Tuesday, 7 March 2023

(10.30 am)

(In the presence of the jury)

... [Omitted] ...

(The witness withdrew)

MR JOHNSON: Dr Evans, please.

DR DEWI EVANS (recalled)

Examination-in-chief by MR JOHNSON

MR JOHNSON: Welcome back, Dr Evans. For the record would you identify yourself, please?

A. Dr Dewi Evans.

Q. Thank you. I hope I'm correct in saying that you have completed five separate reports or statements on the case of [Baby N].

A. I have.

Q. Thank you. They are dated, for the record, 3 June 2018?

A. Correct.

Q. 17 January 2019?

A. Correct.

Q. 24 June 2021?

A. Correct.

Q. Then there is a pair on 21 October 2021?

A. Yes.

Q. As before, your initial statement was a sift?

A. Yes.

Q. The second statement was more considered?

A. Yes.

Q. And then subsequently, you've dealt with administrative issues such as pagination, but you've also given us some further detail on issues that have been raised with you after your considered report?

A. That is correct, yes.

Q. Thank you. Just to put this case into the overall context, this was, I think, the 29th case that you were asked to look at?

A. Yes.

Q. Thank you. I would like to take, if we may, as a template for your evidence the report of 17 January 2019. There did you set out the circumstances surrounding [Baby N]'s birth --

A. I did.

Q. -- which we have heard in evidence?

So far as the material that you were given, did that consist of the medical records from the Countess of Chester, which included some radiology material?

A. Yes.

Q. An index and also some medical records from Alder Hey Hospital --

A. Correct.

Q. -- in Liverpool?

A. Yes.

Q. Taking up, if we may, your report at paragraph 4 -- I'm looking at your overview to start with -- did you note the breathing issues, the grunting issues, that had

occurred shortly after [Baby N] was born?

A. Yes, I did. These lasted for a few hours, soon after his birth, but settled quickly.

Q. Did you also note the results of the blood tests, the coagulation results in particular?

A. I did and noted that the factor VIII value was recorded at 3%.

Q. Yes. Did you, as a matter of fact, towards the end of your report, invite the police to consult somebody with the sort of specialist knowledge that Professor Kinsey has?

A. Yes.

Q. Did you go on to consider the circumstances surrounding [Baby N]’s collapse at shortly after 01.00 hours in the early hours of 3 June?

A. I did.

Q. And in particular, did you refer to the note made at the time by the doctor concerned, saying that [Baby N] had desaturated down to 40%?

A. Yes.

Q. He was unsettled, there was an increased work of breathing?

A. Yes.

Q. He looked mottled?

A. Yes.

Q. And dusky?

A. And screaming.

Q. And screaming, of course, yes.

A. Yes.

Q. You referred also, I think, to the nursing note entry made by Nurse Booth, which recounted the fact that [Baby N] had continued to cry, as it was put in the nursing note, for 30 minutes?

A. Yes.

Q. Thereafter, did you review the medical records covering the time following that and the events in the early hours of the morning of 15 June?

A. Yes, I did. What I found was that having recovered from this event on 3 June, his progress was pretty uneventful really. He was making satisfactory progress as you would expect of a baby who was premature but otherwise well.

Q. Did you refer at your paragraph 13 to the events at 01.45 on the morning of 15 June?

A. I did.

Q. For anybody's note, they're at tile 80 and are [Dr A]'s notes.

A. Yes, I did. I heard [Dr A]'s testimony yesterday and the note that he was -- had noticed mottling, which is a discolouration of the skin, and this -- but otherwise his heart rate and his heart sounds were normal, he had good air entry in his lungs and his abdomen was normal and there were normal bowel sounds. They also did -- [Dr A] carried out blood gases, capillary gases.

They were all satisfactory. The lactate value was 3.2, which is minimally raised, but in isolation is not of clinical significance.

Q. Yes. And that in effect is what he told us yesterday?

A. Yes.

Q. Did you move on to consider [Dr A]'s notes which were at tile 84 in the second [Baby N] sequence and some desaturations which had been noted on the monitor?

A. Yes. Again -- we're talking about 05.15 hours?

Q. Yes.

A. Again, some more blood tests. So first of all, the capillary refill time was 3 seconds, and you'd want it to be 2 seconds or less really, so it's slightly increased and could be indicative of baby becoming unwell for some reason. His white cell count was 7.4, which is normal, in other words there was no indication of infection from the white cell count value. Platelet count 309, which is normal again. CRP value was less than 1, which again is a marker of infection, and a value of less than 1 is normal. But [Dr A] was sufficiently concerned, I think because the capillary refill time was slightly prolonged, to stop oral feeds and give a bolus intravenous infusion of 10% sodium chloride, which is standard practice, and he also added an antibiotic.

Q. Again, we heard, I think, from [Dr A] about that yesterday.

A. Yes.

Q. Did you move on then to consider the notes that had been made by [Dr A] at 08.00 hours that same morning?

A. I did. These notes indicated a far more significant deterioration in [Baby N]'s condition because his oxygen saturation had dropped to 48%. Now, that is low and life-threatening. His heart rate was 80. That is very low and very, very concerning. And those values were sufficient for him to require what he called bagging or being bagged up. He also had a mottled appearance of the skin once more and also reduced tone -- in other words, he was more floppy.

So these are very concerning matters and were sufficient for him to be transferred to the intensive care nursery.

Q. Yes. You recorded additionally, I believe, the fact that [Baby N] had been given medication in preparation for an elective intubation?

A. Yes. He received morphine, which is a drug given for pain relief and for -- yes, pain relief. He also was given suxamethonium, which is a muscle relaxant, which one gives as a pre-med in anaesthetics to relax the muscles if you're preparing intubation. And he had atropine as well. So anyway, there were three efforts made. They were, sadly, unsuccessful.

Q. Yes. The jury has heard evidence yesterday concerning blood being seen at this stage of the process and no

doubt the jury will come to their own conclusions in due course. But you have noted that fact, haven't you?

A. Yes, and it's clear from the evidence I've heard yesterday and from the notes I'd seen before that the blood was noticed in the oropharynx, in other words at the back of the throat, and the blood was present prior to the efforts at intubation.

Q. That, as you will understand, Dr Evans, I think is disputed on behalf of the defence.

A. Okay, right. That was my understanding anyway.

Q. Yes. That's one of the issues that the jury will in due course be invited to determine.

Did you go on to consider [Dr A]'s notes of [Baby N]’s vital signs together with those noted by Dr Ukoh at 10 am that morning?

A. Yes. The 10 am notes noted a respiratory rate of 28, which is normal, a heart rate 149, normal, and oxygen saturation 100%, which again is clearly satisfactory. His blood pressure was 88/51, which is absolutely fine. And on this occasion his capillary refill time was less than 2 seconds, which is normal. In other words, showing normal perfusion of the skin. And again there was an additional note about there was no evidence of what they describe as abnormal posturing, in other words his tone was not abnormal. So these were normal findings.

