again. Thank you very much for coming this afternoon and giving your evidence.

That completes it. You're not required to give evidence again during the course of this case, but for the avoidance of any doubt or difficulty, don't speak to anyone -- I don't know where you are working now, but don't speak to anyone about anything to do with this case until it's over.

(The witness withdrew)

MR ASTBURY: My Lord, we would like to call Nurse Sophie Ellis next and she and any other witness that we might get to today require screens.

MR JUSTICE GOSS: Yes. This is the three-minute break, 2 to 3 minutes.

(Pause)

MS SOPHIE ELLIS (recalled)

Examination-in-chief by MR DRIVER

MR DRIVER: Could you repeat your full name again for the benefit of the recording?

ELLIS: Sophie Ellis.

DRIVER: Ms Ellis, when you were last with us, you gave evidence about the care that you gave to [Baby O] or [Baby O] on the night shift that ended about 07.30 hours on 23 June 2016. Did you work the following night shift?

ELLIS: I did, yes.

DRIVER: And that's a shift that I would like to ask you questions about today.

Upon your return to work to work the night shift from 19.30 hours on 23 June, did you learn of [Baby O]'s passing?

ELLIS: Yes.

DRIVER: So we can all orientate ourselves, that was an event timed at 17.47 on 23 June 2016, that is to say a little short of 2 hours or so from your return -- to your return to work. Upon your return to work were you allocated responsibility for [Baby O]'s brothers?

ELLIS: Yes.

DRIVER: Both [Baby P] and [Baby R]; is that correct?

ELLIS: Yes.

DRIVER: If we could begin, please, by looking at your nursing note in which you summarise the events of that shift, which, Mr Murphy, is housed behind tile 169.

If we look to the middle right of page 23872, the block entry, middle right. Your initials on an entry made between 01.31 and 01.48; is that correct?

ELLIS: Yes.

DRIVER: Does it begin, as is the custom, with you setting out the time that you took over his cares and the safety checks, et cetera, that you undertook?

ELLIS: Yes.

DRIVER: Did you summarise the fact that his observations had, up until that point at least, been within the limits, that is to say the expected parameters; is that correct?

ELLIS: Yes.

DRIVER: But you note that he did have:

"One desaturation into the 80s and one episode of bradycardia into the high 90s, self-corrected, no intervention required"?

ELLIS: Yes.

DRIVER: Could you reflect upon that for us, please?

ELLIS: Yes. So sometimes preterm babies do have desaturations and bradycardias that can be due to immaturity, it can also be due to other factors. But the fact that he'd self-corrected and he didn't need any intervention was a more positive aspect of it.

DRIVER: To continue your summary, you noted that he does or did at times have a low-lying heart rate, between high 90s and 110, and did you bring that to the attention of a medical colleague, Senior House Officer Henton?

ELLIS: I did, yes.

DRIVER: Was that deemed to be a set of data of concern?

ELLIS: Not necessarily. Sometimes if they're in a deep sleep they can maybe have a low-lying heart rate. I know for a baby of his gestation it possibly was on the lower side, hence why I raised it. But yes, it's important to take into account other factors as well.

DRIVER: Your note moves on to make reference to the feeding regime, 90ml per kilogram per day of donor-expressed breast milk at the rate of 15ml, 12 times per day.

ELLIS: Yes.

DRIVER: Then you made this note:

"14ml part-digested milk aspirate gained at 20.00."

ELLIS: Mm-hm.

DRIVER: Could I ask you, please, to open the folder in front of you and go behind divider 21. There's a number of documents. If you go to the final two documents in that part of this folder, you will, I hope, recognise documents entitled "Neonatal unit fluid balance chart"

--

ELLIS: Yes.

DRIVER: -- the likes of which I'm sure are well familiar to you.

ELLIS: Mm-hm.

DRIVER: For the benefit of the screen, Mr Murphy, this document is also housed behind our tile 171. Drawing your attention to

the paper document, do we see your initials to the bottom right of our page J23981 --

ELLIS: Yes.

DRIVER: -- corresponding to entries at 20.00 and 22.00 hours?

ELLIS: Yes.

DRIVER: There seems to be a third entry, is this fair to say, the same handwriting at 24.00 hours, but you haven't initialled that one?

