Tuesday, 6 November 2012

(12.00 pm)

DR NEIL STEWART (called)

Questions from MR REID

(The witness appeared by video link)

THE CHAIRMAN: Good morning.

Dr Stewart, can you hear us?

A. Yes, I can indeed.

THE CHAIRMAN: Is "doctor" still the right way to describe you?

A. Yes. That's fine, thank you, yes.

THE CHAIRMAN: Okay. My name is John O'Hara, I'm the chairman of the inquiry, but the questioning is going to come overwhelmingly from Mr David Reid, whose face you'll see appear on the screen, I think, when he's asking you questions. Okay?

A. Thank you very much.

THE CHAIRMAN: Can I ask you one more thing: do I understand that you have a lawyer close by, or has he left?

A. He has just gone to use the restroom.

THE CHAIRMAN: Okay. Maybe what we'll do now is swear you in to give your evidence and, when he comes back, we'll discuss what his role is during the next hearing. Okay?

A. Thank you.

THE CHAIRMAN: Thank you, Dr Stewart. Can I ask you, first

of all, what is the name of your attorney?

MR JARRETT: Patrick Jarrett.

THE CHAIRMAN: Thank you, Mr Jarrett.

Mr Jarrett, the way in which this inquiry has been run is that there are various doctors and others in the position of Dr Stewart who have had legal representation from time to time, but the questioning of Dr Stewart will be done through inquiry counsel. He will raise the issues with Dr Stewart, with which the inquiry is concerned. If you have any objection to a question, then you make that objection to me, but I want you to understand that Dr Stewart is not to receive any assistance or any prompting in answering the questions. Is that understood?

MR JARRETT: That's understood.

THE CHAIRMAN: Thank you very much. Okay. Mr Reid will now start to ask questions. Thank you.

MR REID: Good morning, Dr Stewart. Thank you for appearing so early for us this morning. There might be a slight satellite delay between me asking the questions and you responding, so if you just wait until I've finished speaking just to make sure that you hear the full question.

You've made two witness statements to the inquiry to date, Dr Stewart. Those are WS141/1, which is dated

17 February 2012, and WS141/2, which is dated 17 June 2012; is that correct?

A. That is correct.

Q. Would you like to adopt those statements as your evidence before the inquiry?

A. I would, if I could make two additional comments regarding them.

Q. Certainly.

A. First of all -- and the pagination may be a little different. We use letter size here, I believe you use A4 there. There's a part of my first statement which is in answer to question 27(g), which I believe is page 15, in which I note the nursing notes do record a fluctuating Glasgow Coma Scale, GCS, through the day and into the evening. I remember Dr Bartholome commenting that she believed this was as a result of the Hypnovel infusion.

I want to clarify now: I do not recall that conversation happening at 11.30, whenever the abnormal serum sodium result returned. It's my recollection that occurred earlier in the evening and may have indeed come through Joanne Hughes in her handover to me, shortly before 10 pm. But I don't recall with certainty.

Q. I see. So you're saying --

A. And the second thing I would like to say --

Q. Just to clarify that first point. You're saying that your recall of that comment wasn't at 11.30, it was during an earlier conversation with Dr Bartholome and/or the handover from Dr Joanne Hughes; is that right?

A. Yes. I remember distinctly the comment in connection to Dr Bartholome. Whether it came from her directly or through Joanne Hughes at the handover, I can't recall with precision.

The second comment I would like to add is that I do believe now that I did attempt an examination of Claire at 11.30 before I called Dr Bartholome.

Q. Thank you, doctor. We will get to that in due course.

If I can also just refer to a letter which has come from the Directorate of Legal Services here in Northern Ireland. That's dated today, 6 November 2012, and the reference for that is 302-147-001. Some of these documents will be pulled up on screen, you might not have the availability of them, but rest assured I will be explaining what is on the document to you so you have the full benefit of it. Okay?

This letter is in response to an inquiry e-mail, which asked whether you recalled treating any other children on Allen Ward on 22 October 1996. It says that:

"[You instruct] that this was your first paediatric

attachment at the Children's Hospital and so, naturally, you do recall some details from that time. You recall you had some involvement on Dr Sands' ward round and [you] certainly saw a number of children during the course of that particular morning and afternoon. However, without the benefit of handwritten notes, [you're] not presently able to recall these patients with precision."

Can I assume that that is your evidence on that point; would that be correct?

A. That came from me, yes, sir.

Q. Thank you. Just going back then, you'd been a junior house officer in the Ulster Hospital in Dundonald and then you started as a senior house officer in the Royal Group of Hospitals in August 1996. This was your first posting, as you said there in the letter, in paediatrics at that point. So you'd been a senior house officer for three months by October 1996; is that right?

A. That's correct.

Q. You left medicine in 1999 to become a Presbyterian minister and you are now a senior pastor at the Kirk of the Isles Church in Savannah, Georgia; is that right?

A. That's also correct, yes.

Q. When did you leave Northern Ireland, Dr Stewart?

A. I left Northern Ireland in the June of 1999.

Q. And you went to the States at that point?
A. Yes. I went to study at a reformed theological seminary in Jackson, Mississippi for three years.
Q. So you have now been out of medicine for 12 years; is that right?
A. Yes, sir.
Q. Coming up on maybe 13 years.
A. Yes.
Q. Can I ask you: in October 1996 were you aware of the Adam Strain case or inquest in any way?
A. At that time, I was not.
Q. Can I assume from your answer that you're now aware of the Adam Strain case and inquest?
A. Yes, I am. I remember a brief conversation between consultants in a coffee room when I was attached to paediatric ICU on the second year of my placement at the Royal Belfast Hospital for Sick Children, which would have been towards the end of 1997.
Q. Okay. So you remember --
A. 1998, sorry.
Q. You remember a conversation then about Adam Strain between two consultants in PICU towards the end of 1997. Can you remember any of the --
A. Or 1998. It was in the summer of my second year in the Royal, so it would have been, let's see, 1998 -- 1997.

It was the second year of my attachment to the Royal at that time. I remember it was on passing, I remember his name being mentioned. I believe Dr Taylor was there. Maybe Dr Crean or Dr McKaigue. I just remember his name and a discussion of some of the incidents regarding his treatment in the hospital, but I couldn't recall with precision those details, I just remember his name being mentioned.

Q. Can I ask, why do you recall that particular conversation happening?

A. It just sticks in my mind, I just remember it.

Q. Is there any particular reason why it sticks in your mind?

A. No. I just recall -- there was nothing, it was just a conversation, I think about fluid care. It just stuck in my mind. I remember when I saw the inquiry come through and saw the list of names of the children who were being examined and dealt with, with the inquiry, I just remember Adam Strain's name and I remember that conversation.

Q. I have to ask: is it possible that maybe the conversation stuck in your mind because you recalled maybe elements of Claire Roberts' case that seemed similar to the conversation that was being had?

A. I'm most certain that wasn't the case.

Q. Okay. As far as you're aware in October 1996, what was your awareness of hyponatraemia and the dangers associated with it?

A. I was aware that children responded to IV fluids differently from adults, and so we had to be very careful in the way we handled their fluid balance. I remember that particularly because we had a particularly ill child with diabetic ketoacidosis in Musgrave Ward several weeks before and Claire's presentation -- and I remember the registrar that night, Dr Jean McKnight, stressing the importance of slowly restoring fluid anomalies in a controlled manner. In adult patients, you can be a little bit more aggressive, but with children, I remember Dr McKnight stressing how important it was that we restored normality to their fluids in a controlled fashion. That stuck in my mind, so I was aware of that detail. I was also aware of the dangers of about hyponatraemia and hypernatraemia to a child.

Q. You're giving evidence towards the end of the clinical section of Claire Roberts' case. Several other clinicians who were in the Royal at the time have given evidence already to the inquiry. Have you had the opportunity to read any of the evidence on the transcripts that have passed before the inquiry so far?

A. I have glanced through some of them. There's an awful lot of them, so I wasn't able to read them exhaustively, but I did glance through some of them, yes.
Q. I can certainly accept there's a lot of reading material there, doctor. Has there been anything that you've seen or read that has stirred any other memories that you might have of that particular time? Anything that's twigged your memory?
A. Undoubtedly, reading the events of that time, it has served to refresh and jog my memory, yes. Although it's difficult to define what's been jogged and what I recall, it's kind of, you know, flashes, impressions, memories, events. But yes, of course it has served to jog my memory.
Q. And you have certain memories of things that happened on 22 and 23rd and other elements that you've pieced together from the notes; would that be fair to say?
A. That would be fair to say, yes.
Q. If I can bring you then to 21 to 23 October. You were on the day shift that day between 9 am and 5 pm and then you went off and came back at 10 pm; is that right?
A. That is correct. I probably came back to the hospital -- it was my normal practice to come in shortly before 10 pm to allow time for a handover with the doctors who were passing the care on to me.

Q. And then you were still on the on-call shift then until 9 am the following morning?
A. A good bit after that. I believe I may have led the ward round in Allen Ward the next morning, and that went on past midday, even into the afternoon.
THE CHAIRMAN: Sorry, doctor, you believe you may have led the ward round in Allen Ward on the Wednesday?
A. I believe so. I certainly remember being part of the ward round. I may have led it.
THE CHAIRMAN: Well, for you to lead it, would that not mean that on the Wednesday there was neither a consultant nor a registrar?
A. Um ... That would be true, yes, sir.
THE CHAIRMAN: So if your recollection is right, it means that not only was there not a consultant on the ward round on Tuesday the 22nd, but it means that there wasn't a consultant on Wednesday the 23rd, nor was there a registrar on Wednesday the 23rd?
A. Yes. There were times -- not very often -- when Dr Sands was present elsewhere in the hospital. I remember sometimes he had to -- he would assist the cardiologists with echocardiograms and it may have been that morning, I couldn't recall with precision, but I could have easily connected with him had I needed to. I would have discussed the patients on the ward round

afterwards before I retired from duty.

THE CHAIRMAN: Thank you.

MR REID: Can I ask you then, just leading on from the chairman's point about the ward rounds, from the evidence we've heard so far there would be a ward round every morning on Allen Ward and that this would typically be done by the consultant if they were available and then, if they were not available, the registrar. And then you're saying if neither was available, that you or another SHO could take the ward round; would that be a fair summary?

A. That's correct.

Q. I know this is looking back a considerable period of time, but how often would the consultant be unavailable to take the ward round in and around October 1996?

A. As I recall, some of the consultants had their scheduled ward round on a certain day each week and then consultants like Dr Steen, who had considerable commitments outside of the hospital in the community, would come in through the day or perhaps earlier in the morning and see her patients or come in later in the day and touch base with the registrar and see their patients at that time.

THE CHAIRMAN: Sorry, does that mean, so that I understand this, that there would be nothing unusual about Dr Steen

not being there for a ward round?

A. As I recall, especially after a take-in night when she was on call, she would have come in at some time during the day, if not before working hours, ie before 9 or 8 o'clock in the morning, or later on in the morning or afternoon, and she would see her patients and do a ward round then. That's my recollection.

THE CHAIRMAN: Thank you.

MR REID: So sometimes the ward round would be deferred or put off until the consultant was available; would that be right?

A. No. In those cases, Dr Sands would begin the ward round first thing in the morning and he would go through the ward round, make a plan for the day and then he would be in a position to brief the consultant when they arrived.

Q. I see. How often would neither the consultant nor the registrar be available to conduct the ward round?

A. It was very, very rare for Dr Sands not to be present for the ward round. And the reason why I believe he may not have been present that day is that I remember distinctly learning about Claire's collapse when I returned to the ward in the morning to take care of the morning bloods and to do the ward round. And I don't remember him being there at that time. So I don't remember talking with him about it, and so it

may have been -- that may be the reason why I suspect it was that morning that I did the ward round beforehand. Having said that, he was almost always there to do a ward round and he was always available for me to get him at short notice if he was detained elsewhere in the hospital doing an echocardiogram with the cardiologists or doing a clinic.