Q. Did you go on to note a later desaturation at or about

14.50 hours that afternoon?

A. Yes, I did. Yes, I did. Again -- which part is this?

Q. We're at paragraph 19 of your report.

A. Yes. He desaturated once more at 2.50 in the afternoon and the entry notes blood in the oesophagus and in the nasogastric tube and he required some resuscitation, he required bagging and, again, needed or was given two fluid boluses of sodium chloride, which is standard treatment in a situation of this nature.

Q. We then heard evidence which you have summarised concerning a continuing series of events, which culminated ultimately at about 19.40 that same day when preparations were being made by the Alder Hey team to intubate [Baby N].

A. Yes. Very striking that a number of people were unable to intubate [Baby N] during this afternoon, which is why they called the Alder Hey folk, yes.

Q. And we heard that [Baby N] required, after his collapse at that stage, CPR?

A. Yes.

Q. And received multiple doses of adrenaline?

A. Yes.

Q. And sodium bicarbonate?

A. Yes. Six doses of adrenaline in all and sodium bicarbonate, yes.

Q. As part of your review did you look at the observation charts, in other words the yellow and white charts which

the jury have hard copies of?

A. I did.

Q. Did you also review the nursing entries, both from 3 June and 15 June?

A. I did. Yes, I did.

Q. So just going to page 20 of 27, please, Dr Evans. It's your observations section, paragraph 58. What overall view, in a nutshell, did you take of [Baby N]’s progress from his birth until his collapse shortly after 01.00 hours on 3 June?

A. My overall observation was that it was known that his mother was a carrier for haemophilia, but that he was well following his emergency caesarean section, not requiring much in the way of resuscitation. So therefore, that would have been satisfactory for a baby who's 34 weeks of age, gestational age.

Q. Did you regard his deterioration at 01.00 hours on 3 June as being an everyday type of occurrence for a child in his position?

A. No. In my sift report I overlooked it, let's be frank about that, but it was rather unusual in that he seemed to be fine at about 9 hours of age, and what was striking was this very sudden and very significant drop in oxygen saturation to 40%, so very low. He responded with 100% oxygen. We heard from the doctor who said she was crash called to something else, to another patient, sorry, and when she came back he was asleep, in air,

with normal saturations. Therefore this very sudden onset of something with a very quick improvement, which is something very unusual.

Q. Yes. Now, this apparent desaturation was associated with what Dr Loughnane described as screaming.

A. Yes.

Q. Did you think that was significant, the use of that particular word?

A. Well, it's very unusual for babies to cry other than when you're doing blood tests or causing some sort of discomfort, usually by putting intravenous lines in or taking blood tests from a heel prick. So they will cry. But once you stop the procedure, they usually stop crying fairly quickly. They don't carry on crying.

As for screaming, this is an incredibly unusual description in my experience of a baby, 6 weeks premature, screaming. That's very unusual. And again continuing to cry for half an hour. So that was something that, having looked back on these notes, struck me as very unusual.

Q. Did the length of time, the 30 minutes -- is that -- it may be implicit from what you've already said, but is that unusual?

A. Yes, the length of time is very unusual -- well, the fact of screaming, that the term screaming was used, is very, very unusual for a doctor to describe a baby in a baby unit, and the fact that it was the nurse, actually,

who recorded the crying continuing for 30 minutes. So that is an exceptionally unusual finding in a neonatal unit and it's not what you would get because a baby is hungry, for instance.

Q. So did you come to a conclusion as to what, in your view, had caused [Baby N] to react in that unusual way?

A. By this time, of course, this is case 29, and I was aware of, you know, all the other cases we'd done because these files arrived with me later than the others, the first 28. It struck me that this baby might -- that something had been done to this baby to cause this episode of screaming. And so I went back over my notes, I went back over the overarching view I made in relation to injection of air into the circulation from other scientific papers, and there were a couple of them, a couple of papers, who described babies who had accidentally received an intravenous injection of air into the bloodstream and screamed, collapsed and died.

Now, all of that -- none of this was known to me before I became involved with this investigation, and of course it repeated what we've heard in previous cases with [Baby I], [Baby I], case 8, possibly [Baby E], where one heard, I think with [Baby E], this horrendous cry, as his mother described it. [Baby I], again, a significant cry.

We know that babies who get intravenous air for

whatever reason, there is an increased risk, hardly (inaudible) because they're small, of course, so you don't need as much air to cause problems. And secondly, they still have this hole in the heart, this foramen ovale, so any air can get from the right side of the heart into the left side of the heart. If it gets into the left side of the heart, it could get into a heart blood vessel, coronary artery. So technically, it could cause a heart attack, you know, which is incredibly painful. I can't prove any of this by the way.

Q. Let's stick to, if we may, rather than getting involved more arcane areas, whether you thought that this particular event was a naturally occurring event, in other words whether it was one of the vagaries in behaviour of an infant on a neonatal unit or whether there was some other cause for it.

A. This was unusual. This was unusual. This baby, very quickly following his birth, had recovered. So he was well at 9 hours of age. In other words, there was no grunting, one did not have any of the features you get with breathing difficulties. So there was none of this and then suddenly, out of the blue, he collapsed very, very precipitously and this is what is remarkable.

Equally remarkable is the fact that he recovered so quickly. So for instance, if he had deteriorated because he was sickening for an infection, we're talking 3 June now, I would not have expected him to be back

asleep, breathing in air, you know, soon afterwards. So therefore all of this, as we've heard several times, is incredibly unusual and not the sort of thing one has seen, despite one having spent most of one's career looking after babies in baby units.

Q. So far as the issues of 15 June are concerned, the events of the early hours -- and by the early hours I'm talking about from midnight through to before 07.00 hours, okay?

A. Right, yes.

Q. In that period of time, did you draw any conclusions from the evidence as it was presented to you on paper and as you have heard it during this trial?

A. As I've heard it during this trial, and clearly it's much easier to form an opinion having heard everyone else's evidence, I would say that during the early hours his condition is what could be explained -- could be explained -- on the basis he was sickening for an infection. In other words, he was not quite as well, skin mottling, you know, that kind of thing, but not -- in other words, if I'd been there I would have done what [Dr A] had done and considered, "Hmm, he is sickening for an infection". We know the results subsequently did not prove an infection, but that is what I would have done. I would have done what [Dr A] did.

Q. You say the results didn't prove an infection thereafter, but looking at those results in the

succeeding days, was there any evidence of an infection?

A. No, none at all.

Q. But thereafter, there are several collapses from 7.15 onwards. What view did you take of those events?

A. I'm not sure what -- it's quite difficult what to make of those. The key event for me was the fact that there was a deterioration around 8 am, which was more significant. In other words, his oxygen values dropped, his heart rate dropped significantly, and the most significant finding for me was that the doctors decided to intubate him, correctly, but when they put a laryngoscope in to visualise the vocal cords, the back of the throat contained lots of blood --

Q. Yes.

A. -- which meant that they were unable to intubate him, so they carried on with BiPAP.

Q. So far as that is concerned, we've heard the factual evidence, we know where the issues lie between the prosecution and the defence. Would it be fair to say that your expert opinion can't really assist the jury in deciding whether the blood was there before the intubation or it was the intubation that caused the blood? It's a matter for them to look at the evidence and make their own minds up?