ELLIS: Yes.

DRIVER: So as to the aspirates, or aspirate more accurately, how much was aspirated from [Baby P] and when?

ELLIS: So at 8 o'clock there was 14ml that was aspirated and that looks like it was returned with an acidic pH. On the next feed I didn't write the volume that was aspirated -- I most likely aspirated enough that got me an acidic pH just to make sure the tube's in the right place. Then at midnight I aspirated 20ml and I think that's a D with a circle around it, which means that that was discarded. And I got a pH of 3 for that one.

DRIVER: Let's deal with them in turn. 20.00 hours. We know -- we've just reminded ourselves from your summary that which is evidenced on this document, that on the face of the document at least, during his previous feeds, the feeds that preceded your shift, he was being given, via the nasogastric tube, 15ml per feed every 2 hours?

ELLIS: Mm-hm.

DRIVER: Your first feed of him was at 20.00 hours?

ELLIS: Yes.

DRIVER: Does it follow that immediately prior to which you aspirated 14ml?

ELLIS: Yes.

DRIVER: Looking backwards, prior to which there'd been trace aspirates in the earlier shift.

ELLIS: Mm-hm.

DRIVER: Was that a cause of concern or at least a noteworthy event, the fact that on your first feeding of baby [Baby P], it was preceded with an aspirate of that volume?

ELLIS: I mean, I can't comment on the previous ones, whether they tried to maybe -- I don't know whether they just got enough to get an aspirate or whether they attempted to do a full aspirate. But at 8 o'clock I did do a full aspirate, that was just something that we did at Chester at the time.

DRIVER: As to "full", how significant a quantity is 14ml in the context of a baby whose regime was 15ml per 2 hours?

ELLIS: I guess it was a large volume. He was having 15ml every 2 hours, so now, unless I had any clinical concerns now, would I do that now? Possibly not, unless they were vomiting. So yeah, I guess that was something that we did at Chester and, based on what our kind of normal practice there, that was probably a large aspirate for the volume of feed that he was on.

DRIVER: We can see that you've circled the letter R next to the millilitres for 14ml and you've decoded that already for us to the effect that that milk would have been reintroduced into the baby --

ELLIS: Yes.

DRIVER: -- at that point?

MR JUSTICE GOSS: Can I just be clear then about that?

Given that it should be a 15ml feed, do you just add 1ml of milk to it or do you put the 14 back and then another 15?

ELLIS: You put the 14 back and then you'd give 15. That's what I did.

MR DRIVER: Thank you. This note continues the other side of the arrow:

"Placed on tummy to monitor aspirates."

ELLIS: Yes.

DRIVER: Could you expand on that?

ELLIS: Sometimes it helps with feed tolerance if you pop them on their tummy and nurse them prone and I just put "to monitor aspirates" just to make it known that I was aware that that was a large aspirate.

DRIVER: Thank you. We'll go back to your corresponding nursing note in due course, but do you from memory recall whether they were decisions that you made in isolation or under the guidance of a doctor?

ELLIS: I don't know, I can't remember.

DRIVER: We'll look at your note in due course. Let's stay with this page though while we're on it. The final entry, which we know is 24.00 hours on this date, an aspirate, is this right, of 20ml?

ELLIS: Yes, that was at midnight.

DRIVER: D for discarded?

ELLIS: Mm-hm.

DRIVER: We can see if we look up that column, "Feeds stopped"?

ELLIS: Mm-hm.

DRIVER: Are those two entries connected or shall we view them independent of each other?

ELLIS: They are connected, it was the same feed.

DRIVER: Was the decision to stop the feed made because of the aspirate?

ELLIS: Yes, most likely, yes.

DRIVER: Thank you. If we could just go to the next page, if you could turn the page, Ms Ellis, and if Mr Murphy can put page 982 up, please, J23982.

Your initials at the bottom?

ELLIS: Yes.

DRIVER: Save for the last entry, I think.

ELLIS: Yes, from 1 o'clock to 7 o'clock.

DRIVER: So the remainder of your night shift. Do we see that from hereon in, feeds having been stopped, he, [Baby P], was receiving dextrose?