Q. Okay. On 22 October, it seems that the ward round was done with Dr Sands leading it and being accompanied by yourself as an SHO and by Dr Roger Stevenson, who was also an SHO; would that be your recollection?

A. That's my recollection, yes, and at least one of the nursing staff.

Q. Do you know which of the nursing staff?

A. I don't recall.

Q. You wouldn't know whether, for example, it was Kate Linskey or Sarah Field?

A. I'm sorry, I don't recall.

Q. When the ward round happens, was there a particular order in which patients were seen? For example, were the sickest patients or the newest admissions seen first or was it done in a different order?

A. I think if we were aware of a particularly sick child, we would often begin with them, but also there were many times we would just go through the ward round and see

the patients in order. If the nurses had a particular concern, they might direct us to a patient in first order, but I think we just made our way methodically through the ward round if there was no reports to that end.

Q. And what role would you, as an SHO, have as part of that ward round being led by a registrar?

A. Basically, two roles. First of all, Dr Stevenson and I would take it in turns to record notes. I do recall we divided up the patients in the ward, that we would tend to look after certain patients ourselves. I don't recall exactly how we made that determination. But we would record the notes that Dr Sands would make. Sometimes he would write in the notes himself if there were some details he particularly wanted recorded. And then often the SHO who was not directly recording the events of that patient might be sent off to chase up other lab results, maybe get an X-ray report from radiology and other various and sundry tasks connected with the patient that was being seen then or a patient who had been seen previously.

Q. Okay. So for example, in Claire's case, Dr Stevenson records the note. Is there anything you can take from the fact that Dr Stevenson was recording the note in Claire's case as regards your care of her?

A. I do recall that ward round that I was not with -- I was not directly present on the ward round when they reached Claire. It's my recollection that I was chasing down results, perhaps for another patient. I do remember distinctly seeing Dr Sands standing by the bedside talking to, I think, both of Claire's parent were there, I remember seeing that. I remember hearing as I kind of walked back and forth -- I remember hearing "non-fitting status epilepticus". That sticks out in my mind because I don't believe I was aware of that diagnosis and, if I was, I'd certainly never seen a patient with it. So I remember when I heard that, it stuck in my mind. And I do remember coming back to the ward round just as they were finishing dealing with Claire and there was a brief discussion around the notes trolley regarding Claire's condition and what the plan of management was for her that day. And I remember sort of being brought to speed on the events of Claire's case the night before and the plan of action for that day.

THE CHAIRMAN: Doctor, if I could interrupt for just one moment. When you said that you and Dr Stevenson would divide up the patients between you and that you would take it in turn to write the notes of the ward round, did the division follow who wrote the notes, so that for instance if Dr Stevenson wrote the notes on patient A,

he would take more care or a primary role in the care of patient A than you would, and then you would do patient B?

A. That may well have been the case, yes. I couldn't recall with precision.

THE CHAIRMAN: What I'm trying to understand is if I should infer anything from the fact that Dr Stevenson made the notes on the ward round with Claire.

A. What I do recall, sir -- I remember, he obviously wrote the notes on the ward round.

THE CHAIRMAN: Yes.

A. I do recall, in the afternoon, Dr Webb coming to see Claire and I recall him going into the bay with Dr Stevenson. I was caught up doing other business in the ward. I don't remember what it was, but it must have had some urgency to it because I had an interest in paediatric neurology, it was the specialty I intended to go into if I'd stayed in paediatrics. And I remember thinking I would love to be there to hear Dr Webb's examination of the patient and observe that for myself, but I was caught up doing other business in the ward.

THE CHAIRMAN: Thank you.

MR REID: There are a number of points raised by your answer there. Firstly, if I can bring you to your witness statement, 141/2, page 2, please. Do you have that

there in front of you?

A. Yes, I'm getting it now. Yes.

Q. At 1(b), you are asked whether you specifically attended Dr Sands' ward round on the morning of the 22nd. You said:

"I may well have been present during Dr Sands' ward round. I normally was. I would only have been absent if Dr Sands required my presence elsewhere. I do not recall for certain whether I was there that day or not."

Are you saying to the inquiry that your memory now is clearer than it was at the point at which you were answering the witness statement?

A. What I meant to say -- what I was saying then was I don't remember whether I was with Claire or not. As I've thought about it, yes, my memory has clarified.

Q. Okay.

A. I was certainly present on the ward round. That's a statement of fact. So I wasn't trying to deny that I was present on the ward round. At that stage, my memory wasn't as clear as it is now.

Q. I'm not trying to accuse you of anything, doctor, I'm just trying to make sure that your memory is clear. You said that one of you would write down a note and the other might go and do certain things in connection with that patient. Would it ever be the case that one person

would write down the note while another might, for example, draw blood in order to take an electrolyte test, for example?

A. The electrolyte tests were not normally taken during the ward round. They cause significant distress to a child and generally you would do them later in the ward round to avoid any element of chaos being brought into the proceedings.

Q. If an electrolyte blood test had been requested at the ward round, would it have been your responsibility or Dr Stevenson's responsibility to ensure that had been done?

A. I remember I kept a spiral notebook in my pocket and if there were any -- if there were tests requested, I would have made a note of that in that notebook. So it would depend. Generally, after the ward round, Dr Stevenson and I would have discussed who was going to do what. If there were a lot of tests going to be taken -- and often there were -- we would have divided them appropriately.

Q. Would it ever be the case, for example, if Claire was nominally Dr Stevenson's patient that, for example, he would do more than you would as regards the patient?

A. He certainly seemed to be the one making the majority of the notes in her case that day, both with Dr Sands and Dr Webb through the course of the afternoon. I don't

recall with precision.

Q. Are you saying that, in general, though, it wasn't that patients were assigned to the SHOs, it was that the tasks that needed to be done for the patient were effectively divvied up between the two of you?

A. That's correct. Some of the wards I worked in, you would take different bays and the patients in those bays would be yours. I just don't recall exactly how we did it in Allen Ward 16 years ago.

Q. You say that you seem to remember non-fitting status epilepticus being discussed at the ward round. Whenever you heard that and it piqued your interest, did you speak to Dr Sands to ask him to explain that further?

A. I don't recall with certainty. I may well have done.

Q. Given the level of interest you had in paediatric neurology and the interest that was generated by that being said, do you think it was probable that you did so?

A. I would say so, yes.

Q. And do you recall any mention of encephalitis at that particular ward round?

A. Yes, I believe that was the working diagnosis. As I understand it, Claire's seizures had been stopped, she had epilepsy early in her life or seizure activity much

earlier in her life, but they'd been settled for quite some time, and it was deemed that encephalitis -- I think she had a viral -- there was a question about a viral illness and maybe a history of diarrhoea or loose motions and it was mentioned the possibility of encephalitis being the, perhaps, cause of the seizures.

Q. Were you aware of any treatment that was suggested in order to treat the encephalitis itself?

A. I know she was started on acyclovir. I don't recall when that happened.

Q. From the notes, it seems that the acyclovir was directed by Dr Webb at around 5 o'clock that afternoon --

A. Yes.

Q. -- and was administered at around 9.30 in the evening on the 22nd. There doesn't seem to be any note of a direction of acyclovir prior to 5 o'clock in the notes. Do you have any comment to make about that?

A. I don't.

Q. Can you recall the level of concern that Dr Sands had for Claire's condition at the ward round?

A. Yes. He certainly was concerned about her condition.

Q. And how do you know that?

A. I just remember his tone of voice, his posture towards the parents. I remember him heading off to ... I do recall there being some confusion about the location of

Dr Steen and I remember him saying he was going to try and track her down and also I remember him heading off to find Dr Webb personally.

Q. Were you at all aware of the nursing staff who were present having any concerns for Claire?

A. Um ... I couldn't recall precise details, but there was definitely an atmosphere of heightened concern for Claire's condition by all the medical staff.

Q. And finally, were you aware of the level of concern of Claire's parents who were there?

A. I don't recall that with certainty. I remember Dr Sands talking to them, but I don't recall any responses they made or questions they asked.

Q. You don't think you were present for the entirety of Dr Sands' attendance with Claire; would that be right?

A. That would be correct.

Q. How long do you remember him being there with Claire?

A. Probably about 10 minutes, maybe 15 minutes.

Q. Would that be a longer than usual period for a doctor to spend with a patient on a ward round?

A. Not a new admission who had some symptoms and pathology that was concerning to a doctor, no.

Q. Were you at all aware of concerns that Claire's parents had, which had been passed to the nursing staff prior to the ward round?

A. Would you repeat that question again?
Q. I'll set it out for you. Staff Nurse Field says that she was spoken to by Claire's parents to say that they were concerned at Claire's appearance whenever they arrived at the hospital that morning. Staff Nurse Field says she spoke to Staff Nurse Linskey to pass that message on to Dr Sands. Were you at all aware of that course of events?
A. No, I was not.
Q. And did you have any awareness of whether the ward round was on time or was running late that morning?
A. Um ... Are you asking if it started late or if the ward round was taking an undue length of time?
Q. Let's start with the first. Do you know if it started late that morning?
A. I don't believe it did. Dr Sands was very punctual. I don't ever recall him being late to a ward round.
Q. And do you know if it was running late at that stage?
A. I don't think so. My recollection is we got to Claire mid-morning, but I couldn't give a precise time.
Q. Some of the evidence has suggested that the ward round may have been in and around 11 o'clock in the morning. Would that be a late stage for the ward round to still be continuing?
A. Not at all. The ward round started at 9 and would quite

1 often take the whole morning to complete.
2 Q. Do you have any sense of where the consultant
3 paediatrician, Dr Heather Steen, was that morning?
4 A. I do remember Cupar Street being mentioned as a possible
5 location, but that's the best -- that's the only detail
6 I recall with precision. I do not recall seeing
7 Dr Steen on the ward while I was there.
8 Q. And do you recall whether Cupar Street was in relation
9 to the morning of the 22nd or the afternoon, or can you
10 simply not recall?
11 A. I don't recall. As I recall, the conversation was
12 a list of outlying clinics that Dr Steen was known to
13 lead and top of that list was Cupar Street. I don't
14 remember if there were any other specific locations
15 mentioned, I just remember Cupar Street being mentioned.
16 Q. But you don't recall seeing Dr Steen on the ward while
17 you were there?
18 A. I don't.
19 Q. If you had wanted to contact the consultants that
20 morning, how would you have gone about that?
21 A. As a first time SHO, I don't recall ever calling
22 a consultant or paging a consultant directly, unless the
23 registrar asked me to. Normally, it was the registrar
24 would make contact with the consultant and, as I recall,
25 they did that through the main switchboard of the

hospital.

Q. But if the registrar was unavailable, how would you contact the consultant?

A. I would contact the registrar. I don't recall a registrar ever being unavailable. Certainly, if the consultant was on the ward and the registrar was, say, at a clinic, then I would talk directly to the consultant myself, but in terms of paging senior medical staff, I would work up the line of command and go to the registrar first. I don't remember ever being in a situation where I needed a registrar, couldn't find one, and had to go to a consultant.

Q. Would it be correct to say that the numbers of the consultants were available at the nursing station if they were required?

A. That may well have been the case. I don't recall on Allen Ward.

Q. You say that Dr Sands was leading the ward round that morning. Do you have any recollection of where Dr Sands was on that afternoon of the 22nd?

A. I don't recall him being on the ward round specifically. When Dr Webb came to see Claire, I distinctly remember Dr Stevenson going with him and I'm sure, if Dr Sands had been there, he would have gone as well. It's my understanding that Dr Sands would have had a clinic in

the afternoon, but I don't recall with certainty.
Q. And generally, in the afternoons in Allen Ward, in October 1996, were the registrars on the ward or would they have been off in clinics?
A. It would all depend. I remember Dr Sands being there a good chunk of the time, but he did have clinic responsibilities on some afternoons.
Q. Just going back a little bit. Whenever you came on that morning, you would have received or may have received some sort of handover from the night SHOs; would that be fair to say?
A. Perhaps. As a rule, though, the night SHOs had to go back to their own wards and take care of the morning work and the morning ward round on those wards. And so it was not common for the night-time SHOs to liaise with the junior SHOs at a ward level, and that if a handover was given, it was generally given informally between the registrars, who were the first point of contact.
Q. You don't specifically remember any handover from either Dr O'Hare, who was the registrar, or Dr Andrea Volprecht, who was the overnight SHO?
A. I do not.
Q. If we bring up 090-026-075, please. At the end of the ward round note, it's noted that Dr Sands recommended rectal diazepam, and if we go to page 075, which is in

front of us, we have the prescription for that:

"Date given, 22 October. Drug, diazepam. Dose, 5 milligrams. Time of administration, 12.15. Method of administration, rectal. Signature ..."