A. Yes. If a doctor who had passed a laryngoscope said there was blood there, well, there was blood there. I can't help in that situation.

Q. Okay. But what view -- on the assumption that the blood was there before the laryngoscope went in, what conclusion did you draw?

A. Right. My conclusion was that there was bleeding. I obviously can't claim haematology expertise. I know the baby had haemophilia. I've read Professor Kinsey's report and heard her evidence this morning that babies whose haemophilia is moderate will not spontaneously bleed. It was my opinion that the bleeding was the result of trauma to his upper airways.

Q. Yes. The issue for the jury is how the trauma is caused?

A. Yes.

Q. Is it the laryngoscope or is it something else?

A. Yes.

MR JOHNSON: All right. I note the time, my Lord, but I'm almost finished.

MR JUSTICE GOSS: I think then finish if you're talking about a few minutes.

MR JOHNSON: Yes, thank you.

Did you in your report defer -- it's your paragraph 76 -- to a paediatric haematologist?

A. Yes, absolutely.

Q. Which in effect is what Professor Kinsey is?

A. Yes.

Q. So far as later events were concerned that day, beginning at about 15.00 hours and culminating in the

dramatic collapse at about 19.45 or thereabouts, did you come to any views so far as what had caused that was concerned?

A. Really, I mean, [Baby N] had a very torrid time of it during this time and, of course, I knew by then that not only was there blood in the back of his throat and therefore that could have compromised him at any time during the future, but I think the original -- the 8 am inspection noted that the epiglottis was swollen, which is what caused the problem, which would make intubation more difficult, and therefore it is difficult to say whether his subsequent deteriorations were the result of the problems he suffered from around 8 o'clock in the morning.

MR JOHNSON: Yes. Thank you very much. My Lord, that may be a convenient moment.

MR JUSTICE GOSS: Yes, certainly.

2.05 then, please, members of the jury. Thank you very much.

(1.04 pm)

(The short adjournment)

(2.05 pm)

Cross-examination by MR MYERS

MR MYERS: Have you got your papers ready, Dr Evans?

A. Yes.

Q. I'm going to start with the events of 3 June --

A. Yes.

Q. -- from round about 1.10 in the morning. You dealt with this in three of the reports that you've prepared for us, haven't you, in particular 3 June 2018?

A. Yes.

Q. 17 January 2019?

A. Yes.

Q. And 21 October 2021?

A. Yes.

Q. The first time you deal with 3 June is in that first report. In that report I ask you to look at paragraph 58. I know it's described as a sift report, that's the way it's been put, but let's look at paragraph 58. Tell me when you're there.

A. Yes.

Q. Dealing with [Baby N]’s position, having reviewed the notes, the papers you had, your opinion was:

"There is nothing to suspect any significant problem until the early hours of 15 June."

That's what you said then, isn't it?

A. That is correct.

Q. That's on the report of 3 June 2018.

A. Yes.

Q. By the time that you wrote this report, you've told us this was report number 29.

A. Yes.

Q. So you were familiar with the issues in the case, weren't you?

A. Yes.

Q. If we put up the notes, please, from Dr Loughnane at tile 161, Mr Murphy. This is sequence 1 for [Baby N], tile 161.

We see the notes there. We'll look at them again in a little bit, Dr Evans. You will have looked at these notes in the course of preparing this report, won't you, into [Baby N]?

A. I would have.

Q. If we scroll down please to the key section, Mr Murphy. Are we able to go overleaf to the 01.10 report? A little bit further down, so we've got the entirety there.

You had the opportunity to read that as well, didn't you?

A. I did.

Q. When you wrote that report in June 2018, nothing there caused you concern, did it?

A. Overlooked it.

Q. I'm going to suggest you are -- you have told us in your evidence that you have decades of experience as a paediatrician, don't you?

A. Yes.

Q. And if you considered this to be significant, you would have said so in your first report, I suggest, Dr Evans.

A. Let me go through, it's only five or six lines, and I think it will explain why I did not take much notice

of it.

01.10. Before this, the baby was stable. I think we will accept that. Asked to see, desaturated. Fine, okay, that's a concern:

"Unsettled and increased work of breathing. Got upset. Looked mottled, dusky. Saturations reduced to 40% and then [arrow] 100% oxygen."

Okay? Therefore that is a concerning event:

"On my arrival. 40% oxygen."

I'm not sure whether that means the baby is now on 40% oxygen or having an oxygen saturation of 40%. I would interpret that as being in 40% oxygen. That is the way I would interpret it.

"Screaming" -- at the time, let's be frank, I had not associated screaming -- it was screaming, okay? So baby's -- he was screaming.

There was sternal recession. Key entry here:

"Poor trace on sats probe."

In other words, we're not quite sure whether it's accurate or not. He is pink, okay? Good:

"Attempt to settle."

That is the whole of the entry. That is not a criticism by the way because the next entry is:

"Crashed bleeped away (inaudible: coughing)."

If we go up the next two lines, please:

"On return, SVIA [spontaneous ventilation in air], sats 100%. Asleep. Work of breathing improved."

In other words, he is back to normal. So therefore, in the grand scheme, looking at 1,200-odd pages, that did not strike me as something that I -- at the time was significant, especially as a few pages later, ie the events of 15 June, were far more striking. So that is my response to the way I looked at those few lines.

Q. You say 1,200 pages. Most of those pages are scans that don't play a part in what we're looking at here, aren't they? There are hundreds and hundreds of pages of scans; yes? This is in the first few pages of the clinical notes -- it is in the first few pages, isn't it, Dr Evans?

A. I have made my response and that is my answer.

Q. And can you assist me, it's almost the first entry you come to of any substance in the clinical notes, isn't it?

A. I've told you what my answer is.

Q. And it's easy to read?

A. I have told you what my answer is.

Q. I suggest you said you didn't consider it to be significant because it wasn't actually. That's the reason. Do you agree or -- well, you disagree with that, don't you?

A. Right. In my evidence in other cases, I have described in many cases, most of the cases, what I have called standalone cases. What I mean by that is this: that from looking at the clinical notes, only looking at the

clinical notes, there were features there that, in my opinion, were concerning and also consistent with one or more of the babies being the victims of inflicted injury, okay, inflicted injury as a standalone case. I'm not going to go through all of them, we can do that at another time.

Now, this event of 3 June is not, in my opinion a standalone case. In other words, if I'd been presented with this sheet on its own, without knowing about the others, I'd have said: well, this is concerning, interesting, you know, suddenly deteriorating and then suddenly improving, how do I explain that in isolation? This is very difficult to explain.