ELLIS: Yes.

DRIVER: Can I just ask you to expand upon the entry under the output section that corresponds to your final note on 07.00 hours?

ELLIS: Yes. So it looks like I aspirated 25ml of air at 4 o'clock.

DRIVER: Is it 4 or 7 am?

ELLIS: I aspirated 25ml at 4 o'clock and then at 7 am I aspirated 5ml of air and 2ml of milk.

DRIVER: With pH of 3. What's that indicative of?

ELLIS: It's an acidic reading, which would show that the NG tube is in the stomach.

DRIVER: Thank you. Could we go back, please, Mr Murphy, to our tile 169 and Nurse Ellis' nursing note. The same paragraph in the middle of the right side of the page, please.

We were looking at the sub-paragraph:

"Feeding on 90ml/kg/day."

You recorded the 14ml part-digested milk aspirate gained at 20.00 hours. You recorded that you informed the nurse in charge. Do you recall that?

ELLIS: I don't recall doing it, no.

DRIVER: "20ml part-digested aspirate gained."

As we have seen on the original note:

"Abdo is full but soft, Dr Mayberry informed. Plan: to put nil by mouth and start on 10% dextrose."

Does that remind you as to who it was you interacted with in relation to that latter decision to put him nil by mouth --

ELLIS: Yes.

DRIVER: -- and dextrose?

ELLIS: Mm-hm.

DRIVER: "Cannula site satisfactory. Blood gas completed at the start of shift."

And you set out those results. In summary, how were those blood gas results?

ELLIS: Yeah, positive.

DRIVER: Thank you. You noted later in the morning, shortly towards the end of your shift, at least, at 06.39, that his abdomen had been soft and non-distended and you make a reference to that aspiration of 25ml of air by a colleague --

ELLIS: Yes.

DRIVER: -- described by you as Kate Ward.

ELLIS: Yes.

DRIVER: The final entry there being:

"NGT placed on free drainage."

ELLIS: Mm-hm.

DRIVER: Is that in consequence of that air being withdrawn from the baby?

ELLIS: Yes, sometimes if we get quite excessive amounts of air from the NG tube, we put it on free drainage just to allow the air to freely escape so it's a bit more comfortable for the baby rather than having lots of air accumulating.

DRIVER: We looked at your original note within the chart that made reference to 25ml being aspirated. Is that the same as that contained in your summary or is this an additional one that was aspirated by your colleague, Nurse Ward?

ELLIS: It looks like that was maybe an additional one because it's not recorded on here, that aspirate. I mean, I put that I had aspirated 5ml of air at 7 o'clock but not 25, so it's possibly an additional one.

DRIVER: Perhaps we'll ask Nurse Ward about that in due course.

Finally, from my point of view in terms of this note, if we could go down the page, please. Did you communicate with the family, who were understandably keen to be given news of any developments in relation to [Baby P]? And the last word missing there is "update". So if we add the word "update" for our own benefit. That's on a different page:

"Informed them that they could come down at any point overnight and they can ring the unit for an update."

Do you recall interacting with the family and keeping them up to date as to any developments?

ELLIS: Yes. I do have brief memory of going upstairs to inform them that we'd put [Baby P] nil by mouth because of his large aspirate. I don't remember any other further interaction from memory other than that.

DRIVER: Just to step back and summarise, how was [Baby P] when under your care overnight?

ELLIS: Yeah, I mean, there was -- you know, he was having these large aspirates and he did have that period of a low-lying heart rate and we were watching him very, very closely and raising any tiny little detail, you know, because of previous events with [Baby O].

DRIVER: Yes.

ELLIS: So yes, I escalated things as I felt was needed.

DRIVER: Just to be crystal clear, what was the nature, the quality of those aspirates, what type of aspirates were they?

ELLIS: I would imagine part digested -- I think if they were bilious I would have -- part-digested milk, sorry. If they were bilious or anything suspicious I would have said that.

DRIVER: If they were green or bilious, is that the type of detail that you would include in your --

ELLIS: Yes, definitely.

DRIVER: -- summaries for obvious reasons?

ELLIS: Yes.

DRIVER: Thank you. Did you at the end of the shift hand over to your colleague Nurse Letby?