And it seems that that's your signature for that; is that correct?

A. That is correct, yes.

Q. It's signed by Kate Linskey.

A. Okay.

Q. First of all, doctor, I think you may already have explained, but why would it have been you administering the rectal diazepam instead of either Dr Sands or Dr Stevenson?

A. I don't recall with precision. It's my recollection that Dr Sands came back from having met with Dr Webb somewhere in the hospital and I perhaps was the first doctor he met, but he asked me to sign -- to write up diazepam, 5 milligrams PR.

Q. What did he tell you about the diazepam at that stage; can you recall?

A. It was a sort of first line of management in treating a child with presumed ongoing seizures.

Q. Did he say anything else about Claire at that stage?

A. I don't recall. I do recall Dr Webb was going to come and see her, and that really the first order of business

was to get an urgent neurology consult.

Q. So in terms of what you remember from Dr Sands, from the ward round, non-fitting status epilepticus was discussed, encephalitis was also discussed, and then he came to you and asked you to administer diazepam for ongoing seizures; is that right?

A. Yes, sir. I signed the kardex, I wouldn't have given -- I wouldn't have actually administered the diazepam, for obvious reasons.

Q. Yes, you prescribed it and the nurse administered it; is that right?

A. That's correct.

Q. Would it have been possible that you would have been present during the administration of the diazepam?

A. I was not.

Q. If I can refer you to a page in the clinical notes. It's Dr Webb's first attendance at 090-022-053. If that can be brought up on screen, please. At the bottom half of that page is Dr Webb's first attendance. It's incorrectly dated, it should be, "22 October 1996 at 2 pm".

On the sixth line down it says:

"Note, appeared to improve following rectal diazepam 5 milligrams at 12.30 pm."

Do you have any knowledge of that particular

incident happening?
A. I don't. Of, what, her improving after the diazepam --
Q. Yes --
A. -- or Dr Webb seeing and saying that?
Q. The improvement following the administration of the diazepam.
A. Not directly.
Q. Do you know who may have informed Dr Webb of that improvement?
A. I don't. I imagine it would have been Dr Stevenson and/or the nursing staff with him. I couldn't say. As I was not there, I could not say with precision in any sense.
Q. You say then you recall Dr Webb coming on to the ward and attending Claire with Dr Stevenson; is that correct?
A. I do.
Q. And that you thought it was unfortunate that you weren't able to be present because you wanted to learn more about paediatric neurology?
A. That certainly would have been a desire, yes.
Q. Whenever that attendance by Dr Webb had finished, did you speak to either him or Dr Stevenson about what had happened at his attendance?
A. I remember wherever I went, whether I went into another bay in Allen Ward or in the nursing station. When

I came out, he had already left and there may well have been a conversation with Dr Stevenson. I don't recall with precision.

Q. And do you know what you might have discussed with Dr Stevenson?

A. Well, being unable to recall the conversation with clarity, I wouldn't be able to recall what we discussed.

Q. Earlier on, you said that non-fitting status was mentioned at the ward round and that Dr Sands has spoken to you later on about the diazepam. Did you have any knowledge of how you might confirm a diagnosis of non-fitting status epilepticus?

A. Yes, an electroencephalogram.

Q. And what was your knowledge of the availability of an EEG in October 1996?

A. That's hard to recall because my understanding of paediatric neurology and the services available evolved over my three years in paediatrics. I certainly knew by the time I left paediatrics that the EEG test, the electroencephalogram test, would have been prescribed by a consultant neurologist, and so the way to arrange one of those things would have been to liaise with the neurologist, who then examined the child and decided whether such a test was necessary.

Q. Would you have had any consideration at that time of

treating non-fitting status epilepticus without the benefit of an EEG?

A. Not at that stage of my medical training, I don't believe so, no.

Q. Dr Webb, in his latest witness statement to the inquiry -- that's 138/3, page 2, just for the benefit of those in the chamber -- he said that he was contacted about Claire Roberts after an apparent seizure at 15.10, 3.10 pm, on the 22nd. He said he believes this contact was made by a doctor, but he couldn't recall by whom. Do you have any knowledge of you contacting Dr Webb that afternoon?

A. I don't have any direct recollection of that, no, but I'm as sure as I can be that I did not contact Dr Webb. I feel sure that would be a detail I would remember.

Q. You say you don't recall contacting Dr Webb at this point or you wouldn't recall contacting Dr Webb at any point during the afternoon?

A. I don't remember ever speaking to Dr Webb that day or at any time during Claire's admission to the Royal Belfast Hospital for Sick Children.

THE CHAIRMAN: Sorry, doctor, if I've got it right, you believe that if you had spoken directly to Dr Webb or contacted him, you would remember that?

A. I would.

THE CHAIRMAN: So your best guess is that you did not have any direct contact with Dr Webb that day?
A. Yes, sir, that's correct. I'm really quite certain about that.
THE CHAIRMAN: Okay, thank you.
MR REID: Can I ask you this then: you have said in your witness statements you do not recall any direct contact with the Roberts family, as in Mr and Mrs Roberts and Claire's grandparents. Is that also the case as far as your recollection of them is concerned?
A. Yes, sir.
Q. So I suppose you're as sure as you can be that you had no contact with them?
A. That's correct, sir, yes.
Q. I think we spoke earlier about the fact that your day shift that day finished at 5, and then the evening shift began at 10. Did you go home between 5 o'clock and 10 o'clock?
A. Yes.
Q. Whenever you left at 5 o'clock, what do you think your knowledge was of Claire's condition at that time?
A. I knew she had been seen by Dr Webb. I don't believe I was there at 5 pm when he saw her for the last time. I knew she had been seen by Dr Webb and that Dr Webb was going to be examining her and deciding whether or not

non-fitting status epilepticus was indeed the diagnosis that we were going to follow, how that was going to be examined, and what would be appropriate treatment measures to undertake.

Q. Would you have been aware of the seriousness of Claire's condition at 5 o'clock?

A. I certainly knew she was a child who was unwell, yes.

Q. We've heard various evidence throughout the inquiry that at some points the doctors would have considered Claire to have been the sickest child on the ward. Would you have considered Claire to have been the sickest child on the ward at 5 o'clock?

A. Yes, sir.

Q. And can I ask why you would have thought that?

A. She was a young girl presenting with disordered levels of consciousness. Status epilepticus is a serious condition that needs to be remedied and the underlying cause needs to be elucidated. That was just a group of symptoms that we would have known to take seriously.

THE CHAIRMAN: Sorry, doctor, I just want to clarify this: are you saying now that, looking back on it, she was the sickest child on the ward, or are you saying that on 22 October you regarded her as the sickest child on the ward?

A. I believe ... As I recall that night, Claire was the

major patient I had to deal with on Allen Ward, that Allen Ward was quite quiet, medically speaking, that night, and that I spent most of my time up in Musgrave Ward and maybe the haematology ward as well. So I do feel back then she was the sickest child on Allen Ward that I was aware of. I certainly don't remember any other patients who had generated that level of concern in the ward.

THE CHAIRMAN: Thank you.

MR REID: And do you know whether that level of concern would have been communicated to nursing staff in Allen Ward?

A. Yes. The nursing staff in Allen Ward were very, very experienced and they'd seen many children and I have no doubt they knew that Claire was an unwell child and the sickest child on the ward, if indeed she was.

Q. Is that an assumption or do you actually know whether they were aware of the seriousness of her condition?

A. Well, I know they were experienced. I know they had seen a whole range of paediatric patients and were well-versed in understanding with, I think, some clarity which children on the ward were doing very well and which ones were causing concern. It was the normal practice for the doctors to discuss this with the nursing staff, and the nursing staff were often the ones

who would raise concerns with the doctors about patients, especially the junior doctors, when they would bleep us at night-time. So the nursing staff certainly did know which patients to keep an eye on and I would see no reason to doubt that that was the case on 22 October.

Q. I suppose the issue that is raised is that Claire's parents were allowed to leave by nursing staff in and around 9.00/9.15, on the evening of the 22nd. And there's an issue the inquiry is investigating as to whether the medical and nursing staff were aware of the seriousness of Claire's condition if indeed the parents were then allowed to leave that evening. Do you have any comment to make about that? I obviously understand that you weren't present at that time.

A. Well, I think there's no question that none of the medical staff that day expected such an acute deterioration of Claire's care that night. I do remember that Dr Webb had said ... And I don't remember when I learned this, but I do remember he had made comment that if she -- if her disordered level of consciousness had remained unchanged through the night, that they would be arranging a CT scan the next morning. In my sense, I suppose I may have taken that as Dr Webb expected her to maintain -- the possibility of her

remaining with a reduced coma score overnight was certainly on the cards.

Q. You said there you remember that Dr Webb had said something, but you couldn't remember how you learned that. You've said that you didn't have any direct contact, you don't recall any direct contact with Dr Webb.

A. I am sure of that.

Q. Do you presume that you learned that from other doctors or the notes or what?

A. It would either have been -- there were only three possibilities, I think. Either from Dr Stevenson before I left that afternoon, from Dr Hughes at the handover later on that night, or from the medical notes themselves. But I couldn't recall with certainty how I came to that precise piece of information.

Q. And were you aware of anyone informing the parents of the seriousness of Claire's condition?

A. Not directly.

Q. As you said, during the ward round, you would have assumed that some of that would have been communicated on, but you don't have any direct recollection of anybody discussing her condition with the parents.

A. I don't.

Q. At 5 o'clock, would you have been aware of the

anticonvulsant treatment other than the diazepam, obviously, that Claire had received over the afternoon of 22 October?

A. I would need to check when that was prescribed, but yes, if it was prescribed earlier in the afternoon then I would have been aware of it. If it was prescribed at 5 pm when Dr Webb saw her for the last time that day, then I don't think I would have been aware of it then because it's my recollection I'd left the hospital shortly before 5 pm.

Q. If we go back to 090-026-075, which is the drugs prescription sheet, we can see there your once-only administration of diazepam. There are then also once-only administrations of phenytoin at 2.45, of midazolam at 3.25, and -- from the fluid balance chart -- there's also a continuous infusion of midazolam from 4.30. Would you have been aware of all of those anticonvulsant drugs at 5 o'clock?

A. Certainly the earlier ones, yes, the phenytoin and the midazolam. I'm sure I would have been aware of those when I left the ward. Dr Stevenson would have been given a heads up on that as I left, I'm sure.

Q. Why would he have given you a heads up, is that because he knew you were on the night shift that night?

A. Yes, sir.

Q. So you think Dr Stevenson would have handed over to both Joanne Hughes, who was coming on for that 5 to 10 shift, and yourself because you were doing the on call overnight?
A. I don't recall with certainty, but we did work in the same ward, we did talk about the patients, so I'm sure I would have been aware of that, but I don't recall with precision.
Q. So you don't actually recall the handover from Dr Stevenson, but you assume that that's normally what would have happened; is that right?
A. Yes.
Q. Can I ask you then just about your overnight shift? Would it be correct to say that overnight from 10 pm until 9 am the following morning, there would be one registrar covering all of the wards of the hospital and that was Dr Brigitte Bartholome; is that correct?
A. That's correct, yes.
Q. And then there would be an A&E SHO and then there would be yourself as the SHO for all of the other wards; is that right?
A. That's correct.
Q. Would it be the case, as we've heard from other witnesses, that on the overnight shift your duties generally were to carry out tests and check on things

that needed to be done and were told to you by the staff that were on before you and the nursing staff, and then also then to respond to any abnormalities that might happen overnight; is that right?