Q. You'd already prepared 29 reports by this time, hadn't you?

A. I'd prepared 28 reports, I think.

Q. Yes. Let's move to the second report, which is dated 17 January 2019.

A. Yes.

Q. If we go to your views of this event, it's at paragraph 63. By this point now, you have identified this and you say:

"It's my view that [Baby N]’s deterioration, his distress is consistent with him being the victim of some kind of inflicted injury which caused severe pain and distress and destabilised him."

"Inflicted injury." There is nothing actually from what we see in these notes to support the suggestion that there is an inflicted injury here, is there?

A. That was my opinion then and that is my opinion now. And I'll explain to you the way that my opinion evolved --

Q. I'd be grateful if you'd answer the question. If further explanation is necessary, you can be asked, but I'd be grateful if you could simply assist with explaining what I'm asking and dealing with those questions.

A. If you ask me the question, I'll answer it if I can.

Q. Is there evidence of physical -- physical evidence of inflicted injury in what we see on this occasion?

A. From my report of 2019, the answer is yes, and I'll tell you what they are. There was a sudden deterioration at 40%, the screaming and the crying that lasted 30 minutes. I explained to you that in 2018, I was not aware or familiar with the association between screaming and the injection of air into the blood system, didn't know about it at the time. But you will also know that in 2019, I collected a whole load of scientific papers, put them all together in what was described as an overarching report in relation to air embolus and quoted a load of papers. We've already said it's difficult to get scientific papers on this condition because it's so rare, so unusual, and I think that was January 2019, I'm

not quite sure, I don't have a copy with me.

In those papers -- in those papers, there are papers who quote babies being given air, accidentally, into the circulation, screaming and dying. So therefore, we've got those two, those papers. In addition to that, which reinforces the opinion I made in 2019, since the beginning of this trial, we have heard of other cases -- [Baby I], case number 8, being the most striking example of a baby screaming as part of her deterioration.

Now, that was not evident from the clinical notes that I saw in 2017, so I didn't know that at the time and I didn't know about the other babies and the extreme crying or screaming. So all that information is information that I discovered since the beginning of this trial. So therefore, the information from the beginning of this trial has reinforced the opinion I expressed in -- whenever it was -- January 2019. But I did not know about the association with screaming, I don't think, during what Mr Johnson calls the sift report.

Q. In that report, the second one that I'm asking about, you make absolutely no reference to an air embolus, do you, at any point? Do you?

A. I'll check it. I think I made that in my second -- my third report, I think.

Q. This is the second report. We've got the first report

of 8 June 2018 when you identified nothing, you simply say 15 June is the time that is significant. We've got your report of 17 January 2019. You don't mention an air embolus, do you, Dr Evans?

A. I do not.

Q. No. You use the expression "inflicted injury", don't you?

A. I use that as a generic expression which I've used in other cases.

Q. You agree there's absolutely no evidence of any physical injury from what we see on the 2nd or 3 June, is there?

A. I disagree with that. I should also add as clinicians, we accumulate evidence. In other words the more information we get, the more likely we are to reach a diagnosis. So therefore, in my first report I overlooked this, and I think I've explained why: in my second report I am now suspicious and by my third report I am more prepared to commit myself to the diagnosis of what happened here.

Q. What you are doing, Dr Evans, is coming up with different theories to try to fit an allegation to give support to it. That's what you're doing, isn't it?

A. No, no, I'm functioning as a clinician. This, you will find, is what clinicians do. We start with quite often minimal information and then, as the information accumulates, then it's more -- it's more possible to reach a diagnosis. This is what clinical practice is

all about, irrespective of whether somebody is the victim of an inflicted injury.

Q. You don't mention air embolus until we come to your third report on 21 October 2021?

A. That is correct.

Q. That is 3 years after we've been going with this particular child; that's correct, isn't it?

A. Yes.

Q. In fact, the material you've pointed out to the jury is the same material you had been looking at up to that point, isn't it?

A. No -- sorry, the presentation of [Baby N] on 3 June was different to the other cases where we've discussed --

Q. No, I'm talking about the material relating to [Baby N] that you base air embolus on, in that report in October 2021 is material you had had since 2018. It's the same material.

A. It's the same material --

Q. Yes.

A. -- but the way you interpret the material depends on the additional information you get.

Q. And this is you, by the time we get to October 2021, moving away from "inflicted injury" and now having a shot at air embolus, isn't it? That's what we have.

A. I think in the circumstances I think this is very likely what happened to the little baby actually, yes.

Q. We know that Dr Loughnane arrived on that unit at 01.07.

We know the report of the collapse was at about 1 o'clock.

A. Yes.

Q. You heard her evidence?

A. Yes, I did.

Q. We can see it says here "pink" and her evidence was by the time she got there he was looking pink, so he'd recovered, that's what she said?

A. Yes.

Q. So this had gone on for 7 minutes?

A. Yes.

Q. So this must be the swiftest air embolus in the history of air emboluses, Dr Evans. Seven minutes, air embolus?

A. It could well be.

Q. A world record?

A. It could well be.

Q. Rapidly dissolving nitrogen?

A. It depends on the volume, it depends on the rate of infusion. Those are the two characteristics that determines what happens to the baby. And the baby received 100% oxygen, so that's what happened.

Q. You have put this in because you want to find something to support the allegation and this is the best you can come up with, isn't it?

A. It's not like that at all. What I have said in my reports, in this particular report, is that I'm aware, and I've said earlier today -- is that it's case 29,

that this is not a standalone event. But you cannot overlook the events that have happened that we've discussed in this trial over the past few months. I have not said that in any report before this but I think it's worth noting that this is what I've said in this particular case. In other words, I am looking at all of the options and I think that's quite important.

Q. We've heard what's been said about the features of air embolus so far in this trial. So looking at this, first of all, there is no characteristic discolouration, is there?

A. Not as far as I know.

Q. There is in fact absolutely no significant collapse at all, is there?

A. Saturation dropping to 40% is a significant collapse, sorry.

Q. There was no collapse requiring resuscitation?

A. Required 100% oxygen. Any baby who requires 100% oxygen who was previously in air has something significantly the matter with them.

Q. We've seen plenty of cases in this case not linked to the allegations where there are desaturations and oxygen provided to babies; that's standard, isn't it?

A. No. If you have -- what prem babies do sometimes is they desaturate, their oxygen drops, they may drop from, I don't know, the low 90s to high 80s say, and it resolves spontaneously. We've had many of the nursing

staff say that, short-lasting, you know. But a drop to 40% in a baby who was previously in air is very, very striking and very significant, even if -- if they recover in 7 minutes, but the doctor concerned was crash called away, you can't blame her for that, so therefore that may -- so that may limit the information that she was looking at.

Q. Her evidence was very clear. Are you seeking to put a perspective on what she said to the jury?

A. No, I heard her evidence. You heard mine and that's my opinion.

Q. You weren't there, were you, Dr Evans?

A. No, no, I heard her evidence.

Q. Her evidence was:

"By the time I arrived he was looking pink".