ELLIS: Yes.

DRIVER: And was it indeed Nurse Letby who in due course informed you, by way of text, that sadly [Baby P] passed away later?

ELLIS: Yes.

DRIVER: We've already been through that sequence of texts and I see no benefit in taking the witness to --

MR JUSTICE GOSS: No, it's in evidence, it speaks for itself.

MR DRIVER: Could you remain there and answer any questions.

Cross-examination by MR MYERS

MR MYERS: Ms Ellis, I'd like to go through the note with you and look at a few other details again, some of them the same, just to take another look. The note was at tile 169 so I'll ask if we can put that up please.

We're familiar with it.

You set out at the start of this three lines down:

"Observations have been within limits."

Do you see that?

ELLIS: Yes.

MYERS: That's referring to how [Baby P] has been up to the point, pretty much, that your shift started; would you agree?

ELLIS: Yes.

MYERS: Then it says:

"Did have one desat into 80s and 1x brady into high 90s. Self-corrected."

Does that mean those were not episodes for which you needed or felt it was necessary to call a doctor?

ELLIS: No.

MYERS: Is it the case sometimes if a baby does have a desat, even into the 80s, you might wait just to see if they do self-correct?

ELLIS: Yes.

MYERS: It's not necessary to raise the alarm every time that happens, is it?

ELLIS: No.

MYERS: I'm going to ask you some questions about the process of aspirating [Baby P] and the babies generally. When you do aspirate, you draw out fluid sometimes from the NGT; is that correct?

ELLIS: Yes.

MYERS: And if you're drawing that out can you draw out air as well?

ELLIS: Yes.

MYERS: And you can check the pH too, can't you?

ELLIS: Yes.

MYERS: We've actually got the note on the screen but I wonder whether we've all still got the paper copy of the feeding chart. You've got it in front of you, Ms Ellis, it's the one that has page 23981 that I'm going to look at.

In fact, so we can follow it, if anyone doesn't have the paper immediately we can put it on the screens at tile 24, if that helps, so we've got it in both places.

I'm going to go down to the entry at 20.00. It's the first one where you have performed the aspirate -- the aspiration and written down the details. 20.00.

And pH 3, we've heard that's fairly acidic; is that correct?

ELLIS: Yes.

MYERS: It was pH 3, in fact you'd also drawn 14ml of milk from there?

ELLIS: Mm-hm.

MYERS: Is that probably partly digested milk or can you not say from that?

ELLIS: I can't say from that.

MYERS: However, as it happens, even with 14ml of milk in there, the pH was still acidic, wasn't it?

ELLIS: Yes.

MYERS: If we look at the figures, we can see there's a running total in the line above where it says 14ml. Can you see it's got 136 and then the next entry, which is in fact at 22.00, if we were to look, is at 151, isn't it?

ELLIS: Yes.

MYERS: So as you've explained to us what happened is that the milk that you aspirated is in effect recycled, isn't it, it goes back in?

ELLIS: Mm-hm.

MYERS: And that's what the R stands for next to 14ml, doesn't it?

ELLIS: "Returned", yes.

MYERS: Returned. And then in addition to that the 15ml that he would have been receiving for a feed anyway, he received that too, didn't he?

ELLIS: Yes.

MYERS: So in fact he was getting a total of 29ml at that time, wasn't he?

ELLIS: Mm-hm.

MYERS: At this stage it's not something you'd call a doctor for, is it, for something like that?

ELLIS: No.

MYERS: We can see in the note when you do, but it's not at that point, is it?

ELLIS: No. Did I inform the nurse in charge for that one?

I can't remember without looking.

MYERS: We'll come back to the note in a moment if that helps.

Yes, you did, you informed the nurse in charge in your note.

But as we go -- if we carry along on the chart that we've got open, we can see that was the feed at 20.00.

At 22.00 there's another 15ml that goes in, isn't there --

ELLIS: Yes.

MYERS: -- on top of the 29 that -- well, the 15 plus the 14?

ELLIS: Yes.

MYERS: I just want to be clear about something you told us when you were saying about what you'd done by way of aspirating on

that occasion. We can see you've aspirated enough to check that the pH is 3, haven't you?