A. The main task on call overnight was to clerk in new patients who came into the hospital generally via the Accident & Emergency department. That took up quite a bit of our time. Then, yes, we'd have been responsible for other sundry tasks on the various wards, giving the first dose of IV antibiotics, giving other IV medications that the nurses were not covered to give, taking some blood results that were outstanding, that were urgent in the evening, things of that nature.

Q. So would it be fair to say that it's really twofold? Firstly, you have your scheduled tasks such as medications, blood samples and so on, and then you have your reactive tasks, clerking in new admissions and reacting to crashes and so on?

A. That would be correct, yes. But the clerking in of new admissions and taking care -- being the first point of contact for unwell children would be the top of the list of priorities as a rule.

Q. I presume top of the list of priorities after crash calls.

A. Of course, but they didn't happen very regularly.

Q. If we turn to your witness statement at 141/1, page 3, question 4(b).
A. Of my first statement?
Q. Just give me one moment, please. I'll come back to that in a moment.
A. Okay.
Q. I haven't got the reference for the moment, but you state in your witness statement that you recall that that night was particularly busy for both you and Dr Bartholome; is that right?
A. That's correct, yes.
Q. And that both of you spent the night moving quickly from one urgent case to another?
A. That's correct, yes.
Q. What do you mean by "a particularly busy on-call shift"?
A. Well, I certainly don't remember that many quiet nights at Children's Hospital. There were two of us covering well over 100 beds and it was very, very busy. You had patients coming in, a new patient could take you anything up to an hour, maybe more, to take care of, to really assess them appropriately, do the blood work, get lines in and so forth and so on. So it was a constant juggling match of priorities when you were on call.
Q. We had Dr Bartholome giving evidence a fortnight ago. I asked her if it was the case that really you'd be

firefighting, almost, overnight, as incidents arose; would you accept that?

A. I would say that would be correct, yes.

Q. And how would you comment generally on the workload that you and Dr Bartholome faced during those on call shifts?

A. Often overwhelming.

Q. And do you think that you had sufficient resources during that period?

A. Certainly more help would have been greatly appreciated.

Q. But you did the best you could?

A. Of course.

Q. If I can ask you then about your handover from Dr Hughes, who was the doctor directly on before you between 5 and 10 pm. Can you recall having any sort of handover from Dr Hughes that particular evening?

A. I do.

Q. And do you recall where that took place?

A. I believe it occurred in Allen Ward. She had just resited an IV cannula and I remember feeling some relief because, at that stage, I struggled to get IV access in children, it was a difficult task to master, it took me some time to do that. So I remember feeling relief when she told me she had resited the cannula just before I had arrived. She told me that she had taken a U&E, a urea and electrolyte blood test, and also she had sent

off a serum phenytoin level that was to be checked before we began giving the IV phenytoin later that night.

Q. Can I just ask you, coming back to something else, the letter that we had up earlier, 302-147-001, and you say that you saw a number of children during your day shift on Allen Ward; isn't that right?

A. That's correct.

Q. But the only one you can recall with precision is Claire Roberts; is that right?

A. That's also correct.

Q. Is there any reason that you recall with some clarity the events surrounding Claire during 22 October, but can't recall any other patient that day?

A. During my time in paediatrics -- I spent three years in paediatrics -- three patients died who were directly under my care: one in Allen Ward that night, Claire Roberts; a little girl in paediatrics --

Q. Sorry, doctor, just so we -- obviously --

THE CHAIRMAN: Sorry, doctor. I'm quite happy for you to give this answer, but you'll understand I don't want you to give the names of any other children; okay?

A. I won't give the names of the children.

THE CHAIRMAN: That's what Mr Reid was making sure you didn't do. I think you want to make a point about how

this explains why you remember Claire's case.

A. Yes.

THE CHAIRMAN: If you go on ahead with that.

A. So Claire in October. In the summer of my second year, a little girl died when I was in paediatric intensive care, who had meningococcal septicaemia. And then a little baby died in my last attachment when I was at the Ulster Hospital as a second term SHO and I saw that child in A&E. And I remember the details of those cases with crystal clarity and could walk you through them, here, now, without having seen the notes in 16 years.

And also, a few weeks before Claire, as I said earlier, there was a little boy in Musgrave Ward who came in with diabetic ketoacidosis. He was really very seriously unwell. We admitted him to paediatric ICU and I could walk you through the events of his case now this evening without reference to the notes there. They're burnt in my mind.

And of all those patients, Claire was the first little girl ever to die under my care and I don't think I'll ever forget the details of her case. They'll stay with me to the end of my life.

MR REID: Thank you, Dr Stewart, for that explanation.

It's just one other point, just in regard to your memory, because you say that you recall that you had

a handover from Dr Hughes that night. Is it the fact that you remember that you had a handover from Dr Hughes or is it the fact that you just remember having a handover?

A. I remember having a handover from a doctor. I don't believe I'd have remembered Dr Hughes' name, but I remember having a handover from a female doctor.

Q. Thank you. You say you would have had a handover from Dr Hughes in Allen Ward. What do you think that Dr Hughes would have told you about Claire's condition at that handover?

A. She told me that she resited the Venflon -- or the IV cannula -- that she had taken blood for U&E and phenytoin, and that I was to keep an eye out for those results later on in the evening. I believe she said that the lab would phone them through to the ward -- I couldn't be precise about that -- and I believe she also told me about the increase in the midazolam infusion that had been given, that had increased the midazolam at 9.30, as well.

Q. Do you think that she might have told you about an attack or an incident at 9 pm that night?

A. I believe she may have mentioned it in connection to the increase of the midazolam.

Q. If we can bring that up for the benefit of those in the

room, 090-042-144, and this is the "Record of attacks observed" document. It's recorded at 9 pm that there was:

"[An] episode of screaming and drawing up of arms; pulse rate increased to 165 beats per minute; pupils large, but reacting to light. Doctor informed. Duration 30 seconds. State afterwards, asleep. Initials [Lorraine McCann]."

Dr Hughes was giving evidence yesterday and she accepted that the doctor informed was most probably her, but she couldn't recall precisely. Do you recall her saying any of that information to you at that time?

A. I do not.

Q. Simply that she just thinks there was an episode and that midazolam was increased as a result; is that what you're saying?

A. Yes, and I feel confident she asked Brigitte about that because I can't imagine an SHO taking the decision to -- midazolam was not commonly prescribed and Brigitte was the Paul Ward registrar, the paediatric neurology registrar, so I feel very confident that Joanne liaised with Brigitte regarding the increase in midazolam.

THE CHAIRMAN: Well, doctor, at the risk of reconstructing events, if she told you, as you recall, that the midazolam had been increased, is she also likely to have

told you why it was increased?
A. Yes, sir.
THE CHAIRMAN: Which may lead back to the attack at 9 o'clock?
A. That's my recollection.
THE CHAIRMAN: Okay. So you don't actually remember her mentioning the attack at 9 o'clock, but you do remember her saying that the midazolam had been increased and your best guess is that she might have explained why?
A. I feel confident now that she told me the midazolam was increased, she had talked with Brigitte, and I believe it was all connected with that attack at 9 pm.
THE CHAIRMAN: Right, thank you.
MR REID: So as far as you were concerned, what did you have to do in regard to Claire's care overnight after receiving that handover from Dr Hughes?
A. I knew I needed to give her the phenytoin later on in the evening and I knew you had to keep an eye out for her U&E as well. At that stage, the phenytoin wasn't my -- it was the most pressing lab result regarding Claire. The U&E was, I believe, carried out simply because they had venous access, she was on IV fluids, it would not have been unusual to check a child's serum sodium twice a day if they were on -- the whole U&E twice a day if they were on fluids and they were unwell.

So I presume that -- well, at that stage, I don't remember any alarm being raised regarding a potential significant drop in her serum sodium.

Q. And would you have been aware of her Glasgow Coma Scale scores or the fact that she was on hourly central nervous system observations?

A. I knew she was on hourly observations. I don't recall precisely what knowledge I had of her Glasgow Coma Scale scores, but I knew they'd fluctuated through the day, but I couldn't -- I can't recall precisely my level of recollection then.

Q. Dr Hughes yesterday spoke about the fact that during the 5 to 10 shift, there would often be a walkabout, as she described it -- not a formal ward round, but a walk around with maybe the registrar or the SHO. Would that have been something that would have been familiar to you in October 1996 in those night shifts?

A. Sometimes, but quite often, you would track the SHO down and wherever they were in the hospital, you would find them, and they would give you a quick handover of the patients causing considerable -- that were of concern to them, any tests that were yet to be carried out, and any new admissions that were expected in through Accident & Emergency. There wouldn't generally have been time for a walk round all the wards.

Q. Do you remember any walk around of the wards that night?
A. I don't.
Q. Mr Chairman, I'm aware that Dr Stewart has until 2.30. I think the stenographer will need a short break at some point during this period and I think it might be best placed to do it now so I can get on to the serum sodium result at 11.30 and the administration of the phenytoin in the latter period.
THE CHAIRMAN: Okay. Doctor, I don't know if you followed that. The recordings here are made through a stenographer and we're going to give him a short 10-minute break. We'll rejoin you in 10 minutes and get the rest of your evidence completed in the following hour; is that acceptable?
A. Yes, sir, thank you very much.
THE CHAIRMAN: Thank you very much. We'll be back in 10 minutes.
(1.23 pm)
(A short break)
(1.33 pm)
THE CHAIRMAN: Doctor, can you hear us?
A. I can indeed, yes.
THE CHAIRMAN: We can't quite see you yet.
A. I can hear and I can see you.
THE CHAIRMAN: We can all see each other now, thank you.

Let's go again.

MR REID: Doctor, thank you. A few queries arising out of your evidence so far.

You say that you heard non-fitting status epilepticus being discussed whenever you passed the ward round; is that right?

A. Yes.

Q. Mr and Mrs Roberts have given evidence and said that what they were told at the ward round was that Claire had a viral illness and had some sort of internal fitting, but they do not recall being specifically told or it being discussed that Claire had non-fitting status epilepticus; do you have any comment to make about that?

A. I don't.

Q. Do you know any reason why you think that non-fitting status epilepticus was said, but that the Roberts don't recall that being said?

A. I could give conjecture, but I have no way of explaining what they do and don't recall. It's not uncommon for patients and their relatives, when they're talking to doctors -- what you mean to say, what you do say and what they hear you say are often three different things, and quite often they -- statements, jargon can go over their mind, they might not have known what those words

meant and so they mightn't have lodged in their memory, whereas the more down-to-earth description that they do remember is what they took away with them, but I have no way of helping the inquiry in that regard.

Q. I think the point has been made previously in evidence that they do have a clear recollection of that ward round, but as you say, you can't assist us any further with that.

A. Yes, I'm sorry.

Q. In Dr Stevenson's original note, which is at 090-022-053, he said:

"Impression: non-fitting status."

Then at some later stage, Dr Sands added:

"/encephalitis/encephalopathy."

Do you know when those additional notes were added on?

A. I couldn't say with certainty, but I remember Dr Sands often editing my records of his ward rounds at the time by the bedside. So I would make my notes and Dr Sands would come back and maybe add a word here or there and something I had missed. So whether it happened at the time or later, I can't say, but I do know his normal practice was to add additional notes as he thought necessary at the time.

Q. And do you have any recollection of when you first

recalled noticing that additional entry to the notes?
A. When I was reviewing the notes for the inquiry was the first time recently that I remember seeing that editorial comment.
Q. And when do you first recall the working diagnosis of status first being reached in Claire's case?
A. At her bedside or shortly afterwards. It might have happened when we had moved the trolley out of the bay and were talking round the notes trolley and we were talking about the patient, but I do remember it being said and I'd never certainly seen a patient with that diagnosis before and I don't ever even believe having heard that diagnoses before, so it piqued my interest. I am quite certain it was mentioned then at the ward round or shortly afterwards.
Q. And can I ask you just about the taking of bloods at the ward round -- actually, in general. How often with patients on Allen Ward would you have expected blood testing of electrolytes to have been done?
A. It would depend on the condition, but certainly a patient who is unwell and on IV fluids, at least once a day.
Q. Would it have been not unusual to have checked the U&E twice a day, for example?
A. That would not be unusual.