So he's recovered, and then she went on to say:

"I'd expect his sats to be high 80s or 90s."

That's when she attended. Do you recall that?

A. I can't recall every word, but I was next door, but it was 40, you know, it was 40 when she was called and an oxygen saturation of 40 is concerning and potentially dangerous.

Q. This was --

A. It is dangerous, not potentially dangerous.

Q. The entry for screaming you have told us all is incredibly unusual, "exceptionally unusual" is the language you've used, isn't it, today in your evidence?

A. Yes. I don't think I've ever heard babies screaming in baby units. They cry. They certainly don't cry for 30 minutes.

Q. It can't be that unusual, Dr Evans, because you didn't make reference to this when you first read it and it's -- did you?

A. It's one word, screaming.

Q. Do you agree that descriptions of how a baby cries or how it screams are subjective, aren't they?

A. Depends on their experience, really.

Q. We've seen the report of the baby getting upset is the way this was -- if we just scroll up, please, scroll up and look at the top of the screen. The report given to Dr Loughnane was "unsettled and got upset". Do you see that?

A. Yes.

Q. We've seen the clinical notes of Nurse Booth who was present -- who wasn't present, but reported it as crying. This word, screaming, is used by one person, this doctor here, isn't it?

A. Well, you know, there's screaming, you've got looked mottled, dusky, you said there was no sign of abdominal discolouration or skin discolouration. That's not strictly true. Looked mottled, right? That is skin discolouration. It is not specific for any condition but you can't say it wasn't there. I've already said that I was not aware of the association between

screaming and air embolus in 2018, so there you go. So we've got, you know, he's dropped his sats to 40%.

Q. The question I asked you, Dr Evans, was if they were a characteristic description of air embolus and you've agreed.

A. It is not characteristic of air embolus, but you cannot say that there was no -- you cannot say that there was no change in its skin colour.

Q. I didn't say that.

A. No, no, I'm sure we'll agree on this one. He looked mottled, therefore there was skin discolouration. Is it characteristic of air embolus? No, it is not.

Q. So your reference to it is an attempt by you to try to work a piece of evidence in to support your evidence, is that correct, seizing on the word "mottled"?

A. No, I am replying standard clinical practice, which is what I've done throughout my career and what I've done throughout this trial.

Q. If it doesn't denote an air embolus, and we agreed there's no characteristic discolouration of an air embolus, why did you stop as you were going through to make a point of identifying "mottled" then?

A. Because it's written there. It's on -- it says there, "Looked mottled".

Q. In any event --

A. Sorry, there's a difference between "looked mottled, dusky". Okay? There's a difference between "looked

mottled, dusky" in a baby whose oxygen drops to 40% and then is back in air within a few minutes and was pink when the doctor saw her (sic). There's a difference between that and "looked mottled" in a baby whose blood pressure was a bit low or who's sickening for an infection or requiring 40% oxygen because of breathing difficulties, for example.

This baby's "looked mottled" is in association with those other features. It is not characteristic of air embolus, but it's -- you cannot say that there were no skin discolouration changes in this baby. There were. And the other thing that's interesting in this particular case is, and if we accept what Dr Loughnane said, is that when she got there he was pink. Therefore whatever the skin discolouration was, was short-lasting, and this is something we've heard the local doctors mention in association with other clinical cases in this trial.

Q. You can't tell the cause of the screaming from the fact it records "screaming" or "got upset", can you?

A. Sorry, I was -- I missed that because of the coughing, sorry.

Q. You can't tell the cause of what lies behind the screaming from the fact the word "screaming" is put there, can you?

A. You accumulate evidence, that's what clinicians do, and you form an opinion.

The other point in this particular case, I've already said about --

Q. Is your answer no to that, Dr Evans?

A. Just a minute, just a minute. I've already said at least twice that this is not a standalone case like the other cases I've given evidence in. The events of 3 June is not a standalone event, I've already said that. But looking at the thing, on the whole, I think we have concerns here and we have to explain this event somehow and the more likely explanation is as I've described.

Q. A baby of 35 weeks can cry or scream persistently and loudly, first of all, can't they? Is that correct?

A. Well, you know.

Q. And [Baby N] in fact was 10 hours old and not receiving feeds at this time?

A. Well, you know. He's not -- if he's... Yes.

Q. And a neonate of that age can cry or scream loudly because they're hungry, can't they, as it happens?

A. Oh come on, for half an hour?

Q. They can cry or scream loudly?

A. Come on. for half an hour?

Q. They are not going to cry for half an hour collapsing with an air embolism, are they, Dr Evans? That's a fact.

A. If they're hungry, they're not going to drop their saturations to 40%, they're not going to require 100%

oxygen, and if you suggested that any neonatal nurse would let a baby cry for half an hour because they're hungry, I think you would upset an awful lot of neonatal nurses, so let's forget all that. Let's forget about hunger being the explanation for this, shall we?

Q. The point being you simply can't diagnose air embolus from screaming, can you?

A. Of course you cannot.

Q. Right. When you were talking about screaming, you said this before lunchtime. You were talking about the connection between screaming and air embolus and you were talking about the way air moves through the heart. You said:

"Answer: If it gets into the left side of the heart, it could get into a heart blood vessel, coronary artery. So technically, it could cause a heart attack, you know, which is incredibly painful. I can't prove any of this by the way."

Are you seriously suggesting this is a heart attack that's taking place? Is that why you said that?

A. I don't think you can rule that out, actually.

Q. So you --

A. I don't think you can rule that out.

Q. It's a self-correcting heart attack?

A. Heart attacks -- I don't want anyone to have a heart attack, but most people survive heart attacks, okay? So you've got the option -- you've got -- if it goes to the

left -- sorry, if a bubble of air gets to the left side of the heart, it can go anywhere. If it goes to the abdomen, you see the skin discolouration. If it gets to a coronary artery it will cause ischaemia to a coronary blood vessel -- there are three coronary blood vessels, by the way. If it gets to the brain, it can cause a neurological problem, lack of oxygen to the brain.

So where the bubble goes can vary, but the key thing is the volume of the bubble and the rate at which it goes there. So therefore, as I have mentioned more than once in other cases, what doctors do, we list what we call a differential diagnosis. Okay? We list all possible options. So therefore, what I didn't mention this morning was I listed a number of possible options. Looking at this again, I think that my opinion, as I expressed in the second of my three reports is correct.

Q. There's not even a recorded change in heart rate, is there?

A. Not recorded there.

Q. Or blood pressure?

A. Not recorded there.

Q. It's an unusual heart attack to have no change in heart rate, for instance, isn't it?

A. Not recorded there. I have -- I don't recall ever seeing from my neonatal practice a heart attack in a baby, but that's because one tends to avoid injecting

air into their circulation.

Q. You see, what you were doing this morning with the jury was suggesting that because a heart attack can be painful and because [Baby N] is recorded by one person here as screaming, this may be a heart attack. That's what you were trying to say, wasn't it?