ELLIS: Yes.

MYERS: That's what you did?

ELLIS: Yes.

MYERS: Does it follow from what you say you may not have aspirated everything that was in his stomach at that time?

ELLIS: Yes.

MYERS: That's right, isn't it?

ELLIS: Yes.

MYERS: It's not the case that every time a nurse aspirates every part of the stomach contents is removed?

ELLIS: Mm-hm. You're undoing the hard work they've done in trying to digest the milk.

MYERS: So it could well be there's actually a volume of milk still in his tummy at that point, but you've not drawn that out?

ELLIS: Mm-hm.

MYERS: When you do draw the milk out, for instance as we've seen at 20.00 with the 14ml, would that draw out air as well if there was air in there too?

ELLIS: Potentially, yes. It sometimes depends on where the tip of the NG tube is sitting, so it may not be where the air is.

MYERS: If we move forwards on the chart that we have, midnight, 00.00, last entry, 20ml is taken out on this occasion; is that correct?

ELLIS: Yes.

MYERS: So that is a substantial volume of milk, isn't it, in the circumstances?

ELLIS: Yes.

MYERS: The D means that that was discarded; is that correct?

ELLIS: Yes.

MYERS: Is that because the decision was taken to stop feeds at this point?

ELLIS: Because it was a large aspirate, then yes, we decided to stop feeds.

MYERS: At that point no air is recorded, is it?

ELLIS: Mm-hm, no.

MYERS: Which -- is that consistent with there being no air that was taken out?

ELLIS: Potentially. I can't say whether there was air taken out and I didn't write it down or whether there might just not have been any air taken out for that aspirate.

MYERS: It depends where the tip of the tube is in the stomach?

ELLIS: Yes.

MYERS: No signature on that, but sometimes, for whatever reason, from time to time, the nurse might just, in the rush of things, miss the signature?

ELLIS: I should have put one, but yes.

MYERS: I don't criticise you for it, but it's just not there?

ELLIS: Yes.

MYERS: We've seen it elsewhere anyway, not just here, with others.

ELLIS: Mm-hm.

MYERS: 20ml was, is this right from what you have said, a significant enough aspirate to decide it was necessary for feeds to be stopped; that's right, isn't it?

ELLIS: Yes.

MYERS: If we go back to your note, which is at tile 169. So I'd be grateful if we could put that up, Mr Murphy. And if we read through what was happening with the feeds, which is in that second paragraph, you summarise there what we have seen on the chart and you make reference to the 14ml of part-digested milk gained at 20.00:

"Nurse in charge informed. Continue with feeds."

I have just skipped forwards. Then we have this:

"00.00 feed. 20ml part-digested milk aspirate gained. Abdo is full but soft. Registrar Mayberry informed."

That's the doctor you informed at that time?

ELLIS: Yes.

MYERS: And, "Plan: to put nil by mouth", which is what happened, isn't it?

ELLIS: Yes.

MYERS: Do you recall whether Registrar Mayberry came over to review [Baby P] at that time or not?

ELLIS: I don't, I don't remember.

MYERS: Right. Just to remind ourselves, it was Huw Mayberry who you'd informed the night before when you'd been looking after [Baby O], hadn't you?

ELLIS: Yes.

MYERS: If we just carry on, on your note we've got entries relating to the dextrose and the cannula and the blood gas and then it's followed by a separate note that starts at 06.39; do you see that?

ELLIS: Yes.

MYERS: That's the note that makes reference to the abdomen being soft and 25ml of air being aspirated by Kate Ward?

ELLIS: Mm-hm.

MYERS: Who we know as Kate Percival-Calderbank, I think, now.

ELLIS: Yes.

MYERS: I'm going to look, so far as what happens there, back to the feed chart and it's the second page, ladies and gentlemen, that's where the air is, page 23982 on the feeding chart. It's the second page of that chart if it helps anybody to have that on the screen, if there's a reference for that. Thank you, Mr Murphy. That's the image on the screen. Let's just look down at the bottom there. We can see that at 04.00 it's got your initials and 25ml of air; is that right?

ELLIS: Yes.

MYERS: From your recollection, can you recall whether that is the 25ml that's also referred to Kate Ward getting it or is it a different one or are you just not sure?

