Wednesday, 13 March 2013

(10.00 am)

(Delay in proceedings)

(10.25 am)

THE CHAIRMAN: Good morning.

MS ANYADIKE-DANES: Good morning, Mr Chairman. Could I call Dr McCord, please?

DR BRIAN McCORD (called)

Questions from MS ANYADIKE-DANES

MS ANYADIKE-DANES: Good morning, Dr McCord. Do you have there your CV?

A. Yes, in front of me.

Q. Thank you. Dr McCord, you've made two statements and then two statements for the inquiry. You made a statement for the Trust on 12 June --

A. Could I make a slight correction? That was the date it was typed up by my secretary, so it may have been made a day in advance of that, at the weekend.

Q. Almost as soon as you heard that Raychel had died, in fact?

A. That's the best document I have in terms of proximity to Raychel's --

Q. Thank you very much. It's dated 12 June. The reference is 012-009-105. In fairness to you, I think you said -- and I'm going to touch on this -- that you made that

statement without access to the hospital notes.

A. That's correct --

Q. And then you --

A. -- and I also misspelled Raychel's name was the other gaffe.

Q. I understand. You gave a deposition to the coroner, that is dated 5 February 2003, and the reference for that is 012-036-170. Then you have two witness statements for the inquiry. The series for those is 032. The first is dated 30 June 2005. In fact, that being your earliest opportunity for the inquiry, you did there state that that initial statement dated 12 June was made without access to hospital notes and you noted that you had misspelt Raychel's first name. You also had a timing error.

A. Yes.

Q. You then made a second statement for the inquiry, which is dated 20 June 2012. Subject to anything further that you want to say here in your evidence, do you adopt those statements as your evidence and as accurate?

A. There are some minor typographical and layout corrections I could make perhaps.

Q. If there's anything of relevance, perhaps you'd identify them as we come to them.

A. On the very first page, statement 032/1, my name is

"Brian", not "Brain McCord".

THE CHAIRMAN: Doctor, you don't need to worry about typos. The question that's being asked of you, as has sometimes happened in the course of the inquiry, the witness has made a statement and then subsequently learns information as a result of which they want to correct or change something which is in the statement they've made. But I'm not overly concerned about typos or layout.

A. Just one other issue. In some of the papers -- I think they were papers to briefs -- there's reference to a Dr Raymond McCord I've come across. I'm not Raymond. I presume it's myself.

MS ANYADIKE-DANES: Thank you very much. If we can go to your CV, the reference for that is 317-001, and perhaps if we pull up 003 and have next to it 004. You qualified in 1979.

A. That's correct.

Q. And you had your two years as an SHO in Belfast City Hospital?

A. First year as a JHO and then a first year then as SHO.

Q. Yes, sorry. And then you carried on until you did six months in Musgrave Park Hospital --

A. General adult medicine.

Q. -- and coming back to Belfast City Hospital.

A. Mm-hm.

Q. So that span is August 1980 to July 1982?

A. That's correct.

Q. And within that you did some paediatrics, but of the neonatal type, six months of that?

A. And general, I also was fortunate enough to -- in those days we were able to do JHO jobs in general paediatrics. That's probably where I fell in love with it, you know. It was my very first attachment after qualification, I liked it, and I felt at that stage I would like to follow it on as a career. I did have to do some adult medicine in terms of the examination process. It's always useful to have some adult medicine experience, but the vast, vast majority of my experience has been in paediatrics since qualification, probably with a bent towards neonatal care, but a sizable proportion of general paediatric care as well.

Q. Then, by my calculations, you have about seven years as a registrar --

A. That's correct.

Q. -- starting in 1982 at the Children's Hospital, Royal Belfast Hospital for Sick Children, and carrying on until the Royal Maternity Hospital in Belfast.

A. That's correct.

Q. And then you had, as at Raychel's admission, about eight years as a consultant.

A. 1989 -- it would be 10, 11 years.
Q. Sorry, 12 even --
A. Yes, 12.
Q. -- as a consultant.
A. Mm-hm.
Q. You carried out your consultancy attachments at the Belfast City Hospital, the Waveney Hospital in -- sorry your consultancy --
A. Those weren't consultancies.
Q. Your consultancy was only in Altnagelvin.
A. Only in Altnagelvin; those were registrar postings, so --
Q. Sorry, let me go back to the registrar post so we have that. I beg your pardon. So the registrar post for the Belfast City Hospital, Waveney Hospital in Ballymena, ulster Hospital, then the Royal Maternity Hospital, then you have a period of senior registrar. Can you help with the distinction between the two?
A. Probably in terms of preparation for consultant workload, your duties differed a little. You were slightly less hands-on than the more junior regs would be. That has dissipated now and the senior reg system doesn't work, isn't in operation any longer. So there's a straight run through training now.
Q. And indeed, you started at Altnagelvin as a senior

registrar.
A. I did. I had a year in advance of my consultancy.
Q. Yes. Was that with a view to becoming a consultant?
A. You would hopefully become a consultant, but there's no guarantee as you had to go through an interview process and it's open to competition.
Q. I understand. And so then you became a consultant. Did you move directly into that? It's not entirely clear from your CV, but I take it that you moved directly into that?
A. Yes, there was no gap in service. So 31 July I was a senior reg, 1 August I was a consultant.
Q. Yes. In your CV you have given a description of your membership of various committees at the hospital.
A. Yes.
Q. Did you have any other positions in the hospital?
A. Those were the listings(?) I had at 2001 and my membership of those has subsequently lapsed, but presently I have very little in the way of administrative or managerial positioning. It's something that doesn't attract me at all.
Q. You have been good enough to provide us with some of your publications, which are reasonably extensive. Do you have an area of specialisation that bears at all on the issues that arose in Raychel's care?

A. Only in the general paediatric sense. I was probably trained as a generalist with an interest in neonatal care, which would be a very sellable career experience for a district general hospital setting. Subsequently, out of that, I've probably become slightly deskilled in the neonatal side because I've developed an interest with asthma and allergies, which is now what I'm taking forward.
Q. And before that it seems that you were developing an area in respiratory distress syndrome.
A. That was the neonatal end of things. And I travelled a bit with that.
Q. Yes. If we come now to your role as a consultant paediatrician in Altnagelvin as at 2001. I'm going to ask all my questions, unless I clearly indicate to the contrary, from 2001. So the state of your knowledge or awareness or the practices all at 2001.
What was, so far as you can help us, the role of a paediatric consultant in Altnagelvin Hospital in 2001?
A. There were a group of us -- I think there were five in total. We would provide a leadership role in paediatric management. We would do ward rounds, we would do clinics, and we would have an element of training as well of our juniors, but there was a heavy service commitment. When I first started we were providing a

problem-orientated ward round cover and outpatient clinics to Tyrone County Hospital and Enniskillen. And the first four, five years of my life were spent -- a lot of time in the car travelling between the posts. However, with the appointment of a consultant paediatrician to the Erne Hospital, then we were able to withdraw in part and then ultimately completely withdraw and remain in-house then.
Q. Sorry, could I just ask, when did you completely withdraw from providing that kind of assistance to Erne?
A. I think probably around 1989, 1990 ... mid-90s.
Q. In your witness statement you've helped us by saying that you had five consultants. By the time that Raychel was being admitted, you're not providing that outreach service to the Erne.
A. No.
Q. So you're more based in Altnagelvin?
A. Primarily in Altnagelvin.
Q. We don't need to pull it up, but from your first witness statement to the inquiry, 032/1, page 2, you said that you would have been assisted by two tiers of trainees. You have the senior house officers in their first term.
A. Mm-hm.
Q. Would that be somebody like Dr Johnston?
A. That would have been very like Dr Johnston, yes.

Q. And a more experienced middle-grade SHO, second term, carrying out rather sort of functions, and that would be somebody like Dr Trainor.
A. Exactly.
Q. Did you actually have registrars as well?
A. No, we had a mix. It's a supply and demand and depending on who's got their registrar grading as such, which tended to be decided centrally. And in that, there was also an element of doctors with their postgraduate qualifications. The MRCP was the one that everybody struggled to get, which made you good registrar material and potential to develop up the career path then. If you didn't have your MRCP, you were stymied.
Q. Can I ask you this, just briefly: was it a hierarchical structure in terms of access to the different levels of experience?
A. I suppose there was some degree of filtering, particularly after hours and on call. But I think paediatricians generally are known to be fairly approachable among the specialties. We're used to being spoken to, we're used to working in child-friendly atmospheres, family-friendly atmospheres, and I don't think any of us have any big issues with being approached verbally, written, any form, in

a professional sense.
THE CHAIRMAN: So it wasn't a rigid hierarchy, but you'd be a bit taken aback if you were regularly(?) approached by fairly minor issues?
A. I suppose minor -- we all have been approached to put in an IV line, to write up a medicine kardex, just by nature of being accessible. We've been contacted at home by nurses when there were concerns. Sometimes we would have junior staff who were particularly -- filling in locum, short-term locums, who were really filling posts to, you know. And the quality of the doctors maybe wasn't as good as we would appreciated or would have liked and if nurses were concerned, there would be no harm in them ringing us and we would expect that and accept that.
MS ANYADIKE-DANES: And that was known to make sure that the appropriate level of care was being provided to the child?
A. Yes, indeed, if there were some issues --
Q. Was there also an element of the fact that although children can be quite resilient, when things go wrong, they can quite often go quickly wrong?
A. Very rapidly.
Q. Was that in recognition of that to try and make sure there was the best possible access to the best

expertise?
A. As you can, get there as quick as you can, yes.
Q. Also in your first witness statement from the inquiry at page 2 -- and we don't need to pull it up -- what you said there was that:
"Typically informal arrangements existed for the paediatric medical involvement in surgical or surgical specialty children. Most commonly verbal, occasionally written form, requests were made and several routes could be employed, eg doctor to doctor, of varying grades, or even via nursing staff."
I've given you that because I'm moving on to ask you about something slightly different. I had previously asked you about the accessibility in the paediatric hierarchy, if I can put it that way. This is now to ask you about your accessibility to the other disciplines.
A. Right.
Q. You've talked about the informal arrangements existing. Ward 6, although a paediatric ward, was a ward which had children from other disciplines; would that be right?
A. That's correct.
Q. For example, surgical children or ear-nose-and-throat children might be there?
A. Not at that stage, but did eventually come, come on to our --

Q. If we stick then to the surgical ones, they were certainly --
A. Orthopaedic.
Q. Yes. So although it's your area, if you like, they are there because they're children, but they have issues that relate to other disciplines.
A. Right.
Q. Just so that we're clear, who had, so far as you're concerned, the primary responsibility for the fluid management, because that's the issue that we're interested in, the fluid management of those children. Let's take the surgical ones.
A. My understanding was that was the responsibility of the named clinician who was the surgeon.
Q. So for Raychel, that would be Mr Gilliland?
A. As the named clinician.
Q. Yes. So from your staff, your team, would view him as being the person with the responsibility for Raychel's fluid management?
A. That's correct. His name would have been at the end of the bed and therefore attached to Raychel and would be on PAS, the computerised system.
Q. Having said that, you've indicated that from time to time that assistance from members of your team would be requested --

A. Yes.
Q. -- for surgical patients. Can you help with typically what sort of thing did you have in mind?
A. They could be as simple as phlebotomy issues, helping the junior surgical doctor to get a blood sample, they could be as simple as erecting an IV cannula. If there were issues in terms of fluid or electrolytes, if there were electrolyte concerns, they could ask us for an opinion as to what to do in that respect. I don't think they had any responsibility for the prescription of the fluids or the volumes, rates, et cetera. But if they ran into difficulties or were out of their depth, my perception was that we were readily available to give advice.
Q. So if I can summarise it this way, you seem to have characterised two sorts of things. One is you may be called in to do something because there isn't another doctor to do it. So for example, if you think about taking bloods, maybe the nurses believe that bloods need to be taken at that stage but they can't --
A. That wouldn't be because there would be nobody there to do it; it would be because they made numerous attempts and failed, not to do the bloods for them.
Q. Ah, Okay.
A. It was usually in that context.