Q. When would bloods normally be taken? Would they be taken, for example, before the ward round, after the ward round or at some other time during the day?
A. The bloods we were aware of would be taken before the ward round and the bloods that arose during the ward round naturally would be taken afterwards.
Q. So for example, in Claire's case, where the sodium result was from the night before -- first of all, were you aware that the sodium result in Claire's case was from the night before at the time of the ward round?
A. I don't recall.
Q. And do you recall whether or not Dr Stevenson or Dr Sands were aware that the sodium result was from the night before?
A. I don't recall.
Q. Just finally before we move on -- first of all, you said about the consultant contact, and that during your time you would never have directly contacted a consultant and I asked you about the availability of their contact details. Was there a whiteboard at the nurses' station with the consultant contact numbers or anywhere on the ward?
A. I can't recall with certainty for Allen Ward back then.
Q. Well, what do you recall?
A. In some wards I worked on there were, in other wards

there weren't, and it's hard to remember which whiteboard is which, if you understand me, if you excuse my expression, now. But there was never any sense that the registrars didn't know how to contact a consultant. Whenever they went to get a consultant by paging them or through the switchboard, whatever way they used, there was never a sense that we couldn't find a consultant -- or very rarely, anyway.

THE CHAIRMAN: Yes. Doctor, I'm sure that's generally right. Unfortunately, it rather seems as if Claire's case is the exception because --

A. Yes, sir, I realise that.

THE CHAIRMAN: -- there does seem to have been a problem with contacting Dr Steen at various points on Tuesday.

A. I do recall that, sir, yes.

THE CHAIRMAN: Thank you.

MR REID: At the ward round, do you have any recollection of any recent seizure activity being discussed?

A. I don't recall.

Q. Do you have any recollection of any history of diarrhoea being discussed?

A. I believe that was mentioned, yes, but I couldn't be certain. It's hard to remember what I remember independently and what I remember because I've read the notes.

MR QUINN: Mr Chairman, at page 20 on the [draft] transcript, there was a history given by the witness in relation to what he supposedly heard at the ward round and I would like some questions asked in relation to that, which we've now passed up to my learned friend.

MR REID: Dr Stewart, you said that during the ward round there was some discussion about a history of viral illness with diarrhoea and loose stools. That's what you said earlier in your evidence to the inquiry today.

A. Yes.

Q. Is that what you recall?

THE CHAIRMAN: Sorry, doctor, just to quote you directly, what the transcript of today's hearing says is:

"I think she had a viral -- there was a question about a viral illness and maybe history of diarrhoea and loose motions, and it was mentioned the possibility of encephalitis being perhaps the main cause of the seizures."

A. That's a good summary of what I recall, sir, yes.

THE CHAIRMAN: Right.

MR REID: And the history of diarrhoea or the loose motions or the stools; do you know where that came from?

A. I do not recall, sir, no.

Q. Because the Roberts say that, first of all, there was no history of diarrhoea, loose stools, and secondly,

because of that, they wouldn't have mentioned to Dr Sands at the ward round of any history of diarrhoea or loose stools. Do you have any comment to make about that, doctor?

A. I don't. I do believe there was history of a foul-smelling bowel motion, but that's what I've learned in my reading of the notes. It's hard for me to recall with precision. I'm trying to be as helpful as I can.

Q. Is it the case that there are certain elements where you directly recall it and certain elements where you might have picked it up from the notes?

A. That would be a fair summary, yes, sir.

Q. And I think the reference to the foul-smelling bowel movements might have been Mrs Roberts' reference to "smelly poo" on the Friday before the admission on the Monday; would that be correct?

A. That may be correct.

MR QUINN: While we're on this point, Mr Chairman, the second point at [draft] page 20 is that there is mention of encephalitis were perhaps the cause of the seizures. But what we have to realise at this stage, there were no seizures recorded in the hospital treatment. And encephalitis was not diagnosed until it was added several hours later by Dr Webb in his own admission.

Sorry, by Dr Sands after speaking to Dr Webb.

THE CHAIRMAN: But does Dr Sands not say that encephalitis was discussed?

MR QUINN: Well ...

THE CHAIRMAN: Sorry, you're right on the point that encephalitis was added to the notes some hours later. But Dr Sands' evidence, subject to correction, is that encephalitis was discussed during the ward round. That was his evidence. I know Mr and Mrs Roberts don't agree with that.

MR QUINN: The moot point here is: this witness seems to be giving evidence from a very, very clear recollection a long time ago, but it seems that all of this was on the transcript and it seems that none of that may have been in the notes. That is the evidential notes. I just want to know whether the witness is genuinely giving evidence from his memory or is he giving evidence from a review of the notes.

THE CHAIRMAN: I think we run into the recurring problem, Mr Quinn, about the combination of the two. This witness does have a memory for reasons which he has given, which strike me as compelling. The next question is how entirely reliable is that memory or to what extent is it affected or jogged by reading the transcript or reading the note or whatever.

MR QUINN: You have the point, Mr Chairman.
THE CHAIRMAN: Mr Green?
MR GREEN: Sir, the reference to Dr Sands' evidence is right so far as your recollection of it is concerned. The reference is page 116 of the transcript for, if memory serves me right, 19 October. The question at line 9 was:

"Question: And do you think that was discussed during the ward round, the encephalitis?

"Answer: I think it was discussed amongst the medical staff and I may not have used those words with Mr and Mrs Roberts, I may have couched it in different terms. But yes, I do think it was discussed at the ward round and it's not noted."

THE CHAIRMAN: Okay. Thank you.

Dr Stewart, if you've been able to follow those exchanges, you'll know that, not surprisingly, there's some debate about what was discussed at different times 16 years ago at various stages of Claire's treatment and ward round, et cetera. That is entirely unsurprising. It would be shocking if there actually was agreement on what was discussed 16 years ago. But just on one point that you have raised earlier today, your memory was that encephalitis was mentioned as being perhaps the cause of the seizures. But at that point it's not obvious that

seizures had been noticed or recorded, at least since she came into the hospital and, in fact, for that matter, before. So when you refer to encephalitis perhaps being discussed as the cause of the seizures, do you want to reconsider that evidence or could you expand on it at all?

A. Yes. What I mean to say is that in the light of the phrase "non-fitting status epilepticus", there would be no visually observable seizures. But That was the working diagnosis that Dr Sands had at the ward round. I remember that precisely being mentioned. And a common cause of seizures in a previously well child would be some inflammation or infection of the brain and surrounding tissue. It would certainly be one of the things you'd want to rule out, first and foremost.

THE CHAIRMAN: Okay, thank you. Let's move on, Mr Reid.

MR REID: Before we move on to the events of the evening of the 22nd, I've been asked to ask you, doctor, have you at any point discussed your giving of evidence today with any of the clinicians who are involved in the case?

A. No.

Q. After the handover from Dr Hughes and your coming on shift at 10 pm that night, it seems that the first noted event --

A. If I can just say one thing. Just a point of

clarification. Whenever I heard initially of the inquiry, when the e-mail arrived in my inbox some time ago, I did call Andrew Sands. It was partly through him -- I friended him on Facebook and I did call him to touch base with him. He said to me immediately at that time that it would not be proper to discuss any of the details of the case. I understood. But he did say it had been a very stressful time going through all of the questions the inquiry had given him, but we didn't talk about any of the details of the case then and I've had no further calls with any of the other physicians.

I did try to contact Brigitte way back then at the beginning, I left a message with her secretary, which she did not return, and having spoken to the Medical Protection Society, they advised me to have no contact with her and I didn't make any further attempts to contact either Dr Brigitte [sic] or Dr Sands and we haven't spoken at all about anything since then.

THE CHAIRMAN: Thank you.

MR REID: The first thing that seems to happen in regard to Claire once you come on shift is the 11 pm administration of phenytoin. If we go to the nursing note 090-040-138. This states at 11 pm, it's Staff Nurse McCann's note:

"IV phenytoin erected by doctor and run over one

hour. Cardiac monitor in situ throughout infusion."

If we go to the fluid balance chart at 090-038-135, please, you can see on the fluid balance chart, phenytoin is noted in the sixth column over, with a number of 110 and the total amount of 170, being the 60 of acyclovir and the 110 of phenytoin.

A. Yes.

Q. First of all, do you have any recollection of the IV phenytoin being erected that night?

A. I do, and it is somewhat in variance of the nursing notes. It's my recollection that the nurses paged me shortly after 11 to tell me that the phenytoin -- they were drawing up the IV antibiotics, the cefotaxime, and they paged me to come and give the phenytoin. I believe the result had been called back to the ward along with the U&E. Then I went -- they gave the cefotaxime shortly before I arrived in the ward and I then erected the phenytoin with the other bag of fluid that I made at the time. That's my recollection.

Q. Okay. So we know from the drug prescription sheet at 090-026-077 that Staff Nurse McCann administered cefotaxime at 11.20 pm; is that right?

A. That's correct.

Q. And so you're saying that the nurses are drawing up that cefotaxime to be administered and they say to you,

"Doctor, it's time for Claire's phenytoin as well"; is that right?

A. That's correct, and I believe ... It's my recollection -- this kind of thing happened so often but it's my recollection the results of the phenytoin and the U&E had been phoned through to the ward.

Q. Is it because of that that you attend Claire at 11.30, or are you given the sodium result? How does that come about?

A. When I arrived on the ward, I'm given the U&E and the phenytoin and immediately see the sodium is an abnormal result. I go to examine Claire, I remember distinctly now trying to see her fundi with an ophthalmoscope, but her pupils were very small and her eyes kind of roved. She was obviously in a semi-comatose state or comatose state and was unable to keep her eyes still -- which is difficult for a child at the best of times -- and I was unable to obtain a clear sight of the back of her fundus.

Q. Okay. We will get on to the 11.30. If we just stick to the issue of the phenytoin at the moment, doctor, and we'll move on to the sodium in a moment. You're saying that first of all that the nursing note, 090-040-138, which says the phenytoin was erected at 11 pm is inaccurate; is that right?

A. If my recollection is correct, yes, it's slightly inaccurate. It was given during the 11 o'clock hour, but it wasn't given until later if my recollection is correct.

Q. If we look at the regular prescription sheet at 090-026-077, and bring alongside it the IV prescription chart at 090-038-136, please. Would you accept, doctor, that there's no note by you of the phenytoin being administered in the notes?

A. That's correct. Well, I sign it here at 9.30 pm when I wasn't in the hospital, and that's my signature "NS" beside it. But I didn't record it in the clinical notes, that's correct.

Q. I see. So are you saying that you signed the phenytoin at 9.30, but that the administration is later on?

A. That is correct. I actually remember that. I was leaving the ward, heading on for other urgent business in the hospital, and a nurse called after me and said, "Dr Stewart, you haven't signed for the phenytoin". She said, "You haven't signed the kardex", and I said -- she said, "The phenytoin was due at 9.30". There was some mention of 9.30 or -- she brought the kardex to me and I remember looking for what number it was on the kardex. It was A, it was due at 9.30, and in my haste I signed the phenytoin at the time it ought to have been given

rather than the time I did give it. So it's a scribal error on my part.

Q. You accept it should have been written in the other time section of the kardex?

A. That is correct.

Q. Before we go into the sodium result, you had the phenytoin level in the blood. If we look at 090-022-056, please, the phenytoin level returned from those bloods at 9.30 was 23.4 and you've also noted down the range, the normal range of 10 to 20; is that right?

A. That's correct.

Q. Would you accept then obviously the 23.4 is above the range of 10 to 20?

A. That is correct.

Q. The question then is: if the phenytoin range was above 10 to 20, why did you administer the phenytoin at that stage?

A. Because I remember discussing it with Dr Brigitte Bartholome and she was the registrar who covered Paul Ward during the day, which was paediatric neurology. She had significant experience in that regard, and I remember her telling me to run it in more slowly. Normally, it would be given -- I forget how long, but over a few minutes and I believe --

Q. Sorry, one moment, doctor, sorry. You're speaking

a little bit fast. It's a little fast for the stenographer. If you could just slow down a little bit. I think you said:

"She had significant experience in that regard and I remember her telling me to run it in more slowly. Normally, it would be given ..."