ELLIS: From looking at the timings of when I did my documentation on Meditech I think I wrote it at 06.39, and that was aspirated at 4 o'clock. So it was likely that that was the aspirate from Kate. Again, I can't be certain but at 7 o'clock, so likely after I'd written that documentation, that's when I got 5ml.

MYERS: Right. Let's proceed in that way. We may hear more from Nurse Calderbank Ward.

25ml of air. Certainly there's nothing that you had found from the earlier aspirates that indicated 25ml of air was in his tummy at 8 o'clock or at midnight?

ELLIS: No.

MYERS: So this appears to be something new that has appeared; is that correct?

ELLIS: Potentially. It could be something new or, like I say, that the air wasn't where the NG was -- the tip of the NG was in the abdomen.

MYERS: That's a relatively significant quantity of air to come from an abdomen, would you agree, 25ml?

ELLIS: It's a decent amount.

MYERS: A decent amount. Is it something that could be a potential cause of concern if a baby's producing that much air, feeds having been stopped?

ELLIS: It could be that -- was he on high flow? I can't remember without looking.

MYERS: No, we've looked at this. He's not on breathing support at this time.

ELLIS: Okay.

MYERS: And hasn't been for about 24 hours.

ELLIS: Fine. It's something to be aware of, maybe not necessarily something to be concerned about. Again, you've got to take into account other clinical things as well.

MYERS: I'm going to suggest that 25ml coming out at that time, after what's been taken out before, is something that shouldn't be there.

ELLIS: I think some people do have air in their abdomen. It's whether it's a cause of concern, how much it is, how frequently you're getting that volume of air.

MYERS: So is that to say it may be, it may not be, it depends?

ELLIS: Yes.

MYERS: You gestured, but I'd better check. Do you agree, it may be, it may not be, it depends?

ELLIS: Yes.

MYERS: This isn't something that led to the doctor reviewing -- the doctor wasn't called to review [Baby P] at this point, was he?

ELLIS: Um... I don't know without looking at my notes.

MYERS: We know in the notes, if I can summarise, we saw that Dr Mayberry was informed after the 00.00 20ml.

ELLIS: Mm-hm.

MYERS: There's nothing in the note we've seen that refers to the doctor being informed about air in the abdomen.

ELLIS: So yeah, possibly not then.

MYERS: That air having been taken out, we can see that a few hours later, at 07.00, there's 5ml of air?

ELLIS: Mm-hm.

MYERS: Not so much air coming out on that occasion.

ELLIS: Yes.

MYERS: But again, do you agree, it's a potential concern if a baby who is nil by mouth is producing air -- air is being taken from their stomach?

ELLIS: Not necessarily a concern. Sometimes I think if they -- some babies sort of gulp or if they're crying sometimes they can get air in their abdomen. I've seen it before on higher volumes, a lot higher volumes, and it's not necessarily been a concern.

MYERS: No suggestion though that [Baby P] was crying or gulping, is there, from the notes?

ELLIS: I don't remember.

MYERS: And the notes don't suggest he was crying and gulping air. Do you say that when a baby cries they can swallow significant quantities of air, that can happen?

ELLIS: Sometimes.

MYERS: Just reviewing [Baby P]'s position by the time we get to the handover, so around about 07.30 or 08.00 in the morning, with where he was the night before, Nurse Ellis, in that period of time he'd been made nil by mouth, hadn't he?

ELLIS: Yes.

MYERS: And that was because he was failing to -- seemed to be failing to digest the milk feeds that were going through him?

ELLIS: Mm-hm.

MYERS: So that is something in effect going backwards, there's not an improvement, that's something that's a bit worse, isn't it?

ELLIS: Depends on, I guess, what the common practice is for wherever you work, I guess.

MYERS: A baby having to become nil by mouth because he's not coping with the feeds he is being given is not a good sign, is it?

ELLIS: Mm-hm, no, but I don't think he was vomiting, which is reassuring.

MYERS: No. You'd identified a slightly depressed, did you say, heart rate at one point earlier in the shift?

ELLIS: A low-lying heart rate, yes.

MYERS: And also the production of certainly 25ml of air round about 04.00 that's another potential cause for concern, isn't it?