Q. Well, can I ask you: are there two categories, are there instances where you're called because, although it's a surgical patient, the nurses cannot access a JHO or anybody else for that matter from the surgical team and there is something that they wish to have done? That could be one side. The other side might be that they have accessed somebody, but they need guidance and some paediatric input in what to do.
A. Well, that would be less -- that would be more likely things like breaking up a medicine or a fluid, even, that kind of thing, where practical tasks, if at all possible, would be delayed until the surgical doctor was available, unless it became an emergency situation or a more pressing situation.
Q. And why is that?
A. I think it's to be helpful.
Q. No, no, sorry. Why would it be that they would delay it until a member of the surgical team should come rather than simply asking a paediatrician who's sort of more readily available on the ward?
A. I suppose not every task needs immediate attention.
Q. Could one reason be to try and preserve the distinction between the team who is primarily dealing with a surgical patient, which is the surgical team, and the paediatricians who are primarily dealing with the

medical patients? Would that be one reason?
A. I'm not sure the context of the question there.
Q. Let me ask you a direct question. Dr Butler, who was a paediatrician, was asked, at about noon, by the nurses to put up a new IV bag.
A. Okay.
Q. The bag had finished and the nurses were continuing Raychel's IV therapy. So she was asked and that's what she did. How common do you think, in your experience, was that?
A. It would only be a perception. It certainly didn't come -- I didn't get asked frequently.
Q. I can imagine that.
A. Even though I feel I'm approachable, I didn't get asked very often.
THE CHAIRMAN: Occasional?
A. Probably, yes. Occasional would be fair -- a fair word to use. It wouldn't be an everyday thing, I would have thought.
MS ANYADIKE-DANES: You certainly wouldn't have expected it to be an everyday thing?
A. It could have been at periods, I suppose, depending on the experience and the confidence of the surgical staff, you know, who will change every few months, that kind of thing. There may be more requests for assistance at

changeover times because they're less experienced, but once they bed in, their requests may become less frequent.
THE CHAIRMAN: I think we got the impression -- and I think the questioning will go on to this in a few minutes -- that was this wasn't so much about the confidence of the surgical staff, but the availability of the surgical staff.
A. Again that factors in, but again it's a dual thing. There's accessibility and experience combined. It's hard to define in general terms for every circumstance.
MS ANYADIKE-DANES: That I understand. I'm simply trying to find out -- and it may be that you're not aware of it because, at your level, you aren't aware of that sort of thing. I'm trying to see if you can help with what your expectations were, whether you thought that that sort of thing happened and really should be happening fairly regularly or not.
A. I would have thought continuation of IV fluids, that's a fairly low-key thing in my estimate, you know -- and writing up paracetamol for fevers would be low-key things. So I think if there were more major things like the practical tasks which were going to take medical staff away from medical patients, if that was happening repeatedly and frequently, it's something I would hope

that people would have let me know about because it would potentially reduce the quality of care to the medical side.

Q. Let me go back to something you said about writing prescriptions. I think you said, "We didn't expect do prescribe fluids".

A. I'm not exactly sure.

Q. Well, would you have expected that your paediatricians would have been prescribing as opposed to simply putting up another bag?

A. In terms of IV fluids or --

Q. For a surgical patient, IV fluids for a surgical patient.

A. Or drugs?

Q. No, IV fluids.

A. Not initiating prescriptions for them. Continuation of what's been written there, pending review by surgical colleagues because of accessibility or delay pending -- you know, to keep the fluid lines open in the child because it's a double insult if the fluids aren't run continuously, if the line fails, then they have to get another venepuncture to get another cannula, so in that context ...

Q. I'm reminded that Dr Butler was actually asked to write a prescription for another bag of IV fluid.

A. But in essence, it's not writing a new prescription, as such; it's continuation. I mean, each bag has to be prescribed.

Q. Yes. But continuation -- now that you are on that point: you're the consultant, would you expect that somebody exercised judgment as to whether the fluid regime ought to be continued?

A. Not in the context of asking a passing doctor to write up a prescription which was a continuation. If there was a significant clinical change or we're being asked to initiate fluids, I would have thought that an assessment would be warranted.

Q. Yes. I've asked you in that way because I asked a similar question to Dr Johnston. His view is -- firstly he said he had never actually been asked to do anything like that, but he expressed his reservations about doing something like that because his view is that even for an apparently straightforward thing such as continuing on with a bag of IV fluid, that may actually require some thought as to whether that was appropriate in the circumstances. And unless you had the notes and knew a little bit more, you wouldn't know the circumstances in which you were moving in to erect that bag of fluid, so he expressed some concerns about that.

A. Doctors differ in their degree of caution, their degree

of concern, their willingness to be of help. I'm sure there are differences between male and female doctors as well. You point out Dr Butler, Dr Johnston -- there's so many, many, many factors --

Q. What I'm asking you is whether you would expect -- I think Dr Butler was an SHO.

A. Yes.

Q. Whether you would expect a doctor to at least consider the possibility of whether this is appropriate. At that stage, you don't know whether any other doctor has asked for it to continue, to have another bag erected. You don't know what's happened in the intervening period. So in your view as a consultant paediatrician, would you expect one of your trainee doctors to have asked questions to ensure that it was appropriate to continue on that fluid therapy?

A. I think most of us would be guided by the person asking us --

Q. The nurse?

A. The nurse, you know. And we'd be guided by that, that this was a simple matter of continuation of what had been prescribed. I would anticipate if there was a really or significant change that that would be noted at that time as well. But we do these things almost without thought, you know, and to break it down into

conscious ... We're all human and you know --

Q. I'm not trying to be critical, I'm just trying to get your view as to what you would have thought was appropriate. Mr Zafar, who was the surgeon who carried out a very brief ward round on Raychel that morning, his view -- well, it was not always clear precisely his view, but a view was that she either shouldn't have needed, given how she presented during the ward round, any further fluid or not much more. He indicated that he might have wanted to know of another bag of being put up to know why she was requiring further fluid. The evidence wasn't entirely clear, but on that basis that's something that would lead your junior doctor or trainee doctor into doing something which may not be entirely fitting with what the surgeon had anticipated. That's why I'm asking you that point.

A. It beholds on the surgeon to be explicit in his instructions to the nursing staff, if that's the feeling. Again, there has been a lot of perceptions and misperceptions and misconceptions throughout this. So I think if that was a view, there should have been an explicit mention to the nursing staff.

Q. When you say "perceptions and misperceptions throughout this", do you mean throughout Raychel's case?

A. Well, what has impressed me is with the three different

specialties, I've had perception -- I'm as guilty as anyone -- that one specialty was doing one thing, another specialty was doing another, and likewise they thought that we were doing one thing, and fluid management was a case in point.

Q. Would you accept that that's unsatisfactory, that people at your sort of level, at the three different disciplines should have those differing perceptions?

A. I think I flagged that up, that is unsatisfactory, you know. The fact is that we thought it worked, but it evidently didn't.

Q. And the point that you had made about it behoved the surgeon to be clear in his direction to the nurses, is that perhaps going to something else that if these sorts of things were better noted in the child's charts, then any doctor coming thereafter or any nurse, for that matter, has a clear understanding of what's been being prescribed and why?

A. Yes, in an ideal world, but you know ... There's a great difference between ideal and what happens in the real world, unfortunately.

THE CHAIRMAN: And just for clarity, the three groups you're talking about are the paediatricians, the surgeons and the nurses?

A. No, no, anaesthetics, you know, would be the three specialties, medical specialties. I suppose nursing would be the fourth, if you wanted.

THE CHAIRMAN: But it would be appropriate to include the nurses?

A. Yes, yes, but they span all three, I suppose.

MS ANYADIKE-DANES: Earlier when I was asking you, you did touch on the issue of accessibility issues, which might lead a paediatrician to assist the nurse in treating the patient in some shape or other. Were you aware that there was a bit of concern from the nurses that the surgeons perhaps just weren't as accessible as they might want them to be for their patients?

A. I did get, you know, that impression, yes. And you know, it was mentioned from time to time and it seemed to flare and then quieten, improve for a while and then it would come to the surface again. But it did seem to be an issue for the nursing staff.

Q. I'm going to come to it in the context of the critical incident review meeting a bit later on. I'm asking you, if you like, as at the time of Raychel's admission, were you aware of that sort of concern?

A. Well, I'd been working there for a number of years, yes.

Q. Yes. And how was that addressed or was it just one of those facts of life that you noted?

A. It's one of those facts I suppose you wished had gone away in that respect. But I do remember Sister Millar at one of our sisters' meetings, you know, where senior nursing staff would meet with consultant staff and I think the encouragement was given by the paediatricians that Sister Millar should speak to the senior consultant surgeon to make her concerns known. And as far as I am aware, she did do that.

Q. Sorry this, is before the critical incident meeting?

A. No, well -- I couldn't tell you about dates, I'm sorry. But I know it was aired.

THE CHAIRMAN: Who would the senior consultant surgeon have been?

A. There'd have been Mr Panasar and Mr --

MS ANYADIKE-DANES: Bateson?

A. Bateson, yes. Those would be the two names that would be most senior ranked at that time.

Q. So would it be fair to say that that sort of issue was known about?

A. It was.

Q. You may not be able to help with this, but there were two other, apart from Dr Butler's, medical interventions in Raychel's care, if I can put it that way, before she suffered her seizure. One happens about 6 o'clock when Dr Devlin gives Raychel an anti-emetic. The other

happens at about 10 o'clock when Dr Curran gives her an anti-emetic. At either of those times, if those JHOs, as they were, very junior doctors, had sought guidance from the paediatric team -- either an SHO or registrar or even yourself, if you were there -- about what to do in those circumstances, what is the help that you would have wished them to have in terms of advice?

A. It's --

Q. Let's take the 6 o'clock one. Given Raychel's condition at 6 o'clock, so she had been continually on her IV fluids at 80 ml an hour, Solution No. 18. She had been vomiting fairly regularly, starting at 8 o'clock. There's only one record of urine, passing urine, which starts at 10, but there may have been other instances, but none others are recorded. Some of those vomits are large vomits. And the JHO's been called to administer an anti-emetic. There's been no electrolytes done since the previous evening just before she went into surgery. So if the JHO calls a member of the paediatric team and says, "I'm being asked to give an anti-emetic, this is what I've been told or this is what the records show about her --

A. Sorry, who is being called?

Q. If a member of the paediatric team is called by the JHO, giving that information, "This is what the records show,

this is what I'm being told, the parents are worried", what is the guidance from the paediatric side that could be given or should be given?

A. All I can -- I can't answer for AN Other doctor of junior grade, but I would be hopeful that they would hear the symptomatology, they would go along, potentially assess the child physically, and then consider an investigation such as electrolytes. I would like to think that would be appropriate at that stage, but --

Q. No, I understand --

A. It's an individual choice sometimes depending on experience and so on.

Q. But in your view, an examination and review of child would have been appropriate at the very least?

A. If it was a request from another specialty, yes, I think that would be -- if it was concerning enough to another specialty, then it would be appropriate.

Q. And also, to have some check on the child's electrolytes?

A. Yes, urea and electrolytes.

Q. Why would you have hoped that information would have been conveyed?

A. Sorry, that information would have been?

Q. Why would you have hoped the information as to a check

on the electrolytes would have been conveyed?

A. From the paediatric team to the JHO?

Q. Yes.

A. I presume that because it was a request for an assessment, the paediatric SHO would be doing it, would be going along and -- no, they would organise it with the JHO, they would probably request the JHO ... Because of the potential of the vomiting.

Q. It's the vomiting that would have prompted that?

A. That would have probably prompted that, yes.

Q. Thank you. In your view, this may be --

THE CHAIRMAN: Just one second. Is that because, doctor, the sustained nature of the vomiting was unusual?

A. No, it's more the fact that it came from another specialty. They were concerned enough, you know. If their antennae are out enough to make them warrant a paediatric assessment, then I think that would cause anxiety with us.

MS ANYADIKE-DANES: I see. Let me put it in a slightly different way then. From a paediatric point of view, leaving aside whether the JHO has contacted a member of your team or not, simply from a paediatric point of view --

A. So she was a paediatric patient?

Q. Yes. Well, I'm asking you from a paediatric

perspective. So if you have that information that I have just given you about her condition, in your view does that lead to wanting to have her electrolytes tested?

A. It depends on factors suchlike temperature and so on and when the last electrolytes were performed.

Q. Well, the information I gave you was the electrolytes were last performed the previous evening before her surgery. Since then there hadn't been anything and she'd been on 80 ml an hour -- leaving aside what happened during surgery -- pretty much continually, of low-sodium fluid, Solution No. 18.

A. Right.

Q. And there had been, from that date, no real review of her hydration status. So if you had all that information and you knew about the vomiting, is that, from a paediatric point of view, something that would have prompted a check on her electrolytes?

A. I think it probably would in the paediatric side in the sense that it's teatime-ish, you know, the night lies ahead of you, what are you going to be doing later on, it's easier to do them around teatime than it is at bedtime, that kind of thing. So do it now.

Q. Yes. And if do you it now and you get a sense of where she is, then you have information to pass on to the

night team, who might be more stretched than the day team, if I can put it that way?

A. Well, I don't know whether that consciously went through everybody's thoughts, you know!

Q. Yes. Then the normal observations that were being carried out, pulse, respiration, temperature, what's the significance of the normal observations so far as you're concerned?

A. I would anticipate that they might give an early warning of a trend away, so it would be -- variation or variance from what had been the status quo would alert you that something might not be right.

Q. Yes. And would you include in "perhaps something might not be right" the mere fact that the nurse had formed the view that, "What we really need is an anti-emetic here, this has gone on long enough"?

A. I must say, I would have to defer to the greater experience in terms of managing post-operative children, I wouldn't feel comfortable commenting because I just don't deal with post-operative children.

Q. I understand. That's 6 o'clock. But at 10 o'clock she has had the anti-emetic and that hasn't actually stopped the vomiting. In fact, the vomiting, just immediately before 10 o'clock when Dr Curran -- also an SHO -- attends at the request to provide another anti-emetic,

is described as "coffee grounds". So now it's been going on all day and the best part of the evening and she's still on the same fluids, electrolytes still not checked. In addition to which she's had a headache and there is concerns about her presentation, maybe flushed, maybe pale, maybe not as active as she was, those sorts of things that are difficult to exactly pin down, but there are some concerns about her presentation, if I can put it that way. So from a paediatric point of view, what would you have wanted to be happening at 10 o'clock?

A. Again, having had her electrolytes?

Q. No electrolytes tested.

A. The same routine as we said before?

Q. Exactly.

A. With the new symptomatology you could have considered changing the frequency of her obs. I can't remember -- I didn't hear you mention how frequently they were being done.