A. What I said this morning is if air had gone into the coronary artery, which is -- it'd cause a heart attack, let's use the scientific term, it would cause lack of oxygen or ischaemia to the heart muscle. Let's avoid the lay term. That would cause severe distress and pain.

If it goes anywhere else then the features change. It goes to the brain, brain problems. If it goes to the abdomen, you get skin discolouration. If the bubble goes into the feet, then your toes will go white. In other words, it depends on where it goes.

Q. So your evidence, so we can understand this, is that this may be signs of a heart attack brought on by an air embolus?

A. I think that we have to seriously consider that this baby was the victim of an air embolus on 3 June. Whether the bubble went into the heart or the brain or anywhere else is difficult to say.

Q. You've referred to research, a paper or something, you read involving screaming and air embolus, haven't you?

A. I have.

Q. That's in your third report at page 4598 in our pages and there are two publications you refer to, aren't there?

A. Yes.

Q. One of them is called Broadhurst. We've got here the situation with [Baby N]. My Lord, it's at page 4598 of the statements, if the reference is to be made, and it's page 2 of the statement dated 21 October 2021.

A. Just a minute, here we are.

Q. It's easier if I read your summary --

A. This is "Death by Error" by Anne (sic) Broadhurst; yes?

Q. "Death by Error" by Daphne Broadhurst describes several cases, and this is one of the two cases you are referring to:

"She notes a baby of 8 months who was receiving intravenous fluids. The family reported the presence of air bubbles in the line after the nurse squeezed IV bag. The baby screamed, turned blue, arrested and died. The cause of death was said to be cerebral air embolus."

A. Yes.

Q. Clinically, and factually, that has absolutely nothing in common with what we're looking at here with [Baby N], does it?

A. I disagree. This baby was 8 months to start off with, so far bigger. A baby of less than 2 kilograms would require far less in the amount of air.

And then in this particular case, there were lots of

bubbles there, so again we're back to how much air and the rate at which it was given.

Q. The other paper that you referred to, I'm going to the detail of what you have put, just following on on the same page of your statement, is Seoul's publication, isn't it?

A. Yes, it is.

Q. It describes an infant death due to air embolism from a peripheral venous infusion?

A. Yes.

Q. "The case relates to a 11-week-old baby who returned to hospital 5 days following a hernia repair."

It says the mother was concerned about the colour of the site there and the question of infection.

A. Yes.

Q. "An intravenous catheter was inserted into an infusion pump in the back of the right hand. The infusion pump was connected to the intravenous line. The nurse flushed the intravenous line with normal saline and the report says immediately thereafter the nurse started the infusion pump and returned to the head of the crib to record the time. Meanwhile the baby's cries had turned into screams. He then coughed or gasped loudly. His back arched, his arms stiffened, he lost consciousness. Resuscitation was not successful and after 5 minutes of effort he was declared dead. The chest X-ray carried on during the resuscitation was described as being of poor

quality. No air was seen in the vascular structures o or the heart. A post-mortem X-ray taken 12 hours after death was reported to show air in the pulmonary and systemic circulation as well as air in the portal venous system beneath the diaphragm."

That, factually and clinically, has nothing in common with the situation with [Baby N] in this case, does it, Dr Evans?

A. That is incorrect. What I've said is that I've quoted papers that associate screaming with injection of air. I haven't taken it any further than that. That is what I've said in my report and that's what I'm saying now. As well as that, again, repeating myself, this is something we've heard in other cases in this trial.

Q. You have gathered bits of what you can to try to put together some kind of allegation based upon air embolus to fit the allegation, not the facts. That's what's happened, isn't it?

A. No, those are the facts, that is the clinical evidence, and by the way, I've not heard of any other explanation that fits as clearly as the interpretation I have given in relation to this particular event.

Q. 15 June, Dr Evans.

A. (Speak sotto voce).

Q. Let's have a look now at... 15 June, Dr Evans. I'm going to the report that your evidence was principally drawn from, you gave it from this morning, the report of

17 January 2019.

A. Yes.

Q. You've explained to us today, you reviewed the deterioration of [Baby N] during the night or rather the very early morning of 15 June, haven't you?

A. I have.

Q. And there was a brief summary of [Dr A]'s clinical notes throughout the course of that night, wasn't there?

A. Yes.

Q. Then we came to the desaturation at about 7.15 in the morning; yes?

A. Yes.

Q. And then the question of the intubation and the blood that is seen around that time?

A. Yes.

Q. Right. When you were dealing with this, you said this about it. Let me start with your opinion. I would like to go to paragraph 71. You said:

"It's probable that [Baby N] sustained trauma to his oropharynx some time prior to the doctors being asked to see him at 1.45 on 15 June."

A. Mm.

Q. "Inserting any kind of implement, such as a nasogastric tube, into a baby's mouth and thrusting it into the back of the throat would be sufficient to traumatise the soft tissues of the oropharynx, causing bleeding and subsequent generalised deterioration."

A. Yes.

Q. And so, first of all, there you're saying that he sustained trauma to the oropharynx some time prior to the doctor seeing him, so some time before 1.45 in the morning. That's what you said, isn't it?

A. I've got that time wrong.

Q. And then we go to paragraph --

A. Sorry, I got that time wrong.

Q. Then we go to paragraph 78. It's not just -- let's go to paragraph 78:

"I suspect that if [Baby N]'s initial bleeding problems were due to spontaneous bleeding from his oropharynx, his condition would have deteriorated significantly during the next few hours."

Well, we're not talking about spontaneous bleeding. But you conclude that paragraph with this:

"It is my opinion that [Baby N]'s oropharyngeal bleeding was the result of some form of trauma to the back of his throat during the early hours (pre 01.45) of 15 June 2016."

That's what you say, isn't it?

A. Got that time wrong, sorry about that.

Q. Well, you -- you said that now twice in that report, haven't you, 1.45?

A. Yes, but it's wrong.

Q. But we've got the clinical entry for 1.45 by [Dr A] when he first sees the baby, don't we?

A. There was no blood. The blood was noticed for the first time at 08.00 hours, and therefore by putting 01.45 -- by talking about oropharyngeal bleeding I should have said "from around 08.00 hours". Got my time wrong, sorry about that.

Q. On paragraph 83 in the same report, you advise the need to look at nursing and medical care present during the night shift of the 14th and 15 June.

A. Yes.

Q. So you're quite clear at the time of that, on your assessment, that you're looking at something that starts or has its start in the very early hours of 15 June, weren't you?

A. What I confused was the fact that he wasn't as well as he had been at 01.45 hours and the fact that the bleeding was part of his problem, although the bleeding did not -- was not found until 8 am. Okay? So I've got that wrong. I got it wrong. My responsibility is to correct any errors I have made.

So the baby was unwell from around 01.00 hours, but the bleeding in the back of the throat was noticed at around 08.00 hours. That's the key thing. If my report has confused the two things, my apologies.