A. Over a few minutes. She asked me to give it more slowly over a -- I believe, an hour. It's a very small amount of fluid, and so we diluted it in a large amount of fluid. I remember that discussion with her, and I believe it happened at 11.30, during this, but I remember having to give it over an hour, run it in more slowly.

Q. So would it then have been given over the hour, 11.30 to half past midnight?

A. That would seem to be correct, yes.

THE CHAIRMAN: Sorry, doctor, when you say that the way to slow down the administration is to put the phenytoin in more liquid than would normally be done, in other words you dilute it more; is that right?

A. Well, I don't recall precisely what happened that night. The notes suggest to say that there was 100 ml or so of fluid that were used to dilute the phenytoin. I remember it being given over an hour, and it would be difficult to titrate the infusion in a bag over an hour

as it was a very small amount of fluid.

THE CHAIRMAN: That means that you have to use a larger amount of fluid than would have been the case if the phenytoin reading was within the range of 10 to 20?

A. Um ... To give the infusion over a longer period of time with a smaller amount of drug, the drips you use wouldn't be very accurate if you only had a few millilitres, so it would not be uncommon of using a slightly larger amount of fluid to run the phenytoin through. How much I used that night, I don't directly recall.

MR REID: Do you know what dilutant you used for the phenytoin?

A. Almost certainly normal saline. I don't recall using any other fluid.

Q. In terms of that IV fluid prescription chart, which is at 090-038-136, is it the case that the administration of an IV fluid such as this should be written into that chart?

A. Um ... Yes. I think that's a fair statement.

Q. And do you accept on that basis that there is not an entry for the phenytoin on that chart?

A. Yes. Only on the back, it's noted that it's given at some time during the 11 o'clock hour. There's no delineation for half hours or quarter hours, just it's

given during the 11 o'clock hour period.

Q. And this is on 090-038-135?

A. That is correct. It seems to finish after midnight, in the 12 o'clock hour.

Q. Finally, just in terms of the phenytoin, you've signed it on the drug prescription chart at 90-026-077. We've heard evidence from Sister Angela Pollock, who was the ward sister at the time, and she says that the administration of intravenous drugs would normally be double signed by, say, a doctor or a nurse. There's just your signature for the administration of the phenytoin. Were drugs double signed in October 1996 on Allen Ward?

A. I don't recall that.

Q. The chairman has Staff Nurse Pollock's evidence on that.

You say that you came to see Claire at 11.30. Was that as a result of knowing about the phenytoin, that the phenytoin had to be administered, or was it because of something else?

A. As I recall, the nurses called me to the ward, primarily because of the phenytoin result, but also the U&E result was back. I don't remember whether they made any comment to me about its abnormality or the levels.

Q. So were the nurses aware of the electrolyte level at that stage?

A. Certainly after I left the ward they were, yes.
Q. But were they aware of the electrolyte level whenever they called you to come and see Claire at 11.30?
A. I don't recall with precision.
Q. But you think that the reason they called you was because the phenytoin needed to be administered?
A. That's my recollection. That was the primary reason for me going to the ward.
Q. So you arrive on the ward and how do you get the U&E and phenytoin results? Who gives them to you or how do you obtain them?
A. I believe they were given to me on a piece of paper.
Q. Would that have been handed --
A. It's possible that -- pardon?
Q. Was that handed to you by one of the nurses or by whom?
A. Yes, one of the nurses.
Q. Do you know which nurse?
A. I don't.
Q. So you're handed the piece of paper with the U&E results and the phenytoin on it; is that right?
A. That's correct.
Q. And what is your reaction to the results that you see before you?
A. Well, I noticed -- my immediate concern is the serum sodium. I also note the phenytoin is a little high.

I wasn't experienced in giving phenytoin, so I knew I would want to talk with Brigitte about the phenytoin, but my main priority of concern was the serum sodium of 121, which was low, and it was at that stage that I went quickly to look at Claire to give her a quick assessment. I don't remember much of that.

I remember -- I do distinctly remember trying to view her fundi and being unable to do so. And I went back to call Brigitte, I paged Brigitte the moment I went back to the nurses' station, I began scribbling my notes, I put in the U&E first and the phenytoin level and the normal range, and wrote my impression, and she returned my call just after I had written my impression of what we should do. I had written:

"Impression: query need for increased sodium content in fluids."

And that's whenever she bleeped me back to the ward and she said to me at that time -- we discussed the various issues facing Claire and I suggested, I said, "Do you think we need to give increased sodium in the fluids, that's a low sodium level", and she said, "Yes, we do need to normalise her sodium, but we need to do so in a controlled fashion. Reduce the fluids to two-thirds and I'll come and see her".

We also spoke about the phenytoin, and that's when

she advised me to run it in over an hour and give it more slowly.

Q. Okay. If we break that down. First of all, your note is at 090-022-056, please. So you say you received a note and you want to speak to Dr Bartholome about the phenytoin, but you were particularly concerned that the sodium was low; is that right?

A. Yes.

Q. And so you go to the nursing station in order to page Dr Bartholome and speak to her, and during that, you start to record your note, which is the note we have before us at 090-022-056; is that right?

A. That's correct.

Q. You note down the sodium, 121, potassium, urea, the creatine, and the phenytoin and its range first.

A. Correct.

Q. At that stage, do you consider that a repeat blood sample might have been warranted?

A. I wanted to call the registrar first of all rather than subject Claire to numerous venipunctures. I thought I would call Dr Bartholome and see what her plan of management was, so I wouldn't have to go back and unnecessarily try to regain IV access.

Q. So you record the sodium of 121. Were you aware of what her previous sodium had been?

A. Yes, I believe I was. It was written in the morning ward round at 132, I believe, and I believe I assumed that was the morning's result at that time.
Q. So you assumed that the 132 was from the morning --
THE CHAIRMAN: Sorry, doctor, this is a little bit off the point, but can I ask you about that? If 132 is recorded in the note of the morning ward round, does it not follow that that cannot be the result obtained following a test taken on the ward round?
A. No. What I mean is quite often the SHO on call that night would do the morning bloods any time around 6.30, 7 o'clock. Those test results would be filtering in often during the ward round and that is one of the things we would be sent to check up on.
THE CHAIRMAN: Thank you.
MR REID: So you're saying, as far as you're aware, the 132 result was from the morning. Were you at all aware of the 132 result from the previous evening?
A. I don't recall. I'm sure I looked at them, I am sure I read the whole notes. I don't recall precisely.
Q. You say you are sure you would have looked at the notes. Do you know which notes you would have looked at?
A. I would imagine all of them. I don't recall that with precision.
Q. Would you have looked at, for example, her central

nervous system observation chart?

A. I don't recall precisely when I looked at that chart. I'm sure I looked at it at some point, but I don't recall precisely when.

Q. Would you have looked at her record of attacks observed?

A. Um ... I don't believe I did. I don't recall.

Q. Would you have looked at her nursing notes?

A. I wouldn't have looked at the nursing notes, no. I'd have talked to the nurses.

Q. And would you have looked at her fluid balance chart?

A. Um ... I may well have done. I couldn't say with precision that I did, but I'm sure I did. With a sodium of 121, I imagine I did. I certainly queried low sodium fluids, I knew she was getting No.18 Solution, which is a low-sodium fluid.

Q. And you said before about your experience with the patient with diabetic ketoacidosis. Was Solution No. 18 used in that case?

A. I believe that -- I couldn't say with certainty. I couldn't say with certainty.

Q. And before you contacted Dr Bartholome, how concerned were you for Claire's condition at that stage?

A. I was certainly concerned for her. That was an unusually low serum sodium concentration.

Q. Did you give any significance to the fact that, as you

thought, the sodium had dropped from 132 that morning at around 11 o'clock to 121? As far as you were aware, you thought the sodium had dropped from 132 to 121 in the space of 12 hours. Did you think that was at all significant?

THE CHAIRMAN: I think, doctor, you said that was your immediate concern, was the low sodium; is that right?

A. That was my immediate concern, yes.

THE CHAIRMAN: And you knew it was dropped. So whatever the time period over which it had dropped, it had dropped from 132 to 121. Was that the prompt for you to call Dr Bartholome?

A. I now know with my years of experience in paediatrics that the issue with low sodium is not so much how low is the number, but how fast it drops. I'm not sure if I was aware of that then. I'd seen certainly some adult patients during my houseman's year that had very, very low sodiums and had been surprisingly well. But I knew it was an unusual number and I needed to tell the registrar forthwith about it.

THE CHAIRMAN: Right. So the note that you had started to write, that has the results in it, and then, before Dr Bartholome comes back to you on the pager, had you written:

"Hyponatraemic. Query fluid overdose and low-sodium

fluids, query SIADH"?

A. Certainly.

THE CHAIRMAN: Is it at that point then that Dr Bartholome comes back to you?

A. She called me back, just as I was finishing writing: "Query need for increased sodium content in fluids."

THE CHAIRMAN: Right.

A. It's that point I discussed with the registrar and we probably changed from what I was thinking to what she was saying.

THE CHAIRMAN: Okay.

MR REID: You have written, "Hyponatraemic, query fluid overload". What was your awareness of hyponatraemic fluid overload in October 1996?

A. Well, I certainly tried to think along the lines of first principles, so when a patient's sodium drops, with the risk of oversimplification, you're either thinking: are they losing sodium or do they have too much water causing a relative dilution of the sodium concentration in their blood? And I imagine it was along the lines of those primordial references to first principles that I would have gone to.

Q. So you're basically saying that you were aware that if you put too much fluid in, it dilutes the fluid in the body, and that can cause the sodium to drop; is that

what you're saying?
A. That's correct, yes.
Q. So effectively, you are aware of the situation of dilutional hyponatraemia?
A. Yes. Mostly, though, in connection to 5 per cent dextrose, which contains no sodium. I was much more aware that that was a fluid without any sodium in it at all that could cause alarming drops of serum sodium. That's my recollection. I didn't know of any connection per se with No.18 Solution.
Q. But you do consider in this note that No.18 Solution was a low-sodium fluid; isn't that right?
A. Yes. As in lower than the 0.9 per cent, that would be the serum concentration in blood.
Q. So it was a hypotonic rather than an isotonic fluid?
A. With respect to sodium, yes. There's dextrose as well in No.18 Solution that keeps the tonicity appropriate.
Q. In terms of the SIADH, what was your knowledge of that in October 1996?
A. Well, I knew that patients who had suffered head trauma or infection of the brain or were having status epilepticus -- I knew that nearly any disorder, pathological disorder of the central nervous system, could cause the syndrome of inappropriate ADH secretion, which would cause retention of free water and a lowering

of the serum sodium, amongst other things.

Q. Can I ask, doctor, were you surprised that no other clinician throughout the day had considered, at least in the notes, the possibility of SIADH?

A. I don't remember feeling surprised that evening about that. I think it was more focused on: what do we do now?

Q. Were you surprised at the level of the sodium though?

A. It certainly was alarmingly low.

Q. Then the final part before you discussed with the registrar is:

"Impression: query need for increased sodium content in fluids."

And can you just explain briefly what you meant by that, please?

A. Well, I suppose it was my immature rumination as to what we should do next, and I knew we needed to work to normalise the sodium, to bring that concentration up to a more appropriate level. I was certainly aware of the dangers of hyponatraemia causing cerebral oedema. So that was one of the first things that was coming to my mind as to potential treatment modalities. But as I say, Dr Bartholome's return of my page rendered my thinking irrelevant, and it was her thinking then that I was listening to.