Q. I think they were four-hourly at that stage.

A. It depends on your gut feeling in part, you know, how the child looked and ...

Q. Would you have wanted her electrolytes tested?

A. Oh yes, the same as applied at 6 o'clock would have applied equally at 10 o'clock.

Q. Would you have been any more concerned that, even with the benefit of anti-emetics, she was still vomiting and that there were coffee grounds in the last vomit?

A. It should start to set antennae ringing: second dose, still vomiting --

Q. And what does that antennae do, what action does that prompt?

A. An assessment, consideration of phlebotomy, consideration of treatment, investigations. All those sorts of things. It depends on what the practitioner has in front of him, what he's presented with.

Q. I understand. I'm putting it sort of hypothetically to you. By that stage, you'd have appreciated that she'd been on these low-sodium fluids for 24 hours.

A. Mm-hm.

Q. There's no real accurate measurement of her output.

A. Mm-hm.

Q. Is that part of your antennae? Do you want to have a re-think from a paediatric point of view about her fluids?

A. Back in 2001, again, electrolytes would have been probably to the fore of what we wanted. We were probably driven -- not driven, guided by electrolytes, you know. Input, output, important in the sick child, you know, but you can appreciate the difficulties in

getting accurate measurements of body fluids, both urine and vomit, or otherwise.

Q. So once you'd got your electrolyte results, you would factor that into that other information --

A. That would guide --

Q. -- had and that would guide what you did effectively?

A. In essence it would probably be the electrolytes that would drive us as much as the clinical setting.

THE CHAIRMAN: Doctor, on the paediatric side of Ward 6, Solution No. 18 was the standard solution.

A. It was, it was. Throughout my paediatric career and across the variety of hospitals I worked in as a junior, No. 18 Solution was ...

THE CHAIRMAN: Among the children who you treated on the paediatric side of Ward 6, were there children with gastroenteritis?

A. There were indeed.

THE CHAIRMAN: So they wouldn't have had surgery as Raychel had --

A. No.

THE CHAIRMAN: -- but they would have been coming in with vomiting and diarrhoea.

A. That's right.

THE CHAIRMAN: Do I take it then that for at least some of these children, the fact of the vomiting and diarrhoea

would have led to a reduction in their sodium levels?

A. Peculiarly, hyponatraemia wasn't that common. We probably were quite tolerant of sodiums. You know, the normal range depends on the laboratory that the blood is measured in. Hyponatraemia could arbitrarily be divided into mild, moderate, severe, depending on the number, but that's very arbitrary and if you ask four or five different people you get four or five different answers of what --

MS ANYADIKE-DANES: Could I just pause you there, because when you say it's not very common, it might help if you give the range you're talking about. I mean, if you look at the normal parameters of 135 to 145 --

A. That depends on the lab, because even in Altnagelvin I think that changed a little, you know in --

Q. I understand that. Different people have a differing point at which they say they would characterise a child's results as hyponatraemic. When you're saying it wasn't very common, what sort of level are you talking about when you say that wasn't very common?

A. Probably the mid-130s. Sorry, not the mid-130s, between 130 and 135. We take 135 as the lower end of the laboratory normal range. 130 to 135 -- and more often 133/134 sort of level -- we would have been very tolerant of and not passed any great comment on. I'm

sure I signed lab forms -- we reviewed lab forms after children go home -- they collect in big bunches and before they're filed into case notes, they have to be signed by a senior middle-grade doctor or myself from time to time. I'm sure I've signed sodiums of 134 in children going home.

Q. At what stage do you consider that it starts to become of concern but -- well, let's start with that. At which stage do you consider it starts to become of concern?

A. I suppose that's an individual thing based on experience. My own concern level would probably be 130 or lower. That may be why I say that we didn't see hyponatraemia frequently in gastroenteritis. We may have tolerated that, you know, and we saw hypokalaemia, low potassium, much, much more frequently and that was a severe problem.

Q. And you could have with the gastroenteritis example that the chairman gave you seen any number of cases of children who were between 130 and 135, who by some people's definitions were fully hyponatraemic --

A. Technically, that is hyponatraemia, but --

Q. You wouldn't have been that concerned about that?

A. Not concerned. Another way of considering hyponatraemia is the symptomatic hyponatraemia, which is a very, very different kettle of fish. If you ask a group of

paediatricians, they will from time to time come across children with very low sodiums, but who are asymptomatic. I think my colleague Dr Trainor mentioned that she had seen low sodiums yesterday, you know, substantially low, you know. But in all likelihood -- not in all likelihood, but in likelihood a number of those will have been asymptomatic. Their sodium has declined very, very gradually or they have an underlying endocrine issue. Those are a separate group from the children who are symptomatic with the seizure, convulsion [inaudible].

THE CHAIRMAN: When you were treating children on IV fluids who had gastroenteritis, they got electrolyte tests every 24 hours?

A. It'd be that or it might be slightly more. It wasn't done by the clock, that kind of thing. But that sort of order of magnitude of time, but they were done more regularly than [inaudible] and I suspect surgical patients were done.

THE CHAIRMAN: I take your caveat about 24 hours, that it wasn't precise --

A. Yes.

THE CHAIRMAN: -- but let's just take it as that for shorthand. Why were they done every 24 hours or so?

A. Why? It was custom and practice. I suppose we did rely

on it to drive us a little about how well the children were. If we had a low-ish sodium day 1 and repeated it 24 hours later and it had improved, that would be a sign of convalescence and a positive sign. Equally, if it started to go the other way, you might have thought at that stage of changing your fluid. We did occasionally do it, but I do emphasise it was occasional. No. 18 seemed to get most of them over their illness, which was short-term. It makes me wonder is vomiting or post-surgical vomiting different from medical vomiting? I just do not know. And one other case in point would be children with pyloric stenosis, who are profuse vomiters, sometimes for days to weeks, before admission, and the terminology "forceful vomit" or "projectile vomit" is seen in those children. Peculiarly, hyponatraemia was not common with them; it was hypokalaemic, hypochloraemic, alkalosis is what they suffered from. So there's some peculiarities in there.

MS ANYADIKE-DANES: Yes. It's some of those peculiarities that we are trying to see if the clinicians of these children and the experts can help to identify as to why these particular children went on to develop the hyponatraemia that they did and ultimately die.

Of the group that you're talking about, you just mentioned the post-operative vomiting as something that

can lead to a loss of sodium. The post-operative situation has that on one side. On the other hand, the stress of the surgery itself can produce, can it not, the body's response through the use of the antidiuretic hormone to retain water?

A. Mm-hm.

Q. On the one hand you have the water being retained, on the other hand you've got vomiting. Does that make that a particularly difficult situation to try and work out what the child's sodium position is and all the more reason to carry out electrolyte testing?

A. Yes. None of us can predict what sodium is.

Q. Sorry?

A. None of us can predict a sodium without actually measuring it. There's no consistent clinical features that would suggest a sodium is low.

Q. So there's no presentation where you can say if the child looks like that --

A. Being that --

Q. Yes. So bearing that in mind and recognising that as I think you were, correct me, about the post-operative situation, does that not make that a particular circumstance in which you would want to know what the child's electrolyte levels were?

A. Let me put it in this way -- let me try and answer it in

this way: I'm a general paediatrician, I did not associate inappropriate ADH with surgery. I had never, ever -- and this was novel and news to me in 2001. And I think if you would have asked a group of general paediatricians, if they were honest they would probably have -- you know, but we had no need to know because we didn't see surgical children as such. I'm not sure what the knowledge was among general surgeons, but it certainly came as a bit of a surprise to me. On reflection, yes, it makes so much sense it should have been, but I had no conscious awareness of it.

We did see, as medical paediatricians, inappropriate ADH in a variety of conditions on the medical side -- meningitis, pneumonia, bronchiolitis, et cetera, numerous conditions -- but I had not made a conscious link between the two.

Q. When you saw it in other conditions where they might -- did that prompt a more careful assessment of the electrolyte position of children with those conditions?

A. It would have prompted an anticipatory alteration to the fluids in the sense that we would reduce maintenance fluids to two-thirds maintenance.

Q. Yes.

A. We would probably be inclined, depending on sickness level, to do electrolytes more frequently, particularly

if we saw an unusual one. A borderline low sodium in a well child, a well-looking child, is very, very different to a borderline low with a child who is obviously toxic, unwell, on oxygen, that sort of thing, and that might be the one you'd want to do the sodiums more frequently on -- the electrolytes more frequently, sorry.

Q. Just so that I pick up on something I think you said to the chairman, those sorts of conditions -- and all children are different and you're trying to address that particular child's needs and concerns -- may lead you in certain circumstances to reduce the rate at which the fluid was being administered.

A. Mm-hm.

Q. Might it also lead you to review the kind of fluid or at least to supplement it with something to compensate for the extra losses?

A. Yes. I think, you know, in 2001 we would have been driven by what the electrolytes were and that would be the arbiter of whether you changed the fluid or not, depending on what the sodium --

Q. Yes. So if you get a low sodium result in 2001, notwithstanding the fact that the typical fluid that would have been used was Solution No. 18, that would not preclude something different being done for that

particular child?

A. Oh, indeed. It would have been an occasional thing, you know, but yes, we would have used half-normal saline. I don't think we were brave enough to go to normal saline at that stage. That came much later.

Q. Thank you.

THE CHAIRMAN: Doctor, just before we move on to the contact with you about Raychel, let me ask you one general question: in Altnagelvin on Ward 6, what is the age up to which children go to Ward 6 rather than an adult ward?

A. That's a bone of contention. It depends on who you ask. I suppose it's limited by maturity and ... It depends on who you ask. We all have different views. Some of us have come from a place where children are kept in a paediatric ward up to the age of 16. Previously, I know that it had been considered -- our policy on Ward 6 would have been up to 14, but we have had children -- young adults as old as in their mid-20s -- who are chronic hospital attenders and are small in size. So maturity and size are important factors. Big pimply adolescent boys don't fit well with pubescent girls in the same locality, so there's that issue. Big pubescent boys don't fit in our size beds, so there's that issue as well. So a large 13 year-old would not probably be

able to fit into our establishment, whereas a small 23-year-old handicapped girl would.

THE CHAIRMAN: Thank you.

A. 16 and 14 are generally -- but probably the driving force would be ... As far as I'm aware, the Children's Hospital use 13 years as the cut -- the Children's Hospital, which is our primary referral centre for intensive care. So in terms of a sick-ish child, I'd always be conscious if they were 13 and beyond 14 -- well, 13 and 364 days. If the child took unexpectedly unwell, he might have difficulty getting a PIC -- paediatric intensive care -- unit bed for them, you know, locally.

MS ANYADIKE-DANES: I'd like to move on now to the contact that you had with Dr Trainor in the early hours of Saturday, which would be 9 June. Your evidence -- and we see it, although we don't need to pull it up, in your first inquiry witness statement at page 2. You say:

"In the early hours of 9 June, I received a call from Dr Trainor regarding a 9-year-old girl, previously unknown to either of us, being under the care of surgical colleagues who'd had an epileptiform episode requiring rectal and intravenous diazepam, but who remained inexplicably unwell and had petechiae."

Can you help us with this: doing the best you can,

what was the information that Dr Trainor gave you during that telephone call?

A. Okay. Can I answer that in a roundabout way? There are three sorts of calls you would tend to get when you're on call from middle-grade doctors or others. The first would be: I'm just ringing for advice and immediately you would relax and you'd run through the story. It's no fun being on call, it can be tense. You don't sleep the same, you don't rest or relax the same, you know, being at home. So there would be that type of call, "I'm ringing for advice".

The second one would be where the case under discussion would be a little bit more complex. There'd be a few subtleties, the history would make you a little bit concerned about, and then after a period of reflection or review of results that have come through from your middle grade -- you say, "We'll come in and see them anyway". That sort of thing. So that's a leisurely return to hospital.

Then there's the third kind, which is a "come quick" call. I think this is the setting for that call, the early hours of that morning. I cannot remember detail, but I remember hearing words like "Child unwell", "Not sure what's going on", "Can you help?", or, "Come quick". I'm not even sure whether I was aware of the

seizure. I think I picked up on the "unwell" and the presence of petechiae because what I suggested was twofold: antibiotics, possible meningitis cover, and seek assistance from anaesthetic colleagues if there was deterioration. And then I proceeded to the hospital as quickly as I could.

Q. Yes. I think there might have been a reference to the petechiae because I think you've -- we see that on 020-015-023. We don't need to pull it up. This is also a difficult question, but see if you can help us with it. Given the information that was available at that stage on Raychel's condition, what would you have wanted to be communicated to you so you can provide whatever guidance that you can for her treatment whilst you're getting yourself into the hospital?

A. (a) know that she was still alive, relevant clinical features --

Q. For example?

A. Was she requiring oxygen, was she conscious, was she alert. Mainly the ABCs -- airway, breathing, circulation -- what were those like, as a starter. Were there any additional features from the history? But again, you know, when you're on a "come quick" call, you want it short, you want it succinct, you knew that your doctor, your middle-grade doctor, was having

difficulties. It was a cry for help. So you don't endlessly probe into history or features, you know. You get it out as quickly as you can, come quick, and you get underway.

Q. Presumably the sort of thing that you want to hear is anything that could lead you to give guidance on something that can usefully be done quickly whilst you're coming in that will make a difference. Presumably that's the sort of information that you're looking for, otherwise you simply get yourself there as quickly as possible because nothing you can tell them in the intervening period would help.