Q. Is it not that at that case you were drawing a direct line in a deterioration that began at 01.45 and, as you saw it, culminated in bleeding being seen at 8 o'clock in the morning? Is that not what you were doing?

A. He was seen at 1, 3 and 5 am, I think, and nobody commented on any bleeding. The bleeding was noticed at 8 am, and that's where I got it wrong.

Q. And you link that to the desaturation that he experienced at 7.15, don't you?

A. Yes.

Q. Yes, you put bleeding together with desaturations being elements of the same event, don't you?

A. Well, you can't... I... You cannot say that. What we appear to be certain about from the evidence we've heard from the local people is there was bleeding evident when the laryngoscope was passed into the mouth at 8 am --

Q. Just to pause there, I'm not going to debate -- there's an issue, and you know exactly what Mr Johnson was referring to earlier today, there's an issue as to when that blood was seen.

A. That's fine. That's a matter for others, I accept that.

Q. Your evidence on this is -- you said, there's a collapse from 17.15 (sic) onwards, that was how you described it this morning when you gave evidence. He collapses from 7.15 (sic) onwards in the morning. Is that right?

A. No, his deterioration was from -- well, it must have been from just before they decided to intubate him. The doctors decided to intubate [Baby N] at 8 am, so therefore his condition had deteriorated sufficiently by that time for him to require intubation.

Q. Yes.

A. So his deterioration was pre-8 am. There was no suggestion that he required intubation during any of the earlier assessments by [Dr A].

Q. And we have the desaturation recorded at about 7.15 that morning, don't we?

A. I'm sure it is. I can't remember what it was.

Q. If we put up tile 141, please, Mr Murphy. Tile 141. And if we go behind that to remind ourselves of the timing. Scroll down, please. Thank you.

It's down, if we go to the bottom left, 07.15:

"Baby crying and dropped saturations."

Do you see that?

A. Yes.

Q. I'd like us to be able to understand your evidence, and I don't say that to be rude, Dr Evans, but to understand it, you are linking that 7.15 desaturation to the blood that is identified in the course of intubation, aren't you, or are you saying they're two completely different events?

A. No, I think connecting the two is not unreasonable from a clinical point of view.

Q. Even though no blood is seen at 7.15?

A. As far as I know there was no blood seen, but there was blood at 8 am. We only know for sure, if we accept the evidence of the local people, there was blood at 8 am. And you know, by 8 am he was very unwell. His sats had dropped to 48%, I couldn't remember that then. His

saturations had dropped to 48%, very low -- this is paragraph 16 of my report -- and his heart rate had dropped to 80 and he was bagged and given Neopuff and so on. So therefore he was very unwell by 8 am. But at that time he was sufficiently unwell to require intubation.

Q. So contrary -- we've been over this: you don't say now at least that it began at 1.45 in the morning; you're clear about that?

A. Got the time wrong, apologies.

Q. You identify the desaturation at 7.15?

A. I have.

Q. And the desaturation which, following this through, leads to the requirement for an intubation?

A. Yes.

Q. And you draw the link between that desaturation and blood at the time of intubation?

A. Sorry, say that again.

Q. You draw the link between that desaturation and blood at the time of intubation?

A. Well, something caused the desaturation. Would blood in the back of the mouth cause desaturation? Yes.

Q. Right.

A. You can't go further than that.

Q. You accept no injury at any point is identified to the oropharynx by any of the numerous practitioners who saw [Baby N] that day?

A. I'm not sure you can say that. All I've read is that there was swelling of the epiglottis and, in my opinion, the swelling to the epiglottis reflects trauma. The epiglottis is a very soft piece of tissue that overlies the airway and it doesn't take a lot to traumatise it.

Q. Do you agree no source of blood, as in a fresh-flowing source of blood, is identified in the oropharynx or in that area by any practitioner?

A. Well, if the area's covered in blood, you're not going to find any tear or abrasion underneath.

Q. It's not covered in blood throughout the whole period the practitioners are looking at it, is it? We have heard from them.

A. It's the area -- there was so much blood there they couldn't intubate, let's put it that way.

Q. At this time it is said that the intubation had to stop because of blood?

A. That's what they said.

Q. At other times the only reference has been to swelling?

A. Yes.

Q. At no time has anybody identified any injury in or around that mouth, despite repeatedly looking at it through a laryngoscope, have they?

A. That is incorrect, because what you've got there is a swollen epiglottis and, in my opinion, that swollen epiglottis -- that epiglottis was swollen as a result of trauma.

Q. You are seeking, again, to support the allegation, aren't you, by reference to a theory that can do that but not by the basic facts?

A. No, I am putting clinical facts together in a way that makes clinical sense.

Q. I suggest you're putting things together to try to construct an allegation, Dr Evans, on this case here.

A. No: clinical consistency --

Q. When you spoke about your involvement in this case at the start of this trial, you talked about being contacted by the National Crime Agency; do you remember that?

A. Yes.

Q. Is that how you recall this, they contacted you?

A. We got in touch, yes.

Q. And they wanted you to deal with this?

A. Well, the way it works -- by this time I think I'd been in touch with the NCA about 40 times or so where -- what happens is a police authority gets in touch with the NCA, we have to look for an opinion from somebody of my professional background, we've got a baby here with abusive head trauma or suspicious injuries or whatever, you know, and a police authority in the West Midlands or West Mercia or wherever, Humberside, I've been involved with loads of them, want a medical opinion. I reply to the NCA saying, tell the police authority to get in touch with me. That's the way it works.

And in this particular case, it was Cheshire Police. I'd not had any dealings with Cheshire Police. I think Cheshire Police got involved in May 2017. They got involved with me, I think in June or July 2017. And someone from Cheshire Police rang me up and I said, "I'm not sure what's going on here, I'll come up and talk to and you we'll take it from there". So that's how it started.

I went up to --

Q. It's how it started that I want to ask you about so let's stick with that, Dr Evans, and I would be grateful if we can look at an email at D24, please, Mr Murphy. It's just one email I want to ask you about. We can all see this. We can see at the top:

"Dewi Evans, 21 May 2017. To: the National Injuries Database re Op. Suspicious Unexplained Death."

Do you see that?

A. Yes.

Q. You'd been working with this body on a different investigation at this point, not this one, and the National Injuries Database provides support and advice for the serious crime investigation roles of the National Crime Agency, don't they?

A. Sorry, say that again.

Q. The National Injuries Database, who you're emailing, provide support and advice for serious criminal investigations involving forensics to the NCA, the

National Crime Agency?

A. They're called FMAT, the Forensic Medical Advice Team, now. But anyway, same lot.

Q. So you're talking to your contact:

"Dear Nick. I've received a lots of documents from [and we have redacted other details] the police op [whatever], but not the autopsy result. I'll liaise with DS [redacted] directly. Should sort quickly once I get all the files. Incidentally, I've read about the high death rate for babies in Chester and that the police are investigating. Do they have a paediatric/neonatal contact? I was involved in neonatal medicine for 30 years, including leading the intensive care set-up in Swansea. I have also prepared numerous neonatal cases where clinical negligence was alleged. If the Chester Police have no one in mind, I'd be interested to help. Sounds like my kind of case. I understand that the Royal College has been involved, but from my experience the police are far better at investigating this sort of problem."