Q. You say you were certainly aware of the dangers of hyponatraemia causing cerebral oedema. By that, do you mean also then that of course that there would be increased intracranial pressure I presume, as well, yes?
A. Yes, sir.
Q. And what checks or examinations did you make to see if Claire was suffering the effects of increased intracranial pressure?
A. Well, before I called Dr Bartholome I went to examine her quickly. My examination was fairly unproductive. She did have a reduced Glasgow Coma Scale. I vaguely remember the increased tone in her limbs, but I remember specifically trying to look in the back of her eyes and that comes back to me. I remember being unable to see anything in the back of her eye. I just couldn't see the optic disc, which is quite difficult to locate if the eyes are moving and if the pupils are small.
I remember thinking that she was examined by Dr Webb during the afternoon and really the person who needs to carry out this examination is Dr Bartholome. So rather than, if you will, waste undue time with an inexperienced doctor with a fruitless examination from my perspective, I wanted to involve a more senior medical professional, who I thought would be better equipped to carry out that examination.

Q. And were you checking for papilloedema when you were checking the eyes?
A. Yes.
Q. I have to ask you, your note in front of you, why didn't you note the attempted eye assessment that you did in the clinical notes?
A. That's a good question. Looking back on it now -- I was known to be a very detailed notetaker. When I clerked patients in and examined patients I recorded a lot of details that may have seemed to others as being irrelevant, but I had a system for examining patients that I tended to follow. I made it a practice never to call a registrar about a patient that I had not examined. It appears unprofessional. So I would always examine in some way. So I am quite surprised to note that I made no note of it. The only thing I can construct from that night was that when Brigitte interrupted me, her plan of treatment seemed more urgent to me to instigate rather than me finishing my note, and it was my impression that she was going to come and carry out that examination herself and would presumably have more fruitful details to include in the charts. But that's a reconstruction.
Q. Can I ask you about your contact with Dr Bartholome. You said you went to try and page her; is that right?

A. I went to the nursing station, yes.
Q. And she phoned back. Was that pretty quickly that she phoned back?
A. I'd only written a few lines, so yes, within a minute or two.
Q. How long did your conversation with her last?
A. It was fairly brief, a couple of minutes.
Q. And do you know what you told her about Claire's condition?
A. I remember discussing the sodium, the potassium, the phenytoin, and I remember her saying she would come and see the patient.
Q. Do you remember discussing Claire's diagnoses with Dr Bartholome?
A. That would be normal. I don't precisely remember saying the words, but it would be normal when you called a registrar to say, "I'm concerned about this patient, are you aware of her?", and she might say, "Yes, I know about her", and then I would move on or I would say, "This is the details". I don't recall precisely what happened in the conversation that night.
Q. And would you have told her about what you thought was the drop -- not only the fact that the sodium was 121, but that you thought it had dropped from 132 that morning?

A. I believe I did, yes.
Q. And would you have told her about the medication that Claire was on --
A. Yes.
Q. -- the anticonvulsants and so on?
A. Yes.
Q. And would you have told her about her Glasgow Coma Scale scores or her central nervous system observations?
A. It would be normal that I would have done, but I don't recall with precision. It was a brief conversation. The impression I had was she was going to see the patient, so we didn't spend a lot of time on the phone. It wasn't as if we were planning out how I would manage the patient in her absence. It was my understanding she was going to see the patient whenever she finished her current work.
Q. Do you know what she was involved in at that time?
A. It's my recollection now that she was in Accident & Emergency, seeing a patient.
THE CHAIRMAN: So in essence, were you taking some immediate steps, but on the basis that you expected that, very soon afterwards, Dr Bartholome would take over the control of Claire by coming to see her, forming a more experienced diagnosis, and deciding how Claire's treatment should progress from there?

A. That's correct. And Dr Bartholome's suggestion of restricting the fluids was certainly more conservative than the suggestion I had made. That cued me into the fact that -- that led me to assume that while this was very serious, we had time on our hands to make those corrections judicially over several hours, and even over the course of the night.

MR REID: So you consider that Dr Bartholome's intervention of reducing the fluid to two thirds was a little more conservative than maybe what you would have considered; is that right?

A. She told me that herself. I suggested giving the increased sodium fluid, she said, "No, we need to bring the sodium up in a more controlled fashion". I think that was the kind of phrase she used.

Q. Did you discuss a repeat test?

A. We did not.

Q. Do you think that's something that should have been discussed?

A. Um ... It was my understanding that she was going to come and see the patient and she would make a determination then as to what, if any, further bloods should be taken. So I wasn't surprised that we didn't discuss that because I thought she would be seeing her fairly soon and would be better equipped at that stage

to direct me or to take the blood herself for further analysis.

THE CHAIRMAN: Well, doctor, can I ask you then: if that's the basis upon which you expected things to develop, there was always a risk that Dr Bartholome was going to get caught up in A&E or elsewhere, as seems to be the case; right?

A. Yes, sir.

THE CHAIRMAN: Because she didn't come soon afterwards and examine Claire and come up with a more developed or alternative plan for her treatment. Okay?

A. That's correct.

THE CHAIRMAN: During the subsequent hour or two, did you keep an eye on what was happening because of your concern about Claire and to make sure that Claire's condition was not deteriorating any further?

A. It's a fair question. It's my recollection that I was essentially run off my feet the rest of the evening. I didn't stop until very, very much later on that night, really in the morning. Dr Bartholome was Germanic in her efficiency, she was the most senior of the senior registrars, she was revered in the hospital, I was on call with her many times, and I had never known her in my life to miss -- to not see a patient whenever she was asked to. In fact, I never knew that Dr Bartholome

hadn't seen Claire until the precipitous deterioration later on in the morning. I didn't realise that there'd been a gap from my call and Dr Bartholome seeing Claire until actually I began to review the notes of the inquiry this year.

THE CHAIRMAN: Right.

A. So I left the ward -- in my mind, the fluid restriction, which is probably the most conservative treatment that could have been instituted that night, keyed me into the fact that whilst serious, we had time on our hands, and we needed to be circumspect in the way we normalised this little girl's sodium concentration. I believe Dr Bartholome was going to see Claire in short order and I also knew that the nursing staff on Allen Ward were aware that Dr Bartholome was coming, they were aware of the plan of management and I assumed that they would either call me or call Dr Bartholome over the course of the night if there was any change in Claire's condition, or if Dr Bartholome had been unduly delayed in coming to examine her.

THE CHAIRMAN: Thank you. We're going to lose the connection in a couple of minutes, so we've got limited time to ask what is left to be asked.

MR REID: Can I just ask you, doctor, is it the case that the connection is finishing in five minutes or is it

that you've another appointment? What is the situation at present?

THE CHAIRMAN: I think it's our connection.

A. Patrick, would you go and ask precisely the state of play?

I want to be of as much help to the inquiry as possible, so I'm more than willing to stay on today if we can or come back another day if that would be helpful to assist you in your enquiries.

MR REID: I don't think there's a great deal more --

THE CHAIRMAN: We'll check at our end. (Pause).

Apparently, doctor, there's somebody else coming in to use your facility at 3 o'clock. So that gives us just over 30 minutes, if we can try and trespass on that to keep going for another few minutes. We've not got very much more to ask you. I think we're coming towards the end of your evidence and it'll be more satisfactory to complete it today than re-establish the connection at another time.

MR JARRETT: The problem is the facility has a deposition scheduled at 10 o'clock, so they're going to have to use the connection again.

A. Is it possible to take a few minutes beyond 9.30?

MR JARRETT: He said until 9.45 at the latest.

A. So we have another 18 minutes.

THE CHAIRMAN: Thank you.
MR REID: Without wanting to compromise the evidence, Mr Chairman, I will certainly try my best.
THE CHAIRMAN: Just for reassurance, doctor -- for you at your end and everybody at our end -- if we can complete your evidence in the next 15 or so minutes, we will do that, but we don't do it at the risk of not getting all the evidence you can give us, and if we have to re-establish the link another day, we will do that. Okay?
A. Glad to help you in that manner, sir.
MR REID: Just one thing out of what you said before we spoke there. Were the nursing staff aware of the seriousness of Claire's condition and what was being done? I think you said they were aware that Dr Bartholome might be attending later on in the evening.
A. Would be attending, yes. They knew that the serum sodium concentration of 121 was an alarming one and that we needed to take action to rectify it.
Q. How quickly did you think that Dr Bartholome was going to be attending Claire after you spoke to her?
A. That's hard for me to say. I trusted her to see Claire as quickly as would have been appropriate. She was aware of Claire's condition and she would have been best

able to judge how urgent Claire needed to be seen. In my view, we had time on our hands. I knew we could have admitted the child to paediatric intensive care. That was never discussed, but I knew that was the treatment modality that was available to us. That was never discussed, so I believed that we had time on our hands and, some time in the next hour or two, at least I would say, Dr Bartholome would have attended Claire and examined her for herself.

Q. And I think you have said you didn't have time to call in with Claire again. Did you follow up at any time to see whether Dr Bartholome had attended Claire?

A. I don't recall doing that.

Q. And do you regret not doing that to see how Claire was being handled?

A. I think that's fair to say. Hindsight has a habit of giving a deceptive clarity over past events. But certainly with the information that I have now, there are many things I regret, and that'd be one of them.

Q. You say that you don't think you had a discussion with Dr Bartholome about admission to PICU. Did you have a discussion with her about contacting the on-call consultant?

A. We did not.

Q. Would you have expected Dr Bartholome to have contacted

the on-call consultant?

A. I would have expected her to do so, yes, but only after she had examined Claire for herself. Unless she was so tied up with an emergency in Accident & Emergency that detained her then, yes, that would have been something -- a pathway of care that she could have taken had she thought necessary. But I would not have expected her to have called Dr Steen had she been expecting to come and examine the patient herself because you would normally examine the patient and then call and see your doctor, for obvious reasons.

Q. And do you consider that perhaps you should have contacted the on-call consultant?

A. Absolutely not. With the information I had then, I had referred the case to ...

THE CHAIRMAN: I think, doctor, the tragedy here is that you had been called to Claire at some point soon after 11 pm. You knew things weren't going well, you had contacted Dr Bartholome, who was considerably more experienced than you were, and in essence she had taken a slightly conservative line on what should be done, which paradoxically gave you some reassurance. And if I --

A. Yes, sir.

THE CHAIRMAN: -- understand you right, you then expected

her to take over charge and, if needs be, call in the consultant.

A. That's correct.

THE CHAIRMAN: And those last two steps didn't happen, so the next thing that, on the medical side -- there's a collapse at about 3 o'clock.

A. That's correct, sir, yes.

THE CHAIRMAN: So there's a time span of something over three hours during which Claire's condition deteriorated and she wasn't seen by any doctor.

A. That's correct, sir. It certainly appears that way from the notes.

THE CHAIRMAN: Yes, okay.

MR REID: Just on your note, the very final line, "send urine for osmolality", was that your idea or was it Dr Bartholome's idea?

A. Dr Bartholome's, definitely.

Q. And was urine sent at that time for osmolality?

A. I told the nursing staff about it. It would normally be their responsibility to collect urine with a bag, perhaps. I'd never catheterised a child at that stage or done a suprapubic puncture of the bladder to collect urine. That would be something that a registrar would have assisted me with, after an examination, where necessary.

Q. If I can bring you to the fluid balance chart, 090-038-136, please. That's on the intravenous fluid prescription chart. At number 3, we have your reduction to two-thirds of the rates of the Solution No. 18. Do you have that there?

A. Yes, sir.

Q. You can see the type of fluid, "normal saline", scribbled out, and "No. 18" is written in. Can you explain why normal saline was scribbled out?

A. I can't at this stage, no. I can't at this stage, no. It was also -- normal saline was written up at the normal rate of -- I think it was 64 ml per hour.

Q. Yes.

A. I may have made that note in anticipation of Brigitte calling me back and when she said not to use a higher concentration of sodium, I added in the No. 18. I can't say for sure. But I seem to have made that note in connection with the 64 ml per hour of fluids, which was the amount of fluids she was getting before my conversation with Brigitte. What may have happened -- it wouldn't be fair to say what may have happened. That's the best I can say, sir. It's a reconstruction from the evidence before me.