A. Yes.

Q. If one looks at it like that, apart from knowing that she'd suffered a seizure, her pupils were fixed and dilated, not responding, that sort of information, but would you have wanted to know that she had a very low, an abnormally low sodium level?

A. Would I have wanted to know?

Q. Yes.

A. If I had known, I can't remember being informed of it. My first instinct -- because that level of sodium is a once in a career, paediatric career, kind of blood result. You don't see that every day. You see it extremely rarely. I would have advised that it's

repeated because a rogue result is potentially an issue. I'm almost certain I would have asked Dr Trainor to repeat it. I would check.

Q. Even if repeating it could bring with it -- nobody knows because it's on the day, sometimes these things come through quicker than others -- could bring with it a delay of half an hour, which could be significant if what actually was happening was that hyponatraemia had produced a cerebral oedema, raising the intracranial pressure, and that actually is what had led to the fit and that is what might compromise her breathing and ultimately lead to coning. If that's where she was, then a half hour might be significant without addressing the issue of pressure.

A. Sure, sure. All I can say there is that it's an evolving situation. I don't think you would make that decision specifically with the 30-minute delay in mind, you know. You would get it repeated and ... I don't know that in the context of where we're dealing with hindsight is beneficial, but the hour was late, I'm sure the thought processes weren't the same as if it had been at 3 pm in the afternoon. I'm not sure that that would have consciously gone through Dr Trainor's mind about the delay thing.

Q. No, no --

THE CHAIRMAN: The scenario that Ms Anyadike-Danes was just putting to you about the very low sodium, whether it was producing cerebral oedema, whether that was raising intracranial pressure, that might be what has led to the fit --

A. Yes.

THE CHAIRMAN: -- is that something which you think would have occurred to you at that --

A. No. I don't think so.

THE CHAIRMAN: Because it was-- because it is so far outside the norm?

A. In terms of -- (a) because we didn't know whether it was a primary or secondary phenomenon in terms of that, whether it was driven by the low sodium per se or whether there was a cerebral insult of some sort and then the sodium had dropped as a result of that.

MS ANYADIKE-DANES: You mean like a bleed?

A. A bleed, a tumour, meningitis. There are many conditions that can be associated with SIADH.

Q. If it had been something like meningitis, infection if you like, that was driving it, would you have expected her to have not only been afebrile at the time, but have been afebrile throughout?

A. Sudden overwhelming sepsis isn't -- may not be associated with temperature.

Q. And would that fit the profile of continuing vomiting, probably increasing towards the evening --

A. No.

Q. -- and --

A. When does meningitis start? Nobody knows. Is it the moment you develop a symptom or the moment that the doctor puts the needle into your back to take a sample? It's very, very hard to pin that down. But it's among the differential. And remember, we were thinking with paediatric medical mindsets.

Q. Yes.

A. Not post-op surgical mindsets as such, which would, I think, probably have hampered us a little.

Q. Well, one of the reasons I've put these questions to you -- and indeed I put them to Dr Trainor -- is because the Trust retained, as you may know, an expert, Dr Warde, who is a consultant paediatrician. I don't know if you've had an opportunity to look at his report.

A. I don't think I have seen that. I may have seen -- how many pages would there have been?

Q. It's relatively short.

A. I think I have seen that one because it may have come with Dr Jenkins'. Then I have seen that, yes. I think he's an intensivist, rather than a general paediatrician.

Q. What I was going to take you to is the comment that he made. I'm trying to look for the reference to it. Maybe I'll come to that series because there are three reports that sort of touch on that sort of area. Dr Warde's is one, Dr Scott-Jupp's is another, Dr Haynes and indeed Mr Foster, who is a surgeon. So a combination of the inquiry's experts and the Trust expert have all commented on what might have been happening in what was a relatively short time frame. Nonetheless, what might have been happening. And I say that recognising that one could never know the difference it would have made if any of those treatments had been actually administered. So perhaps if you'll bear with me, I'll come back to that.

A. That's fine.

Q. You've helped us with what Dr Trainor told you. Can you help us with whether you asked her anything or whether you simply told her you were coming in?

A. No, I think that was just a receipt -- I received and I said I'm coming. Oh sorry, offered advice and then said I was coming.

Q. You offered advice in relation to the possibility of meningitis?

A. Antibiotics and to get anaesthetic assistance if there was a deterioration for airway protection.

Q. Did you have any view in your mind as to what it might be at that stage or were just simply getting there as quickly as you could?

A. No, I was just getting in, yes.

Q. Have you got a sense of roughly how long it might have taken you?

A. Door to door, less than five minutes. Three minutes either side to get dressed and to ... Two to three minutes to ascend the lift to the sixth floor.

Q. So 10, 15 minutes?

A. Yes. And I mean, I live less than 2 miles away and there were no traffic lights on the road at that stage in 2001 and the roads would have been quiet.

Q. And when you got there, can you describe what was happening?

A. Um ... I'm trying to think of a word. There's a hive of activity in the treatment room. If memory serves me right, there were a number of nurses and doctors there. Raychel would have been on the trolley in the treatment room or -- it would have been a trolley, yes. And there's an anaesthetist, I think, at the head of her trolley because she had been intubated, even as I entered or as I -- shortly before I came into the room. So a hectic --

Q. Mr Ferguson has described it as "chaos". To an outsider

it might have looked like that.
A. It's a hive of activity. Whenever that happens, you know, there's a lot of people going, milling around and so on and so forth, and noise, people shouting things, et cetera, et cetera.
Q. And what is actually happening? I took your first point that if she wasn't being literally intubated at that time she had been, so she was receiving attention from Dr Date.
A. Yes.
Q. So that's happening, that would be happening at one end. What else is actually being done so far as you can recall?
A. I think that's the main focus, you know, the airway. So that's where all of the attention was at that time.
Q. So when you go in and you see that, how does she appear to you, her appearance?
A. Sorry?
Q. How does her appearance seem to you?
A. Unwell. She is supine, she has been intubated, she is still, she's not moving. Presumably she's being manually ventilated by this stage. I did a cursory examination of the fundi and the eyes. The pupils were fixed and unresponsive, fixed, dilated -- the terminology is perhaps a little bit confusing. I wanted

to have a look at her fundi, the optic discs, to see if there was any evidence of papilloedema. The discs, to my eye, appeared very sharp, nice and regular, against --
Q. If you had seen the papilloedema, what would that have suggested to you?
A. That would have suggested -- I would have maybe been very suspicious of raised intracranial pressure.
Q. So that led you to think that maybe that that's not what you were dealing with?
A. I wouldn't say not because it takes a while for papilloedema, it's one of these double negatives. The presence of papilloedema is very suspicious; the absence of papilloedema doesn't exclude it.
Q. I understand.
A. It does take some time for papilloedema to develop, but nobody could tell you whether it's six hours, six minutes, 60 minutes, 12 hours.
Q. So you wouldn't have ruled out raised intracranial pressure?
A. I wouldn't have ruled it out completely, but I'd have been more inclined -- I think there has been criticism about the use of mannitol, et cetera. I would have been more inclined to use that had there been papilloedema.
Q. That's your view of her, that's your initial physical

examination of her.
A. Yes.
Q. Are you told anything about her sodium result at that stage?
A. At that stage, I think we'd had her second confirmatory sodium done. I was told there were two sodiums, I think. I don't know if I knew the sodium on the way in. So it would have been relayed that there was one and it was repeated and it was 118.
Q. Can I just pause you there. In fairness to you, in your witness statements and just now, you said you didn't think you knew about the sodium. Is it possible that you did know about it?
A. Anything's possible, but I honestly don't think I did. If I did know, I would suspect I would have asked Dr Trainor to repeat the sodium.
Q. To do the very thing she did do?
A. Yes, indeed. Indeed. I don't think I would have actioned on the basis of a potentially single rogue result.
Q. But in any event, shortly after you're there, you realise that she's had two sodium tests --
A. Yes.
Q. -- one at 119 and another at 118.
A. Mm-hm. And this was real.

Q. And if you add that to your physical examination of her, what were you thinking of then at that stage?
A. Obviously, a major electrolyte abnormality, but still hyponatraemia, but I still, in my mind, wasn't sure whether it was a primary or a secondary condition. We acted to treat the bits that we could treat, ie change the fluids, reduce the rate, for clarity or to try and define further what the initiating insult was, get a CT.
Q. Yes. At that stage, you wouldn't have had any confirmation of whether there was a meningococcal infection of that sort.
A. You fly by your pants. You think the thought, you treat, you can always stop treatment later. It's such a serious condition, you shoot first, ask questions later.
Q. Yes. So what I was going to ask you, bearing that in mind, though, you could treat the very low sodium and the question that I put to Dr Trainor yesterday is: if you'd treated the low sodium, would that have had any detrimental effect, if it turns out that that was secondary to some form of meningococcal infection? I think her answer to that was: no, it wouldn't have been detrimental.
A. If you think of what we did do, change to normal saline, and how long would it have taken to do that? An

IV fluid giving set runs through -- there is a lag phase even doing that. So that would have probably taken 10, 15 minutes if you did it, you know, in advance of me, so it might have saved you less than what you think. If you think of the half hour delay for the blood result, it may not have been a full half hour --

Q. I understand.

A. -- so it questions that time ...

Q. If you'd wanted to treat that low sodium very aggressively, what form of treatment would that be?

A. At that time, I wasn't aware of hyponatraemic -- er, hypernatraemic saline solutions, other than a very, very hypernatraemic form that we used in the neonatal unit, a 30 per cent solution, which was added to oral feeds to -- the babies were feeding orally but required sodium supplements. But very, very toxic stuff, 30 per cent. Major stuff. That was the only sodium hypertonic saline that I was aware of. Additionally, I didn't carry any algorithms of dosage or infusion rates and only learned about that later. Indeed, I did eventually find one on the Internet for 3 per cent hypertonic saline, which I kept on my office wall to this very day, and it's -- that's it there (indicating). It's never been required since Raychel's time. I only discovered -- I went after -- after Raychel's deterioration and transfer to

Belfast, so in the days following that I went looking for that and did find it.

Q. Yes. Let's say that your thinking in the way that I sort of put it to you earlier -- look, this is a very low sodium result.

A. Yes.

Q. If it's the primary cause, so if hyponatraemia is actually what's going on, then what might be consistent with her presentation is a development of cerebral oedema as a result of it and an associated raised intracranial pressure. And it's that raised intracranial pressure that might be producing some of what I'm viewing here. That is a logic that could have been made.

A. Okay.

Q. If you had wanted to address that raised intracranial pressure as being the most proximate thing that's causing her symptoms, what in your view could have been done at that stage?

A. In terms of raised intracranial pressure?

Q. Almost anything to address it.

A. It has to be remembered that she was intubated at that stage and being ventilated. Ventilation per se, by lowering the PCO2, will reduce the intracerebral blood volume and will lower intracranial pressure. So she was

already on a form of treatment for raised ICP. Had there been papilloedema, I would have been tempted to consider mannitol, but mannitol wouldn't be a widely used drug in my experience. I had used it previously when working in the Children's Hospital in paediatric intensive care for children with Reye's syndrome, where there's terrible increased intracranial pressure with intracranial pressure monitoring in situ. The hypertonic saline, you know, I didn't know existed and --

Q. But if you'd had mannitol administered, in your view what could that have contributed to the range of things that you might have -- I think you explained she was on some form of therapy because you were addressing the gases and that, in and of itself, produces a beneficial effect.

A. Mm.

Q. You could have changed, which you did do, her fluids, you might have been more aggressive in the fluids, that's that dimension. Then you could have administered mannitol. What would the mannitol be doing if that had been done?

A. My understanding is that it's an osmotic diuretic and it's a large polymer of glucose, which tends to remain inside the cerebral -- not inside the cerebral, in the

circulating system, circulatory system, and exerting an osmotic effect, drawing liquid to it, and by reasoning then, it draws fluid out of the brain cells into the bloodstream where it can be excreted.

Q. That would have reduced some of that fluid that was in her brain?

A. It would be treatment for her cerebral oedema.

Q. And in that way, reduced some of the pressure?

A. Yes. But you must remember that we had a very fleeting time, you know, with Raychel, you know, in that, you know -- en route from deterioration through CT and ICU.

Q. I understand. We've had all the luxury of many years to think about what might have been done.

A. Yes, indeed.

Q. I have now found the reference to Dr Warde's report. I'll put this up to you now because it puts, in a concise way, the point I was putting to you. It's 317-009 and the particular part I want to address you to is 012.

THE CHAIRMAN: Could we put up also with that 007? Because Dr McCord has made a point about what Dr Warde's specialty is and, since he's made that point, let's bring up 007. Thank you.

Could you highlight on 007 the top two paragraphs, please?

The point you were making, doctor, when you first had what Dr Warde would say raised with you is that you described him as an intensivist and in fact he does describe himself as a consultant paediatric anaesthetist with an interest in paediatric intensive care. Is that the point you wanted to make?

A. Yes, indeed. He's not a general paediatrician as such, you know --

MS ANYADIKE-DANES: So --

A. -- and consequently will work in a very controlled environment with intense monitoring and, because of the nature of the patients he sees, he will be using drugs on a regular basis such as hypertonic saline that I would only use rarely, if at all. And that's the point that I would make.