First of all, I'd be grateful if you can answer the specific questions I ask, Dr Evans. This is you contacting the NCA, isn't it? Yes? You contacting them?

A. Well, it isn't, it's about another case. I can't remember what that other the case was. So I got in touch with them. This is the way the NCA works. As

I said, I'd done dozens of cases for the police authorities via the NCA by 2017.

Q. This is you putting yourself forwards, in effect touting for this job, isn't it?

A. I dislike emotive terms like that (overspeaking) --

Q. All right. Putting your forwards for this job.

A. I was offering my professional opinion if that was in their interest. Okay?

Q. "Sounds like my kind of case."

Yes? That's you advancing yourself as someone who can do for them what they require, isn't it?

A. And it looks as if I have.

Q. It's you ready to give them what they want, isn't it?

A. No, no. I have dealt with several police cases where I went through the report and I said, look, this case does not cross the threshold of inflicted injury or suspicious injury or whatever. My case -- my opinions are impartial and independent. The other thing that -- might be worth telling you, Mr Myers, at this stage is this: in the past 5 years I don't only give evidence via the NCA or to the police authorities, I also give evidence to law firms representing defendants. In fact, in the last 5 years I have given more -- prepared more reports for lawyers acting for defendants than for the prosecution or the police.

Now, lawyers acting for defendants are not known for looking for evidence from doctors who rubber stamp

prosecution expert evidence. As a result of the numerous cases where I've acted for the defence -- I think my record is somebody being found not guilty in half an hour because the prosecution case was awful, that was my opinion anyway. All of this is in the public domain by the way.

Therefore I act for the defence if I'm asked for. Most of my work is, as it is for most paediatricians, for the Family Court. And in the Family Court, it's complicated, but you act as what we call a joint expert witness. And I think the members of the jury need to know this: you act for the local authority, the people acting for mother, father, child.

And we had this discussion a few weeks ago: as far as I know, in the Family Court, I've had no judgments against me apart from one that was reversed on appeal, apart from the altercation Mr Myers raised recently (overspeaking). I need to explain this, I need to explain all of this because I think the members of the jury need to know that I give an opinion if asked and if it's within my expertise. Now, with neonatology being part of my clinical practice for a long, long time, this very much was within my clinical remit or, to use a lay term, "Sounds like my kind of case", okay? I can't even remember who Nick was actually but there we go.

So therefore that's how people correspond. It's not, dear sir, yours truly and all that sort of stuff.

That's how emails work, okay?

Q. Thank you.

A. Therefore that's how I got involved with this case: NCA and me first, Cheshire Police followed.

Q. And when you make reference to the family matter, you just talked about the Family Courts, that was the matter that's been raised with you before during this case, the ruling from Lord Justice Jackson, isn't it?

A. Yes, that is true.

Q. This is a record dated 21 May 2017 -- take it down, Mr Murphy, please. We'll go back to it if we need to.

I'm going to suggest to you, Dr Evans, that at some point before you started writing reports, you were told by the police of suspicions about suspicious rashes and air embolus (overspeaking) you were told that or it was indicated to you, I'm going to suggest, before you wrote any report.

A. No, that is completely untrue. Okay? It is totally untrue. The first time I heard a local doctor mention the word air embolus was a couple of weeks ago. I'm not sure whether it was Dr Gibbs or Dr Jayaram, Dr Jayaram I think, when he talked about the cold chill going down his spine. I knew nothing about air embolus. The first person I know of to raise the issue of air embolus in this particular series of cases was me. And I did that in case number 1. Okay?

In the first case I thought, oh my God, what's going

on here? This is -- you know it was very much an "oh my God" scenario.

I'm not going to go at length about case number 1. For [Baby A], if we remember, I formed the view that it was his collapse and the inability of the staff to resuscitate him was the result of his receiving air embolus. I did not know at the time about the skin discolourations; I heard about that later. I did not know at the time about Owen Arthurs' finding of air embolus on post-mortem X-ray (overspeaking) --

Q. That's your characterisation -- if we can just pause for one moment, Dr Evans --

A. Just a minute. I want to finish this.

Q. My Lord --

A. I want to finish this because if you're going on wild goose chases, I want to --

MR JUSTICE GOSS: You can finish the answer and then you ask the question.

A. Therefore I didn't know any of that. But that's what led me --

MR JUSTICE GOSS: You have said all this before. We've heard all this before.

A. I had nothing at all -- I knew nothing at all, sorry, about air embolus from the police. I was not told anything about any suspect or named anybody and I knew absolutely nothing and, as I said at the beginning of this trial, it's quite important to repeat this, at the

beginning of this trial my role --

MR JUSTICE GOSS: You have said this, Dr Evans. I know. You've said it at least once, more than once.

A. Yes, I know.

MR JUSTICE GOSS: All right? Ask your question, Mr Myers.

MR MYERS: So far as Owen Arthurs is concerned, that is matter that is to be determined in the case.

A. So what now?

Q. So far as Owen Arthurs is concerned, what his X-ray shows or doesn't show is a matter that the jury are going to determine in this case. You understand that, don't you?

A. I do understand that, yes.

Q. What I want to ask is this: one of the cases that you referred us to and that you rely upon when saying that on the 2nd or 3 June [Baby N] had an air embolus over that period is a case that concluded with a post-mortem X-ray taken 12 hours after death, reported to show air in the pulmonary and systemic circulation as well as air in the portal venous system beneath the diaphragm. That was indicative of air embolus in that case of Sowell, wasn't it?

A. That seemed to me -- yes, that's correct.

Q. That is direct evidence of air in the pulmonary and systemic circulation, so in the lungs and in the cardiovascular system?

A. Yes.

Q. And in fact we do not have that in this case, do we? We don't have that, do we?

A. Right. Professor Arthurs' opinion is his opinion, but when I heard his evidence, he said you do not need to find air in the circulation in -- in the post-mortem circulation of babies to confirm air embolus. That is what he said. That's his opinion, he's the radiologist, I am not.

Q. You relied upon that case to support what you are saying here and, do you agree, we do not find air in the pulmonary or systemic circulation in any of the cases we're dealing with in this trial, do we?

A. This Sowell case was a massive air embolus where a baby died and he was several weeks old, so the comparison is not exact. The comparison is not exact.

Q. You're the one making the comparison, aren't you, Dr Evans?

A. No, no, the comparison -- I quoted these papers because of the association between air embolus in these two cases and screaming. The baby screamed. I didn't know about that until I did my online searches for air embolus. Didn't know that.

MR MYERS: Those are my questions, my Lord.

MR JOHNSON: Does your Lordship have any questions?

MR JUSTICE GOSS: I don't. Thank you very much, Dr Evans. That completes your evidence at this stage.

... [Omitted] ...