Q. Thank you for that. But you reduced the rate to two thirds, which was from 64 to 41 ml per hour.

A. That's correct.
Q. That's at 11.30. Also at 11.30, you're administering 110 ml of phenytoin over one hour; is that right?
A. That's correct.
Q. Given that, that meant that between half 11 and half 12, Claire was to receive 110 plus 41, which is 151 ml in that time. Because of the administration of that phenytoin, does that mean that, in fact, Claire was receiving more fluid over that hour period rather than less fluid?
A. That would seem to be correct, yes. I don't recall precisely how much fluid I used for the phenytoin, but it is marked, I think, at 110. I don't recall how much I used. That would seem to be a fair conclusion to make, yes.
Q. Although I think you have said that some of that might have been -- you're not sure of the diluent of the phenytoin, but some of that might have been normal saline?
A. Yes, sir.
Q. So were both and you Dr Bartholome aware that this phenytoin fluid was going in at the same time as the reduced fluid of two-thirds?
A. I can't recall. I can't recall precisely what doctor -- I don't know what Dr Bartholome was aware of. I do

remember at that time when I was told to reduce the fluids in a patient [inaudible due to interference] their major fluid amount --

Q. Sorry, the connection dropped for a second. You were told to reduce the fluids in a patient?

A. Generally, it would be a request. I mean, unless a patient was in strict fluid management, generally you'd be reducing their major hourly rate, which would be the bag of fluid that you put up and run in over the hour, which was 64 ml per hour. So I reduced that to 41 ml per hour knowing, over the course of the night, she would receive a reduction of fluids as per Dr Bartholome's requirement.

Q. She was also receiving a very small amount of midazolam, just 3 ml per hour at that time as well. I suppose the overall question is: do you think that as well as reducing the fluids by two-thirds, that all medications should have been stopped or at least restricted during that time as well?

A. Certainly on hindsight, I think that would be a fair conclusion to make, yes.

Q. Okay. Before I go into the aftermath, just one question I've been asked to ask of you. What were the arrangements for cover at registrar and consultant level in October 1996, ie when a registrar wasn't available or

a consultant wasn't available, what were the arrangements for cover?

THE CHAIRMAN: Sorry, during the daytime?

MR REID: During the daytime, yes.

A. Well, I mean, there would be the registrar on the ward. I don't know if there were any direct guidelines or protocols to follow, but if I couldn't get my registrar on the ward or the consultant looking after the patient, I'd have tried to page or track down another one of the registrars to help me.

Q. So that you would always have just tried to find another senior registrar or someone who was available if you couldn't find your normal registrar or consultant?

A. My point of contact would always have been a registrar during the day, unless there was a consultant that, say, happened to be milling about in the ward, doing a ward round, then of course they would be very approachable to go to and speak to.

Q. Okay. You finished your shift that morning and did you go straight on to another day shift after the end of the on-call shift?

A. I went on in the morning, went back to Allen Ward, to take the bloods and do the ward round. And if I'm right that I took -- it didn't happen very often, but if I did, it would be only a couple of occasions, but if

I took the ward round, I probably wouldn't have got home until after lunch because being fatigued and also being inexperienced, it took me a lot longer to do the ward round than a registrar or a consultant.

Q. And you say that the next morning you found out what happened to Claire; is that right?

A. That's correct.

Q. And who did you find that out from?

A. I believe it was one of the nursing staff. It may have been ... I remember more my shock at hearing in the morning. I wasn't paged to go to her collapse.

I remember thinking -- I don't think actually there was an arrest call put out, but I remember thinking ... I sort of wondered had there had been an arrest call and, if there was, why wasn't I called because normally the SHO would be paged for an arrest call from the ward.

Q. Okay. So you think you would have found out from one of the nursing staff and you were shocked. Did you speak to any senior doctors, for example Dr Bartholome, about what happened to Claire?

A. I don't recall talking to Dr Bartholome about Claire's condition that day or afterwards.

Q. Do you think you would have spoken to her at some point?

A. I may have done, but I may not have done. I believe the working diagnosis that I was informed of was that she

had succumbed to viral encephalitis and had been transferred to ICU, and I was aware of that. At that stage that may have satisfied my understanding of why she had so tragically succumbed.

Q. Who do you think told you it was viral encephalitis?

A. I couldn't be certain. I certainly didn't learn it on the ward round the next morning. I just heard she had been rushed to ICU and was quite surprised about that, but I --

Q. Did you hear that she had died because of cerebral oedema?

A. I believe I did, yes.

Q. And you told us earlier that you knew that hyponatraemia could lead to cerebral oedema. Did you at the time put those two factors together to come to any conclusions?

A. I don't recall.

THE CHAIRMAN: Doctor, if you don't mind me saying so, this was the, as you've told us already, the first child who you had cared for who had died. It just seems to me, from this remove, to be a little curious that you were not more curious about what had happened to Claire. You've said that you don't recall talking to Dr Bartholome. Do you recall talking to any other doctors like Dr Sands or Dr Steen or Dr Webb or anybody, or Dr Stevenson, any of the people who you worked with?

A. I do believe I discussed it with Dr Sands. It's difficult to recollect what we said, but I certainly didn't speak to Dr Steen about it. And I don't recall directly speaking to Dr Bartholome.

MR REID: Do you remember what you discussed with Dr Sands?

A. Not with precision. I'm sure I did have a conversation with him about her and her condition, but it's difficult to remember those details now.

Q. And were you involved in any audits or investigations or discussions after Claire's death?

A. I was not, no. I now know there one -- yes, I would have been but I wasn't. I left Allen Ward shortly after that to go to Accident & Emergency and then I went on to Cupar Street for the second half of the year, but I was not directly involved, as I recall, with any audits of Claire's care.

Q. Do you know if there was an audit or investigation of Claire's death?

A. I do know now there was an audit, yes, looking at the notes that I think Dr Bartholome led, but I have no direct knowledge of that.

Q. I have one final question, unless there's anything further from the floor.

We were talking about the two-thirds reduction in the fluids and we were talking about the other

medications that were being administered. Did you say to Dr Bartholome on the phone that -- did you discuss the fact that she was to receive fluids for phenytoin and midazolam? Did you discuss those on the phone?

A. We discussed the phenytoin. I do not recall discussing the midazolam with her.

Q. You then discussed with her the two-thirds reduction of the fluids. Do you think that you should have considered asking her whether her two-thirds reduction should have applied also to the medication fluids as well as her normal intravenous fluids?

A. With hindsight, yes.

Q. And you said earlier you found out that Claire had cerebral oedema.

A. If we didn't discuss that, that would have been an omission on both of our parts, but it's the one writing up the fluids -- it was my responsibility.

Q. I have just been handed one final question. You said you found out that Claire had cerebral oedema. Do you know who told you that?

A. I don't recall. I do have a recollection of reading some of the notes that were made in ICU. I do believe I went to ICU and looked at some of the notes there. I don't know if I spoke to any of the doctors. ICU is a busy place. But I do recall perhaps going to ICU and

reading the notes and seeing some of the notes that had been made on the charts, but that's ... And certainly cerebral oedema was mentioned, I believe, several times in those notes.

Q. Did you say that Dr Bartholome had conducted an audit, Dr Stewart?

A. I believe I saw that in the course of the inquiry's documents. I have no independent knowledge of that.

Q. Do you have any independent knowledge of any audit in Claire's case?

A. I don't.

MR REID: I think that's probably our time, Mr Chairman.

THE CHAIRMAN: Yes.

MR JARRETT: You can have some more time. Our Atlanta office is cancelling now at the last minute, so if you guys want to continue on, it's up to you.

THE CHAIRMAN: Doctor, give us one moment here and we'll decide if there's anything more to be raised with you. That was hurried a little at the end, but are there any questions that are required? Is everyone content? Okay.

Doctor, in fact, we have finished. Unless there's anything you want to add, we will let the connection go and simply thank you for your time and your effort in contributing to the inquiry.

A. Thank you, sir.

THE CHAIRMAN: Okay, thank you very much. We can cut the link.

TIMETABLING DISCUSSION

Before we finish today -- I didn't say this at the start because I wanted to get on with Dr Stewart's evidence -- there is a report which has come in, in a slightly incomplete form, from Dr Squier, which DLS understandably want to see before Dr Herron and Dr Mirakhur give their evidence. We now expect that that report should be available for circulation, but not until tomorrow. It was for that reason that we notified DLS that we were postponing Dr Herron and Dr Mirakhur's evidence today. That also leads into the postponement of Dr Squier's evidence tomorrow.

Tomorrow, we will hear only from Professor Cartwright. We'll sit as scheduled on Thursday to deal with Ms Ramsay and Dr Aronson.

On Monday, we have Dr Scott-Jupp. Mr Sephton, I understand what you said yesterday about the potential length of his evidence. He has made himself available from his clinics for one day and we'll just start a bit earlier on Monday morning at 9.30. He has to be on a plane back to England on Monday night in order to pick up his clinics on Tuesday. So we will deal with him as

scheduled on Monday.

What we will then try to do on Tuesday, Wednesday and Thursday is deal with the evidence, if the witnesses can be available, of Dr Squier, who I know is available on the Wednesday. And if we can deal with doctors Herron, Mirakhur, Squier and Harding between Tuesday and Wednesday, and if needs be, into Thursday.

We'll see about availability. Had Dr Mirakhur retired when she gave evidence in Adam's case?

MR McALINDEN: She is retired. The only difficulty that she has presently is her husband is quite ill and she is required to regularly attend the Royal to visit him.

THE CHAIRMAN: Okay. Over the next 24 hours we will see what we can do about the evidence for next Tuesday, Wednesday and Thursday. What I would like to do is deal with the pathologists, namely, as I've said, doctors Herron, Mirakhur, Squier and Harding. There might be a small piece of evidence to come from Professor Neville, which we could do by video link perhaps, rather than bring him back. There are some potentially very short witnesses about the King's Fund audit preparation which we now know was being carried out in the Royal, certainly on Monday 21 October 1996 and possibly Tuesday the 22nd. So it may be that there's some short evidence. I think, Mr McAlinden,

we have one statement in on that.

MR McALINDEN: I understand the statement from Mr Shields.

THE CHAIRMAN: And then there was a Ms Chambers who was going to try and give us a statement and there may be also a third one. If we could complete that over the next couple of days and then put them in next week.

Inevitably, ladies and gentlemen, this means that we're knocked a bit off schedule. What we'll do over the next few days is to work out how we can keep going as best we can. The main missing witness, even on the scenario which I have outlined, is Dr MacFaul, who will be giving evidence both on clinical and governance. We'll have to try and re-arrange him. We'll come back to you in the next few days and tell you when that is. Realistically, we're overrunning on clinical. We will not start governance next week, as we had hoped we would do. It might be, Mr Quinn, that we just have to take a little time to get governance entirely ready and start a little bit later than expected.

MR QUINN: Certainly from our point of view, within my team, we would welcome a short break to get the papers in order to consult with our clients and just to see where we are with the various governance papers. So we would welcome some days between the end of clinical and the start of governance.

THE CHAIRMAN: Okay. I can't say any more today. Tomorrow we anticipate will be a short day because Professor Cartwright's evidence is quite concise and limited. So I suspect tomorrow will be a morning session. Thursday is more likely to be a full day between Ms Ramsay and Dr Aronson. We don't have a report, Mr McAlinden, from the nursing expert who you were chasing.

MR McALINDEN: No. I don't think there has been any response at all. It's still outstanding.

THE CHAIRMAN: Something we're familiar with. Okay. Thank you very much.

MR QUINN: If, on balance, you're saying that we're not going to sit on Monday the 19th, the 20th and Wednesday the 21st, or perhaps the week, we would welcome an early indication because there are a number of governance reports that we are still looking for, a number of witnesses still have be to interviewed, as I understand it. We certainly don't have the full complement of papers. So we would welcome some early indication, perhaps tomorrow, as to what the timetable might be.

THE CHAIRMAN: You'll know by Thursday; at worst, before we break this week. We'll work that out. Thank you very much.

(2.55 pm)

(The hearing adjourned until 10.00 am the following day)

I N D E X