Q. He may have greater experience in what to do with a child at that stage of extremis, if I can put it that way?

A. Yes, indeed. I mean, in all these things, the first time you come across an experience is the most difficult because you -- no amount of medical training will train you for the situation that we were found in that night. The second case that you meet is easier in terms of drug use and, you know, ABC, what you do, step A, step B --

Q. I understand. If we then look at the additional

comments and if I can take you to the points I'd like you to address here. He starts off by saying that:

"Her medical management from the time she began fitting was, in [his] view, in most respects entirely appropriate."

Then he says:

"I believe that many doctors of John Johnston's relative lack of seniority would not have suspected from an outset that an electrolyte abnormality was the root cause of the problem."

In fact, Dr Johnston is concerned about her electrolytes.

A. Uncommonly astute for one so junior.

Q. He goes on to say:

"One could question why [and this is one of the points I would like you to address], upon receipt of the initial electrolyte results revealing a sodium of 119, Dr Trainor did not immediately alter the IV fluid therapy to 0.9 sodium chloride, but instead asked for a repeat estimation."

There's another point I'm going to ask you to deal with, but if I can deal with that first, comment on that.

A. I would think that she was outside her box, you know, in the sense that she had never, ever come across this

before and, combined with a degree of relative inexperience, it would be enough for me to say, "Look, don't be over harsh on this, she's only two years into her training thing". I think she did the appropriate thing, she did the repeat. You could argue a 30-minute delay changing fluid, potentially a 30-minute delay ... But the time it might take for a bag to be found, to be set up, run through and erected could eat into that 30 minutes very readily as well.

Q. Leaving aside Dr Trainor then, who was, as you say, only two years into her grade, if I can put it that way -- and I know that nobody's certain that this was ever told to you, I appreciate that -- if that sodium level was communicated to you on the telephone, then it may be that the question from Dr Warde would be: one would question why you didn't direct Dr Trainor to immediately alter the IV fluid therapy to 0.9 per cent sodium chloride.

A. Mm-hm.

Q. It doesn't have to be an alternative to getting the repeat estimation; you can do that as well.

A. Oh, indeed, yes. Point taken. I must say I'd have been inclined to repeat, as you say, but I don't remember being told of the low sodium.

Q. No, I understand you've said that. But how do you

comment or what would you like to comment on the issue that Dr Warde has raised there if you substitute Dr Trainor for yourself?

A. If I was told -- convincingly told -- this is a true hyponatraemia, then my instructions would have been to change to normal saline.

Q. So if she hadn't had a concern about whether it was an artefact or -- but if you were told that?

A. Yes.

THE CHAIRMAN: Sorry. Your answer was:

"If I was told convincingly that this is a true hyponatraemia."

A. Yes.

THE CHAIRMAN: But in order for you to be told that, do you need a second result to confirm that this was not a rogue result?

A. No. It depends, you know. It's always difficult to assess somebody by telephone. So there's an element of trust on the experience of the person that you're speaking to.

THE CHAIRMAN: Yes.

A. You have to take it on what they say. They're on scene and they're relating it to you. If they're convinced this is real, then I would act on -- if there was doubt, I would say repeat. In essence, we did repeat. I'm

getting tied up in hypotheticals.
THE CHAIRMAN: You are a bit. Sorry. You've conditioned your answer that you would have changed to normal saline on the premise that you had been convincingly told that this was a true hyponatraemia.
A. Right.
THE CHAIRMAN: I understood that earlier you said 119 was such a reading that your instinct at that time would have been to get a repeat blood test.
A. Yes, indeed.
THE CHAIRMAN: Does it take a repeat test for you to be satisfied that this is a true hyponatraemia or --
A. If you dot the Is, cross the Ts, yes. But the way information is relayed to you is an important aspect and if it's conveyed realistically and the person who's relaying it to you feels it is real, then I would be inclined to treat and do the repeat as well.
MS ANYADIKE-DANES: If I can give you this --
A. It wouldn't be absolutely necessary if the person who was telling you thought it was real. Yes, I'd say I sometimes would.
Q. Well -- sorry.
MR STITT: I'm sorry, Ms Danes, to interrupt for one moment. Before we move on --
MS ANYADIKE-DANES: I'm staying on this point.

MR STITT: Before we stay on this point, there are two lines of enquiry here. One is directed at Dr Trainor from whom we heard yesterday, and one is directed at Dr McCord.
THE CHAIRMAN: Yes.
MR STITT: They were obviously of different seniorities at the relevant time and the question has been put, quite clearly, on what Dr McCord would have done at the time and he's not being asked to comment on what Dr Trainor did at the time.
THE CHAIRMAN: I think he has commented and what he is saying is he thinks that, insofar as one reads that very carefully worded paragraph by Dr Warde as critical of Dr Trainor, he thinks that's overly harsh: she was outside her box and relatively inexperienced. So I think that that's what Dr McCord has said about the possible criticism of Dr Trainor.
MR STITT: I think, with respect, that's a relevant extract that you have referred me to. May I also repeat the point I made yesterday about Dr Foster? I don't need to articulate that again. And also, Dr Jenkins, whose report is before the inquiry, a consultant paediatrician, came to the same conclusion that the standard practice would have been a repeat electrolyte test.

MS ANYADIKE-DANES: Mr Chairman, I did preface it all by the fact that we had not only Dr Warde's report, but I did say that we had Dr Scott-Jupp, we had Dr Haynes and we had Mr Foster. If you look earlier in the transcript.
MR STITT: And Dr Jenkins.
MS ANYADIKE-DANES: I didn't mention Dr Jenkins, but you had mentioned Mr Foster yesterday and I had specifically included him in the list. Dr Jenkins I would wish to deal with slightly differently because we do have different reports from Dr Jenkins and I would prefer to deal with his evidence in a slightly different way.
But in any event, in terms of the inquiry's experts and the specific expert that the Trust got in relation to paediatrics, I have cited them and I'm prepared to go to their individual comments on this point, but I'm starting with Dr Warde.
So what I was trying to address there with you, Dr McCord, is when you say that if it was a result that was one that you felt that you could rely on, if I can put it that way -- let me ask you in this way: there's a number of results that one can get, one could get -- I don't know that the machine in Altnagelvin produces these results, but we know from experience on other children that you can get a blood gas analysis result, not specifically to test sodium, but a by-product of the

result is it can give you a serum sodium level, which the clinicians have told us may -- and indeed have the inquiry's experts -- that that is not as accurate as getting a laboratory test. Then you can get a laboratory test and that can give a result.
What was available, or would have been available to you had it been communicated to you, is a laboratory test. In terms of whether it was likely to be accurate or not, the only concern about whether it was an artefact is that it was very, very low. One obvious way in which it could have been an artefact is if the blood sample happened to be taken from the same arm as the IV drip was. That would immediately have raised a concern about its level of accuracy. But that's ruled out. It's not. So it's not -- that's not a problem. So the only question mark for Dr Trainor at the time was that she really had never come across a result as low as that and that caused her to wonder whether it was accurate.
A. Right.
Q. So if you're being presented with a result, there is no particular reason to think that it is inaccurate except for nobody can be 100 per cent sure about anything, but leaving that aside, there's no particular reason to think that it's inaccurate. You're given a reading of 119, coming from the lab. What else do you need to know

as to whether that's an accurate result or not? What would cause you to think that it wasn't, if I can put it the other way?

A. Because it was outwith the bounds of expectation -- would that be fair enough way of -- such an abnormally low result.

Q. If you put it in that way, it rather depends on what is the context for your expectation, which is one of the reasons I was putting to you if --

A. Yes.

Q. I'm not suggesting that you would have been told all those things --

A. Sure.

Q. -- but if one saw Raychel's history --

A. Okay.

Q. -- then you might argue -- you might -- that perhaps it wasn't outside the bounds of expectation.

A. Yes, sure. I mean, if this had been an intensive care child who was already in intensive care, you probably would have been more likely to have accepted that result at first, which -- but an apparently healthy 9-year-old, out of the blue, previous normal of 137, within 24 to 36 hours previously. It didn't sort of -- to my mind, it wouldn't have rung true. So you can expect very abnormal results in a context of sick, sick children --

if she had had a gangrenous appendix, you know, that sort of thing, you know -- but given the story: 9 year-old, unremarkable appendicectomy, it does go beyond -- stretch the bounds of belief and makes you query whether the result --

Q. So if you had all that information, then you would have been troubled, as indeed Dr Trainor was, about whether that was likely to be an accurate result?

A. In terms of all the information, sorry?

Q. All the information you've just cited.

A. Intensive care or --

Q. No, you were giving information about --

A. That she was a previously well child? Yes. Yes, I think that would cast --

Q. And if you hadn't had all that information, the information you'd had is that she'd had a seizure, which I think might have been communicated to you --

A. Oh yes.

Q. -- she'd got petechiae, that might have been communicated to you -- in fact, I think that was communicated to you --

A. Sorry, the?

Q. The rash.

A. The petechiae, thank you.

Q. And if you add to that the fixed and dilated pupils,

which might have been communicated to you, and if you add to that the 119 -- so I am really only adding the sodium result to some of the brief details you might have received. If you've got that, is that enough for you to be within this comment that Dr Warde is making, which is if you have that then you arguably should have responded in a way that he's suggesting?

A. All I can say is I'm glad I didn't have to make that judgment call because it was outwith -- I had no decision to take by the time I came on scene. The repeat sample had been taken, you know, so --

Q. Okay.

A. I'm not sure I can help.

Q. I think you have tried to assist as far as you can dealing with a hypothetical. Dr Warde goes on to make another comment and that is -- so that's one thing he's saying you could have done -- you could have altered the IV fluid therapy to 0.9 per cent sodium chloride.

A. Yes.

Q. Then he says something even more radical than that, which is:

"Some would argue that faced with a symptomatic patient with acute, severe hyponatraemia, it would have been appropriate to be more aggressive."

And I took that to mean more aggressive than the

0.9 per cent --

A. Yes.

Q. -- and to commence treatment with hypertonic sodium chloride.

A. Okay. I didn't know the existence of 3 per cent hypertonic saline. And looking back through pharmacy record, neither did the pharmacy stock it. They stocked a 2 per cent and a 5 per cent. My own personal experience of hypertonic saline, as I said before, was of 30 per cent, which was available for oral administration. So I didn't even contemplate -- having subsequently read, I think there are some issues though in terms of rapidity of -- and aggressivity about how much and how rapidly you infuse hypertonic saline in this situation. And there's a wee bit of clarity and a bit of dispute about that.

Q. I understand.

A. But again, it's something that an intensivist would probably be inclined to use more readily and maybe has used it previously compared to myself or Dr Trainor.

Q. Although in fairness to him he's not necessarily saying that everybody would agree with that more aggressive action; he's simply citing that some might have done that.

A. Sure, sure. I'm not disputing that there may not have

been a case for it at some stage, but ...

MS ANYADIKE-DANES: Mr Chairman, I wonder if we might have a short break for the stenographer.

THE CHAIRMAN: Doctor, we'll be back in about 10 minutes.

(12.05 pm)

(A short break)

(12.25 pm)

MS ANYADIKE-DANES: Mr Chairman, firstly, something just to note that although I had generally been asking about "hypotonic solutions", in fact just towards the end of Dr McCord's evidence, we were talking about hypertonic solutions. There was some concern expressed that maybe that would be incorrectly taken down by the stenographer. I've pointed out that to the stenographers, they're aware of it and know the instances where it happened and they'll be checking the transcript to make sure they've got the right fluid and it comes out.

Dr McCord, I had said that I would make a reference to the other reports that deal with that period in fairness. This is Dr Simon Haynes, who's the consultant paediatric anaesthetist. If I could, please, pull up 220-003-018. What Dr Haynes is saying, one sees it starting with:

"Although the attending doctors may have seemed

hesitant to correct the hyponatraemia, it must be remembered that it was of a severity that none of them would previously have seen. Information regarding the correct dose of hypertonic saline would not have been readily available, but I would have expected Dr Trainor to have made some attempt to obtain hypertonic saline to correct the abnormality, even if it meant giving an estimated dose and making serial serum electrolyte measurements."

Then he says, in his view, by the time you arrived, the situation was irretrievable. Leaving aside Dr Trainor's point -- because she addressed that in her comments -- but I would have put to you: had you been told that result, then do you offer any comment as to whether you should have directed or given Dr Trainor guidance to do what Dr Haynes has described here in his report?

A. Hypothetical in the sense that I didn't know of the existence of a 3 per cent hypertonic saline solution at that time.

Q. Yes. There are other instances in Dr Haynes' report where he talks about the speed with which staff responded, so I'm not taking you through each and every element of his report. Those reports are there and people can see them, but I'm dealing specifically with

this particular window of opportunity as some have regarded it and others don't perhaps perceive it as a window of opportunity. The reference to Dr Scott-Jupp's report is to be found at 222-004-014, I believe.

This is Dr Scott-Jupp, who says it was clearly appropriate to do the second blood test. It was appropriate to wait until the repeat result came back before acting upon it and he talks about the risk of acting on a false result and he believes, in his view, that appropriate steps were taken after receipt of the repeat results. I don't think anybody has -- well, there might be some, but in the main I think people regard what was done once those results came back as appropriate.

A. I think my interpretation is that it's unlike comparing like. You know, Dr Scott-Jupp is a general paediatrician presumably working in a district general hospital like ourselves, whereas the criticism initially -- you said Dr Haynes would be an intensivist. We do work in --

Q. Forgive me, I'm not offering any criticism. What I'm trying to explain or have you, the clinicians, explain is what could have been done, what reasonably could have been done and, for some, the explanation might be: we

couldn't reasonably have done that because we wouldn't have known about that, but just to offer the opportunity for you to comment on what some have thought were possible steps that could have been taken.