ELLIS: Potentially, again taking into account other factors.

MYERS: Yeah. There's nothing normal about a baby producing 25ml when they are not on feeds, is there?

ELLIS: No.

MYERS: No. And in any event, as a result of the feeds, it's something that you'd escalated to the registrar during the course of the night, isn't it?

ELLIS: Mm-hm. Yes.

MR MYERS: Right. Thank you.

Re-examination by MR DRIVER

MR DRIVER: Two brief, I hope, points both of which feature in your nursing notes and about which you were asked questions by my learned friend. Could we go to 169?

Thank you, Mr Murphy.

Firstly, as to the entry which refers to the fact that [Baby P] did have one desat into the 80s and one brady into the high 90s, to which he self-corrected, you were asked questions about your management of that and how you effectively permitted him to self-correct without intervening.

[Baby P], of course, at this point was of a gestational age of 33 weeks and 3 days.

ELLIS: Yes.

DRIVER: Would you necessarily have taken the same approach had he been significantly younger, say, for example, 25 weeks' gestation?

ELLIS: As in would I have escalated if he'd had a heart rate that low lying?

DRIVER: Yes.

ELLIS: Yes.

DRIVER: The second point. It goes to the 25ml of air aspirated from [Baby P]. My learned friend asked you a question as to whether that was necessarily a development or whether it may have been something that pre-existed and you got halfway through an answer, which I think relates to the position of the NG tube. Could you finish that answer?

ELLIS: So it could have been that he did have some air in his abdomen and when I was aspirating to get his milk, I just wasn't getting that air, so maybe that was just a build-up of air and

then it all came out in one aspirate. That could have been that the tip of the NG tube had possibly moved, either that being a position change -- so we were able to get rid of that air.

DRIVER: So that's not necessarily a development between the two points of time when you aspirated from him?

ELLIS: I mean, it sounds like that I wasn't getting air and then I was getting air, but again it could be because of the tip of the NG tube had just moved or it could be also a new thing, it's hard to say.

MR DRIVER: Thank you.

Does your Lordship have any questions of Ms Ellis?

Questions from THE JUDGE

MR JUSTICE GOSS: Just in relation to self-correcting bradycardias. How long do you leave it?

ELLIS: So sometimes, like I said, preterm babies do have bradycardias and desats, and that can be due to immaturity, it's not something to get complacent about, it's something to definitely keep an eye on. There probably isn't a time frame. I guess if it's going on for maybe 5, 10 seconds and they're not bringing themselves up then it may be you just give them a little bit of a nudge. If that doesn't bring them up then you'd need to increase your intervention, whether that be -- you know, if they are apnoeic, whether you start bagging them and giving them some breaths.

MR JUSTICE GOSS: So it's 5 or 10 seconds and then if they've corrected themselves --

ELLIS: That's a very --

MR JUSTICE GOSS: As a rough idea?

ELLIS: It's hard to say. I think unless you're -- sometimes when you're in that situation you don't necessarily look at the time, you're just sort of thinking, "It's going on for a little bit now, maybe we should just give them a little bit of stimulation". But yeah, it's hard to say a definite time.

MR DRIVER: My Lord, we don't anticipate that Ms Ellis will be invited back to the witness box.

MR JUSTICE GOSS: All right. That completes your evidence and it's not expected you're going to be required again.

Just in case, don't talk to anyone about this case until it's over, please.

ELLIS: Yes.

MR JUSTICE GOSS: The indications are you won't have to come back again. Thank you very much. Just wait where you are, please.

That will be it for today, members of the jury.

10.30 tomorrow morning. Thank you very much. Some of you will have found the temperature in here good today, some of you will have found it a bit too warm. You can discuss that between yourselves but nothing about the case unless you're all together.

(In the absence of the jury)

MR MYERS: I'd be grateful if we could pay a visit, please, my Lord. Thank you.

MR JUSTICE GOSS: I'm looking at the senior officer. Would it be possible for someone to come and see Ms Letby before she's taken away? Thank you very much. They'll be down shortly, in a few minutes.

(4.26 pm)

(The court adjourned until 10.30 am on Tuesday, 21 March 2023)