So then Mr Foster, who is the inquiry's surgeon expert, the reference in his report would be 223-024 -- sorry.

THE CHAIRMAN: It's his original report, is it? 223-002-024.

MS ANYADIKE-DANES: Thank you. It's the penultimate paragraph towards the end:

"In fact, the blood had not been taken from this area."

This is the query that Dr Trainor has, and that's okay:

"The abnormally low sodium was a genuinely low result. She asked the house officer to repeat the electrolytes. This is a standard procedure when a result is very abnormal."

THE CHAIRMAN: And in fact, on the next page, he continues at page 025, if you can bring that up, at paragraph 12.6. It's the opening two lines really.

MS ANYADIKE-DANES: Yes. That is a direct reference to when I said that some have commended the speed with which people responded. Here is an instance of that:

"Like Dr Johnston, Dr Trainor reacted with commendable speed suspecting, as did Dr Johnston, an electrolyte imbalance as a cause of the seizure."

And it goes on to say what her conduct was.

If I then can move on. I would like you to help me, though, with something that you had said in your evidence to the coroner, which is also around this low sodium result. In your evidence at 012-036-171, and it's in the handwritten part. If you're familiar with this, your statement essentially gets turned into the typewritten deposition and the questions that are asked, the coroner then records in his writing the answers that are relevant to the task that he has at the inquest.

A. Mm-hm.

Q. If you look at the last parts of the handwritten part, in fact it's the last four lines really:

"I have seen a lower sodium level of 118 in a child that survived. That level is extremely low, worryingly so."

If you pause with that thought. Also attending the inquest was counsel engaged and that counsel took notes. Those notes have been typed up and they've been provided to us. They tend to give a rather longer description of what was happening, usually including the question. If we pull up the relevant part of that for this, it is

098-034-108. Two-thirds of the way down, there's a paragraph that starts:

"When asked to assess how low a sodium level of 118 was, Dr McCord described it as very low, though he had seen another child fall below this and survive. In Raychel's particular circumstances, 118 was extremely low and worrying."

Then you go on to say something I think you've already said in evidence:

"In cases where symptoms actually develop, it is much more sinister and a concerning situation. He confirmed that, had Raychel survived, she would have suffered serious brain damage."

If we go to the bit where you're talking about you having experience of another child --

A. No, I didn't say I had experience, I said "I have seen". I have not managed a child, you know, and that would have been in discussion with senior colleagues around me, that they had had children, you know.

Q. So do you literally mean that you had seen another child?

A. Probably "have seen" is probably inappropriate, in retrospect, an inappropriate term to use. "I had been aware of" is probably a better way. Sorry.

Q. You have been aware of another child with a result even

lower than that who survived. Did you know what the circumstances of that were?

A. I can't remember the details, but I have a faint recollection it was related to an endocrine issue, a pituitary gland problem.

Q. Had that happened before Raychel's admission or in the intervening period between Raychel and the inquest?

A. I have no way of knowing. I can't remember, you know. That was 2003.

THE CHAIRMAN: Yes. Your evidence at the inquest was in February 2003.

A. I have no way of knowing.

MS ANYADIKE-DANES: And Raychel's death of course was June 2001.

A. Yes. I have no way of knowing, I'm sorry.

Q. Is it more likely one way or the other?

A. Well, thinking back to June 2001, I had no experience of sodiums that low, so I think it's likely it was in that interval, 2001 and 2003, but I couldn't swear.

Q. I understand.

A. Sorry.

Q. Can we come now to the CT scan? In your first witness statement for the inquiry, you say:

"A prompt CT scan was organised."

Who was responsible for ordering that?

A. That is Mr -- I don't know. You would have to go back to -- I think it was paper forms, paper request forms, and that would give you an idea. But I think it was a telephonic request. Whether there was a paper formalised request submitted, I haven't been able to see that.

Q. In any event --

A. Generally, it wouldn't require -- at one time, it would have required a consultant signature to request a CT, but that was 1989, early 90s. By 2001, a junior doctor could request it if it was cited that they had discussed it with a consultant.

Q. Can you help me if this is what it is? 020-025-054. That's for an X-ray of the chest.

A. So ideally there should have been one similar to that, requesting CT.

Q. It would be one that looked like that?

A. Yes, indeed. We've gone all electronic now, you know.

Q. Okay, thank you. But in any event, that is requested. And you go with Raychel; is that right?

A. Yes. I think there was a troupe of us. There would have been anaesthetic staff looking after the airway and we'd have gone down then to accompany Raychel down to the CT and to see the films.

Q. Are you there when that first result appears?

A. Sorry?
Q. Are you there when the first result is received?
A. Um, not -- because I was unaware of the report. I have racked my brain. I don't know what was going on here because I see in my clinical note I have written "verbally normal".
Q. We'll go to that.
A. In my statement around the weekend, I say that she's had evidence of intracerebral haemorrhage. I am at a loss to explain it. The only thing that I can think of --
Q. If you just bear with me. We'll come to that in order -- I just want to put the question, Mr Chairman, if you'll allow me.
THE CHAIRMAN: He thought he was answering --
MS ANYADIKE-DANES: So you can't remember whether you were actually there when the result came through?
A. What do you mean by result? Do you mean the formal reporting? No, no --
Q. When people knew what it showed --
A. Images start to appear, you know. I think I've a recollection of a radiographer to my left side and the images coming through that way. And what I suspect or ... I fancy may have happened is that she passed comment that it looked normal, couldn't see anything. Of course, the images then go to another screen for

formal reporting by someone with the expert eye, and that's all I can say and think about how I picked up that that initially made me write "verbally normal".
Q. So there was a time when, as images are coming through, you're looking at it and trying to interpret, but ultimately, it'll be the radiologist who writes the report?
A. Who writes the formal report and who is the final arbiter because he's the expert eye --
Q. Of course.
A. -- regardless of what I think or see, you know.
Q. Yes. Can we pull up 020-015-025?
A. Yes, there we are.
Q. Somewhere in the middle there, is that your writing?
A. It is, yes.
Q. Can you just decipher what that says?
A. On the ... "Urgent CT scan brain", okay, you can see that around the middle of the page. Arrow, "verbally". N with a circle is shorthand for "normal":
"Fluid restrict/normal saline maintenance fluid [I think] and [arrow down] 40 ml per hour (equivalent to two-thirds maintenance)."
Q. Is the bit further alongside yours as well?
A. Yes. I'm not sure whether that's ...
"Biochemistry [arrow] marked hyponatraemia, low

magnesium."
"MG++" is shorthand for magnesium. At the very bottom then:
"For ICU. For stabilisation/electrolyte correction."
Q. Thank you.
A. And signature there, "BMcC".
Q. In the order of things, does that mean because your reference to the CT scan and what you have taken from it or what you think you heard in relation to it comes above the fluid restriction, is it fair to interpret that she'd gone off for her CT scan before the fluid restriction --
A. No, no, that's just a random order of things. Just a random -- and it doesn't mean any -- there's no sequence there.
Q. Yes.
A. It's just a list.
Q. Can you help me again with from whom you think you heard the term "normal"?
A. It wouldn't be stated in those terms, it'd be probably more in the terms: I don't see anything there. And then maybe I'm extrapolating to interpret that as implying normality. That would be the context. I don't think a radiographer would think it's normal because that

implies -- there's a reporting element, but radiographers [sic], I don't think they'd go as far as that.
Q. Actually, the radiographer in question is Dr Morrison.
A. No, no, it's radiologist.
Q. Sorry. I do beg your pardon.
A. Radiographers are the attendants who position and set up the equipment, who are around for every X-ray. The X-rays are then reviewed by a medical radiologist, who has an expert eye, reads the history form the referral form and gives you the formal report.
Q. And that's Dr Morrison?
A. That would be Dr Morrison, Cyril Morrison.
Q. Yes. Do you get a -- well, let's pull it up. We'll come back to this, but let's pull up his statement. 021-065-155, and can we put alongside of that 156, please.
This is Dr Morrison saying that he made no report of the sort that could have given rise to your comment.
A. Yes, I accept that.
Q. And in fact, we can come to his clinical note. This is the report of the enhanced CT scan. There was a second CT scan done.
A. I wasn't aware of that. I learned of that some time later. I think that was at the request of --

Q. Perhaps more --
A. -- clinicians in Belfast.
Q. -- appropriately we should look at Dr Morrison's clinical note to be found at 020-015-026. There. So:
"No focal abnormality demonstrated. There is evidence of a subarachnoid haemorrhage with raised intracranial pressure. No focal abnormality demonstrated."
She's rescanned again at the question of the Children's Hospital to rule out, as I take it, a subdural --
A. Empyema.
Q. So:
"An enhanced scan was performed. No evidence of a subdural empyema."
So that's his clinical note, but I think you've accepted that the -- if we go back to your note, 020-015-025 -- the information from that did not come from Dr Morrison.
A. No, no. That was written at 06.15.
Q. Can I ask why you wrote anything at all in the notes until the position was clear?
A. I thought it was an appropriate thing to do, you know. I think I would have been in a much more difficult position here today if I hadn't written anything, or

maybe I wouldn't. I'm not sure I understand the context of your question.
Q. In fairness let me give you what you said in your witness statement, 032/1, page 3. It's right down at the bottom, (ii):
"On review, I note I have commented on the CT film being 'verbally normal'. I cannot fully explain this other than to cite possible sleep deprivation, a desire to return to normal duties, and perhaps radiographer's comments prior to formal assessment by a consultant radiologist."
What do you mean there?
A. I thought I was giving an explanation of why I'd written --
Q. Yes, I know, but -- well, can you help us with what --
A. -- recording --
Q. -- "desire to return to normal duties" means as a reason why you'd put that in the medical notes?
A. Sorry, run that question past me again.
Q. This is your statement and I'm asking you to explain what you mean by it. This is all to try and understand why you put the note that you did in Raychel's charts.
A. Yes. Generally, or the note referring --
Q. The particular note that you put. The particular note that you put.

A. The "CT normal" one --
Q. Yes.
A. -- rather than the entirety of the note?
Q. Yes.
A. Okay.
Q. Firstly, you say you can't really explain it. Then you say it's:
"... possible sleep deprivation, a desire to return to normal duties, and perhaps a radiographer's comment before there had been a formal assessment by the consultant radiologist."
A. Mm-hm.
Q. So I'm asking to you to explain how those things lead to you putting that note.
A. I'm trying to explain how I made an incorrect note. Is that not what I'm ...
THE CHAIRMAN: If we take them in order, doctor. "Possible sleep deprivation" is referring to the fact that you've been woken out of your sleep at 4 in the morning and come into the hospital.
A. Yes.
THE CHAIRMAN: The third explanation is that you may have picked up a comment made by a radiographer prior to the formal assessment made by Dr Morrison.
A. Yes.

THE CHAIRMAN: Can I take it that you're speculating on that rather than specifically recalling that that was what a radiographer said --
A. Indeed. I'm only trying to offer an explanation. I can't offer, you know -- I have no logical reason why I would have written that and I'm speculating in retrospect why I did.
THE CHAIRMAN: Then could you help us with the second possible explanation, which is that the explanation may be a desire to return to normal duties?
A. Uh-huh.
THE CHAIRMAN: The point of the question is that it's not quite clear to us what that means.
A. Oh right, right. At that stage, Raychel had been intubated and technically was under the care of the intensivists, ie the anaesthetic colleagues. So general paediatric involvement at that stage then would be back to advisory, you know, and be there to help. But because it's an intensive situation, she has now crossed into -- she's no longer a general paediatric, she's an intensive paediatric. That's what the inference of that was. It meant that my involvement would be able to -- I could recede unless, you know, my anaesthetic colleagues wished me to intervene or offer advice or help.

THE CHAIRMAN: Okay. Thank you.
A. So I would be back to -- I would have perhaps gone to the special care or the neonatal intensive care unit with the prospect of another 48 hours on call I had with the ward round the next hour or two ahead.
MS ANYADIKE-DANES: But given that there was going to be a radiologist's report, would it not have been more appropriate to say that she was having a scan and they're awaiting the report from the radiologist, rather than to record what, at best, might be a comment or an impression before the actual situation on that scan was known?
A. Yes. Own goal. I have no explanation and what you say is fair criticism.
Q. At that stage, the CT scan looked normal; was that view communicated to the family?
A. That I am unsure of, you know.
Q. Sorry?
A. That I am unsure of. I have no direct recollection of that, and again I didn't make any note of speaking to parents in the CT suite.
Q. I don't want to belabour it, but it's obvious if something like that is written when the child is in an extreme situation, anybody reading those notes who's trying to give some information to the family could

completely misinterpret the situation.
A. Sure, yes.
Q. What at that stage, leaving aside that point, did you regard as the prognosis for Raychel?
A. In terms of altered outcome?
Q. Yes.
A. Balance between brain -- head and heart.
Q. Sorry?
A. It's a balance between head and heart. My heart [sic] told me this was a bad situation, you know, symptomatic hyponatraemia, a seizure, raised intracranial pressure potentially. And on the other hand, my heart [sic] said, "Well, you know, years of working with children have taught me humility in the sense that children are resilient and children do make miraculous recoveries". In essence, the only way you know a child is going to die is if you're doing CPR at the time and they're not responding. That's the only time I think you can say with confidence that the outlook is hopeless. So a lot of mixed emotions at that time and a balance between head and heart.
Q. What did you think at that time was the cause of Raychel's condition?
A. At what time, now? Because ...
Q. Round about that time when you're making that note and

you're thinking that you might be going off to your other duties.
A. Um ... I'm not sure that I think of it in terms of what was the cause. I mean, certainly we had the electrolyte imbalance, the severe ... We didn't have a structural cause, you know, a tumour, and by that inference, you know, whenever I wrote that note I obviously didn't think there was a bleed or otherwise, so I must have been quite muddled.
Q. Sorry?
A. I must have been quite muddled at the time because I didn't have an underlying cause, and that would make you think then, you know, the low sodium was the primary condition rather than secondary.
Q. So you might have thought at that stage that the low sodium was the primary condition?
A. Was the primary thing, you know.
Q. I appreciate things have moved quickly, but if you have got at that stage to thinking that the low sodium was the primary condition, had you thought on as to how she could have got a low sodium?
A. I suppose syndrome of inappropriate ADH would be a primary driver even though I have no experience or didn't associate it with post-op surgery cases, you know. It had to be a runner because that's what our

experience had been in other cases.
Q. Anything else?
A. I was not aware of any other causes particularly. Certainly around the issue of IV fluids we had not seen this degree of hyponatraemia, so I didn't think it was an IV fluid-related phenomenon.
Q. If you start with this is being prompted by a inappropriate antidiuretic response --
A. Yes.
Q. -- and the release of that otherwise normal hormone. If you start with that and then if you recognise that actually for a period of over 24 hours, really, she'd received possibly higher than a normal maintenance rate or actually higher than a normal maintenance rate of low-sodium fluid, is that not likely to exacerbate the problem? The SIADH is causing her to retain water.
A. Mm-hm.
Q. Then you're giving her an above maintenance level of low-sodium fluid --
A. Mm-hm.
Q. -- over a prolonged period of time --
A. Yes.
Q. -- does that not exacerbate that?
A. In 2001, that would not have -- I wouldn't have been thinking with that sort of mindset at all.

Q. But in terms of the logic of it.
A. Oh, the logic, yes. Retrospectively now, yes, absolutely.
Q. In fact, if it had been put to you in 2001, you can see the logic of that?
A. I can and I think Dr Sumner did at the coroner's inquest, you know, did make that quite a --
Q. Dr Sumner was able to explain that particular mechanism in 1996 when he was looking at Adam's inquest.
A. Absolutely.
Q. So that's where you might have got to in terms of what was wrong with her.
A. Mm-hm.
Q. In terms of prognosis, what you have sort of said is you never rule anything out until it absolutely is ruled out. Is that --
A. I think that's ...
Q. That might be what you think, but I'm now going on with your communications with the family. Dealing with the family, who's perhaps wanting to cling on to any suggestion that their child might survive through all of this, that might require a different approach, lest you make matters worse by giving false hope.
A. I would try not to withdraw hope.
Q. Try not to withdraw it?

A. Unless I was 100 per cent certain or as certain as I could be, you know. In some circumstances, it could be considered that if I got it wrong, that there was some precious time there with the child who you thought was going to recover, but didn't. At least in retrospect you might look back and say, "At least I had those hours". It's a ... It's probably a slanted view, I'm sorry about that, you know, but ... I would try not to withdraw hope.
Q. I understand. You met the family.
A. I did. I remember two ladies in Ward 6, is my recollection, at the end of Ward 6, before the CT.
Q. Before the CT?
A. Yes, that would have been.
MR QUINN: I wonder if I might interrupt here? I'm certainly confused by the answers that were given in the last 4 or 5 minutes. If one looks at page 35 of the [draft] transcript in relation to the inappropriate ADH issue, the witness says that:
"I did not associate inappropriate ADH with surgery. I had never, ever -- and I think this was novel and news to me in 2001 and I think if you'd have asked a group of general paediatricians, if they were honest, they would probably have, you know, and [et cetera, et cetera]."
From that answer, it seems to me that the doctor is

saying that he didn't have any knowledge and he was surprised when he related inappropriate ADH with this surgery and Raychel's condition. But what he seems to be saying, arising out of the last set of questions, when he was asked, "What did you think was the cause?", and, "I took that at the time ...", he's then saying: well, I appreciate she was very unwell and that she had inappropriate ADH and that would be the primary driver, his words were. So I'm a little confused about what he's saying at page 35 of the [draft] transcript and what the witness is now saying and I'd much appreciate an explanation and some clarification.
As an aside, he also said in relation to the heart and the head, he's used "heart" twice where I think he should have used "head" and that might also be tidied up in the same set of questions.
MS ANYADIKE-DANES: Can you help with the first?
A. On the issue of the inappropriate ADH, I had no contextual idea of that. It doesn't mean to say I didn't believe it could happen, but I had not linked it in anticipation the way I would with meningitis, say. That's the point I want to make. I didn't say it couldn't happen, I just had no conscious idea about it.
MR QUINN: I appreciate that, but quite correctly, my learned friend was asking, "What did you appreciate was

happening at that time?", and that's where I'm confused. I realise now that you're saying: yes, it is inappropriate ADH and perhaps with better knowledge, more hindsight, I might have connected it up, but at that time you didn't. But it seems to be that latterly, sir, you're saying that you did connect it up, and I'm a little confused about when you made that connection.
A. Presumably because ... Counsel's question at that time, trying to -- I didn't specifically think of finding a specific cause for it, but you know, if asked at the time that's what I would have probably thought about.
THE CHAIRMAN: Just to get it clear, because when Ms Anyadike-Danes started to ask you about what did you think was the cause, you said:
"I must have been muddled, I didn't have a primary cause. I might have thought it was low sodium brought on by inappropriate ADH."
Although Ms Anyadike-Danes was asking you what you were thinking at the time, in that sequence of answers is that a narrative of what you thought at the time or is that bringing hindsight into it? Sorry, to put it more specifically: are you telling us that you remember at the time thinking --
A. No, no, no, no.
THE CHAIRMAN: -- this is low sodium brought on by SIADH?

Ms Anyadike-Danes wasn't trying to get you to speculate; she was trying to see if you could help us with what you did think at the time. If you're not clear that that is what you thought or if you did --

A. I'm not sure that I necessarily thought in those terms at all. So I think ...

THE CHAIRMAN: In fact, her questioning was specifically relating to what you were thinking at 6 o'clock in the morning.

A. I honestly don't know. I'm sorry.

MS ANYADIKE-DANES: Well, what you did know by that time is that it was confirmed she had a very abnormally-low serum sodium result. You knew that.

A. Yes.

Q. By that time you had had an opportunity, as others had, to look at her charts. You knew that she'd had a seizure, you knew her pupils were fixed and dilated, she was afebrile. You knew all those things. And I think when I started that line of questioning, your answer was that you had begun to think or did think that the low sodium was probably the primary cause as opposed to the secondary cause, which was another option. If we just start with that.

In 2001, if you're of the view or were of the view that possibly the low sodium was the primary cause --

A. Sorry, the low sodium?

Q. The low sodium was -- as opposed to secondary. The low sodium --

A. The low sodium? Not the primary cause. You know, I mean --

Q. You had previously been unsure whether something had caused the low sodium --

A. Yes, the low sodium was a primary or secondary problem. The way the question was phrased there --

Q. Yes, sorry. So we've got the low sodium as a primary --

A. That is because there was no structural abnormality. I suppose we couldn't exclude meningitis per se, but --

Q. Exactly, exactly. So if you've got yourself to that point of reasoning, if I can put it that way, then in 2001 what did you regard as the cause for that condition? Why would she have it?

A. In 2001? Inappropriate ADH would be a possible cause, although I hadn't linked it in anticipation senses, and that's where counsel's question came from.

Q. Just to be clear, could you have known that in 2001?

A. Could I have known ...

Q. Sorry, let me phrase it slightly differently. In 2001, did you have enough awareness to be able to form a view that the low sodium might be related to inappropriate antidiuretic hormone syndrome?

A. Yes.

Q. You did?

A. Because we were aware of the syndrome of inappropriate ADH in other circumstances.

Q. So you did have that information. Let me move to a direct point: in the early hours of that morning when you were faced with recognising that Raychel did have very low sodium, did you at that stage consider the possibility of SIADH?

A. At what point, sorry?

Q. 6 am.

A. 6 am? In terms of what advantage would that be to me or where, you know ...

Q. Just as part of why Raychel had got to where she was.

A. I think that is a distinct possibility, yes.

Q. You did think that?

A. Yes.

THE CHAIRMAN: Sorry, you thought it was a possibility it explained what had happened to Raychel or you think it's a possibility that that is what you were thinking about?

A. I think a possibility of what could have happened to Raychel, yes.

MS ANYADIKE-DANES: Thank you. Then what I built on to that was, just so that we're clear about that: if you had got that as a possibility and how that could have given rise

to that condition is because it operates so as to retain water in the body.

A. Right, okay.

Q. And by that means, dilute the sodium in the body; that's correct, isn't it?

A. Okay.

Q. Sorry, not okay. Do you --

MR STITT: May I interrupt for one second? The witness has been giving evidence for three hours now with one 10-minute break. It's my judgment, for what it's worth.

THE CHAIRMAN: Sorry, he hasn't. We didn't start until 10.30 this morning.

MR STITT: We didn't.

THE CHAIRMAN: So it's just over 2.5 hours with the 10-minute break. If you're going to come to the point that the witness might be tired and confused, this series of questions, while I understand why it's being asked, is rather difficult to get an absolutely clear answer to because it's asking a witness in 2013 what he might have had in mind at 6 o'clock in the morning when he was very tired on 9 June 2001.

It does also seem to me that, at best, there would have been a degree of uncertainty about what he was thinking at that time. And I think any uncertainty on the part of Dr McCord in answering these questions is

a result of that combination of factors, not because he's particularly tired just now.

MR STITT: I understand that.

MS ANYADIKE-DANES: Thank you, Mr Chairman.

There's just one last point. You have answered, but I want to clarify now you have been asked to go back.

If we're still in 2001, if you've got that idea that the ADH could have been part of the reason why she has the low sodium because of the mechanism that I put to you, which you haven't rejected, then what would you have thought would be the contributory effect of administering to her, over a period of over 24 hours, a low-sodium solution at a rate above her maintenance level?

A. I couldn't quantify the portion, but it would be better -- I think what I would say is it would be unhelpful.

Q. It could have -- well, unhelpful in the way that it could have been a contributory factor?

A. Might have been a -- it could have been a contributory factor, yes. But which portion was the major, syndrome of inappropriate ADH or fluid, is open to debate.

Q. In fairness to you and so that we're clear, that connection is a connection you could have made in 2001?

A. In terms of the fluid itself, the quality of fluid,

I wouldn't have been of a ready mindset to accept that because past experience had shown, in my impression, that it was a safe fluid. So I would have been more reticent to accept criticism of it, you know, or somewhat reticent.

Q. Then if we go to the family, that's where we were. You said you remembered speaking to two ladies.

A. Yes.

Q. Were you aware that one of those ladies was Raychel's mother?

A. I thought it was mum and auntie, I thought.

Q. Can you recall what you told them?

A. In no detail, but I think I may have outlined what had happened about the history -- not the history, but what happened with the seizure. We weren't sure what was going on, we were going to get a CT, and we had queried things like meningitis and antibiotics. I may have mentioned about low salt as being a contributory factor and we were trying to correct that. In essence, I think I tried to tell them that we didn't know exactly what was going on and we were correcting what we could at that time.

Q. If we can pull up Marie Ferguson's statement. It's 012-028-146. It says:

"I did not see [almost exactly halfway down] Raychel

until about 4.50. In the interim, a Dr McCay [who subsequently has been corrected to 'Dr McCord', so it is you they are referring to] told Raymond [that's Raychel's father] and I that Raychel was seriously ill and, when we saw her, we were advised that she would be going for a CT scan. She had the scan and Dr McCay told us her brain was clear and that if he could get her sodium [they have given evidence about this previously and 'get her sodium down' [sic] is what should be inserted in there], it would be better."

Are you aware of giving them that sort of information or giving Raychel's mother that sort of information?

A. I can't remember meeting dad or -- I have no recollection. I remember the two ladies, but I can't remember dad. I cannot remember.

THE CHAIRMAN: I am quite sure that you don't remember this word for word and I'm not sure that Mrs Ferguson would say she remembers it word for word. Would you agree with the gist of what Mrs Ferguson says in her statement about what you said to her? Or is there something there which you doubt whether you said to her?

A. Um -- just about "sodium would be better", almost -- that promises cure.

MS ANYADIKE-DANES: Sorry?

A. The terminology, "if we could get her sodium, it would be better".

Q. I think what she meant to say is "sodium up".

A. Yes. That sounds almost like a promise of a cure. I would maybe couch -- if I was saying it, which I stand, you know, open that I can't remember and I have made no record. "It would be better for Raychel" perhaps would be the terminology we'd use, whereas saying this would cure her, that would be a bit foolhardy.

Q. Leaving aside the detail of the actual words, if I can put it that way, would you have given the sense that she'd had a CT scan and that seemed to indicate that the brain was clear or something positive, if I can put it that way, about the CT scan? Are you likely to have relayed that?

A. If I was of the notion that it was clear, I would have no reason to withhold that.

Q. You seem to have written that it was normal in your notes.

A. Yes. I'm not sure in that interval, you know -- you could lead me anywhere, I honestly do not know. I'm sorry.

THE CHAIRMAN: I think, to be fair, Ms Anyadike-Danes isn't trying to lead you anywhere, Dr McCord. If we look at

that in bits, the first bit was -- well, it's quite realistic that you would have said to her that Raychel was seriously ill.

A. Yes. I'd hope so, yes.

THE CHAIRMAN: Then, that they were advised that she would be going for a CT scan?

A. Mm-hm, yes, indeed.

THE CHAIRMAN: It's possible that you did tell them that Raychel's brain was clear because that's the impression that you seem to have recorded in the notes at the time. That's a mistake, but there it is. And if the doctors could get her sodium up, it would be better. That doesn't say that she would be better, but would it not have been better if her sodium level was raised?

A. Yes, indeed it would be.

THE CHAIRMAN: So is there anything that Mrs Ferguson has recalled in that statement which jars with you or suggests that she's got her memories wrong on this?

A. The generality -- it's just the specifics, you know, in terms of what the ...

THE CHAIRMAN: Thank you.

MS ANYADIKE-DANES: And then she goes on to say that:

"Raychel was not responding to me and did not even know that we were there. Dr McCord said that Belfast had requested another scan and this was done. He said

they saw a trickle of blood on the outside of her brain and, once a bed was free, Raychel would go to the Royal Victoria Hospital. In the meantime, she went to intensive care in Altnagelvin."

Do you remember anything about a trickle of blood?

A. No, I didn't know a second scan was performed.

Q. You didn't know the second scan had been performed?

A. Which had been requested by Belfast. I didn't know about that.

Q. Just bear with me a moment. The second scan is the one that rules out the haemorrhage. It's actually the first scan where it is thought that that is seen. In fact --

A. Sorry, is that saying that Belfast had requested another scan? I am sorry.

Q. Let's stick to the -- I had asked you about the "trickle of blood" point.

A. Sorry?

Q. Do you see there?

"Dr McCay [which should be 'Dr McCord'] said they saw a trickle of blood on the outside of her brain."

Leaving aside some confusion about whether that is being relayed to her as part of the first or the second scan, her view seems to be that somebody told her that, as a result of a scan, a trickle of blood had been seen. You were only there, as I understand your evidence,

in relation to the first scan. I think you said you didn't even know the second scan had been carried out.

A. [Inaudible] second scan.

Q. It's the first scan where Dr Morrison, when he writes in Raychel's notes, says:

"There is evidence of a subarachnoid haemorrhage with raised intracranial pressure."

Is that consistent with anybody thinking that they might have seen the presence of some blood in Raychel's brain? That description from Dr Morrison, is that consistent with believing that there is some blood in Raychel's brain?

A. Yes, indeed.

Q. So that is something that came out of the first CT scan. Therefore, is it possible that you conveyed to Raychel's mother that they had seen some blood in her brain?

A. That would require two separate -- I couldn't tell them that the scan was normal and tell them that the scan was abnormal at the same time.

Q. Is it possible that you told her anything about blood being seen on her brain?

A. It is possible, yes, because there was a formal report saying that there's haemorrhage. In my deposition to the coroner and in my early statement, I had a belief that there was haemorrhage.

Q. So that is information that you might have communicated to them?

A. Yes, I think -- yes, indeed. But that would have required two -- I can't remember two --

Q. No, I understand that. If there was some sort of haemorrhage in her brain, I don't suppose anything happening in the brain is good, but is that something that in your view you would hope could be addressed?

A. It depends on the cause of the bleed.

Q. But to see the presence of blood, a haematoma or something of that sort in the brain, is that something that you might have thought, subject to what the neurosurgeons would say or anybody else with greater expertise in that field, is that something you might have thought could be addressed?

A. Yes, it would be reasonable enough to expect that a neurosurgical assessment or discussion with the neurosurgeon to review films --

Q. If that's what's causing the problem, although not a good thing to have, it might be preferable to raised intracranial pressure that leads to coning and the brainstem herniation is what's causing the problem. The bleed would be preferable to that, would it not?

A. Let me hear that question again, sorry.

Q. None of these things are very good to have in an child's

brain.
A. No, they're not.
Q. But to think that actually the problem might have been that there was a bleed in the brain as opposed to the problem might be coning, might it not be preferable to have the bleed in the brain which might be addressed?
A. But coning isn't specific to bleeding or cerebral oedema. It can happen -- anything that raises intracranial pressure, whether it's from blood or from tissue swelling or from hydrocephalus, say.
Q. Yes, but to address the bleed would be to address the intracranial pressure? If it could be addressed.
A. If it was bleeding on its own, but I mean, there's no single -- it's not like there's a clot there.
Q. I understand. Did you, at the stage when you left, feel that Raychel was going to be transferred to the Children's Hospital?
A. That was my impression, yes. By virtue of the fact that she was intubated.
Q. Was it your impression that because she was just so ill that's where she inevitably would have to go or was it your impression because that had actually been discussed amongst the clinicians?
A. My impression is that that was a discussion that was to take place between the other specialties, the

anaesthetic surgeon and the neurosurgeons.
Q. You mean to take place, in other words to see whether they had a place for her?
A. Stabilise in ICU, discuss with neurosurgeons, and removal to paediatric intensive care then.
Q. And do you know who was leading that discussion with the Children's Hospital?
A. I didn't specify -- I assumed it was a decision that was made between my anaesthetic colleagues and the surgical colleagues.
Q. Dr Nesbitt perhaps?
A. Perhaps, or it could have been the on-call surgeon. That would have been equally acceptable. But I thought at that stage, you know, paediatric involvement was terminating.
Q. Just to be clear, that's what you thought was going to happen?
A. Yes.
Q. But you're not saying, are you, that you were present when any of that discussion was going on, that's just what you thought?
A. That was my impression of what the next few hours were going to be for Raychel.
Q. Did you have any impression as to what was going to happen or what they hoped would happen when Raychel was

transferred to the Children's Hospital?
A. I don't know. Again, neurosurgeons do surgical things. I don't know.
Q. Well, did you know that there was going to be some discussion with the neurosurgeons?
A. I didn't know, but that was the impression that there was going to be, but I didn't know for definite.
Q. Was that because there'd been some discussion that there might be a surgical approach to Raychel's condition?
A. I don't know. I would think there would be the hope that that might be the case, but equally it would be useful to have a neurosurgical review of the images to assess what their thoughts would be on causation or otherwise.
Q. Yes. When you spoke to the family, given that these were your impressions -- and you've put it no higher than impressions -- that at some stage there'd be a discussion between some of the senior clinicians treating her and the neurosurgeons in the Royal, in your view, that would lead to her being stabilised and ultimately being transferred to the Children's Hospital. That's what thought was going to happen.
A. Sure.
Q. Did you communicate that to the family so far as you're aware?

A. I have no recollection of that, I'm afraid.
Q. Well, if that was your impression and you were speaking to them at all, is it likely you would have communicated that?
A. It is possible. It is possible, but I have no recollection.
Q. The reason I've asked you this is because of the understanding or the impression that the family had.
A. Sure.
Q. If we pull up 020/1 at page 19.
THE CHAIRMAN: Sorry, witness statement?
MS ANYADIKE-DANES: This is a witness statement, sorry. This is Raychel's mother's witness statement. Right up at the top under B:
"What did you understand by Dr McCay's [sic] description of the brain being clear? I remember him saying her brain was clear but Belfast saying they needed another scan. My sister was there, Kay, and I recall me saying to her: thank God, Raychel's brain is clear, she will be all right."
THE CHAIRMAN: And as you'll see from immediately below that, at C, that Mrs Ferguson took reassurance by what you said to her and the gist of this point, doctor, is whether Mrs Ferguson was to any degree given some false or unrealistic hope about what might happen to Raychel.

A. I have no recollection, I'm sorry. I hope it would not be my intention to deliberately mislead or otherwise.
MS ANYADIKE-DANES: I'm sure that's so. Can I put it to you in this way: on the basis of the information that you actually had, what you actually knew, if you did convey that impression, do you think that it was inappropriate to do that?
A. Hindsight's a wonderful thing, you know. And as I've already said to you before, I try and favour realism, the head, with the heart and try and give some hope. How that is perceived by the recipient, ie Raychel's mum, I can see it could be, you know ... I have no recollection, but I accept that, you know, I could have ...
Q. Sorry?
A. I accept that I could have, you know, but I would hope I wouldn't have given it in forthright terms, in terms of a promise or anything like that.
Q. I don't have very much more for you, Dr McCord, but in the scheme of things, it would be helpful perhaps if we could conclude your evidence before we break for lunch. We'll see if that can be done.
THE CHAIRMAN: Does this not involve the 12 June meeting?
MS ANYADIKE-DANES: It does. There is one issue before we get to the 12 June meeting. Let's deal with that.

THE CHAIRMAN: That's why I think it's a bit unrealistic for Dr McCord to finish. I agree with you that it would be better for Dr McCord to finish before lunch, but I think there's probably up to another half hour left here. Let's break until 2.15.
I expect, doctor, there's probably maybe another half hour or so left in questioning.
MS ANYADIKE-DANES: Yes.
THE CHAIRMAN: Then Mr Makar is here somewhere, is he?
So, doctor, if you're content, we'll break now so everyone has lunch for about 45 minutes. We'll be back at about 2.15, we'll finish your evidence and then we'll conclude Mr Makar this afternoon.
MR STITT: Mr Chairman, might I just draw one point to counsel's attention? It could be relevant to the false hope point, before we move away from it, and it's a very, very brief point.
Our understanding of the evidence was that a scan was performed at Altnagelvin and a second scan was requested by the Royal.
THE CHAIRMAN: Yes.
MR STITT: And at Altnagelvin they thought that, in relation to the scan, there might have been some form of haemorrhage. But it wasn't all bad news on the first scan because Dr Morrison, who's the radiologist, said at

his -- can we just pull this up very briefly, sir?
THE CHAIRMAN: Yes.
MR STITT: Witness statement 036/1, page 2. If we could highlight paragraph 2, numbered paragraph 2. The first paragraph:
"I was subsequently informed [this is the radiologist] by Dr Nesbitt that the neurosurgical unit at the Royal had requested a repeat enhanced scan to rule out a subdural empyema. I queried this request was theres of no evidence of fluid collection on the initial scan."
This is the radiologist actually wondering was it even necessary to have a second scan. So I'm wondering was the picture just as bleak after the first scan?
THE CHAIRMAN: At least in terms of fluid collection.
MR STITT: Because we know the problem was fluid collection:
"The bright surface of the brain [according to Dr McKinstry] was misinterpreted as blood when in fact it was abnormally bright because the extra fluid inside the brain makes the inside of the brain look duller."
That's the artefact that's brought about. It does seem to me that there was a ray of hope here -- and that is my expression, it doesn't appear in the evidence anywhere -- and it's not quite as bleak with the first scan. I'm trying to set the scene whereby it's possible

that there was an element of hope that they felt things were maybe not that bad, especially if a haemorrhage is one of those matters which is amenable to a surgical intervention, if that was the other problem at the time.
THE CHAIRMAN: Thank you. We'll come back at 2.15.
(1.31 pm)
(The Short Adjournment)
(2.15 pm)
MS ANYADIKE-DANES: Mr Chairman, where we left off was Mr Stitt referring to the first CT scan and I think his expression was, "it's not all bad news". In fact, I think it may not be quite as straightforward as that.
Firstly, let us pull up 020-105-026. At the top, what is the entry in the notes in relation to the first CT scan:
"There is evidence of a subarachnoid haemorrhage with raised intracranial pressure."
And then it goes on to say:
"No focal abnormality was demonstrated."
Dr Morrison produced his own report, as so many of the clinicians were asked to do, to Therese Brown, who's the Trust's risk management coordinator. The date of that is 6 December 2001 and one can see it at 021-065-155. He's there setting out an account of what he had to do. In the second paragraph he says:

"I was requested to perform an emergency computerised axial tomographic examination of this patient's head at approximately 05:30 on the morning of 9 June 2001."

That's the first CT scan:

"The examination revealed evidence of cerebral oedema, with obliteration of the basal cisterns, resulting in raised intracranial pressure. Enhancement of the meninges suggests an associated subarachnoid haemorrhage. Preservation of the normal grey-white interface was noted. This examination was image interlinked to the neurosurgical centre at the Royal Victoria Hospital."

The next paragraph deals with what was seen on the second one, where they were asked to do a repeat examination to "outrule a possible subdural empyema". The entry was outruled. The inquiry, as you know, had expert neuroradiologist, Wellesley Forbes, report on this. His report is at 225-002-005. That was not his report, but that's where it deals with this particular section. You can see just there:

"Emergency CT of head. There is evidence of subarachnoid haemorrhage with raised intracranial pressure. No focal abnormality demonstrated."

So he is dealing with that first entry into the

notes and he says:

"Mr Morrison's written report correctly draws attention to the raised intracranial pressure, but erroneously considers the presence of a subarachnoid haemorrhage."

Then he goes on to deal with that error. But there is no doubt, Mr Chairman, from the short note that was entered into the notes from the description of what he saw that's recorded in Dr Morrison's statement in a letter form to Therese Brown, or from the consideration of that short note from the inquiry's expert, that what was being seen on that scan was raised intracranial pressure. If one goes back to the elaboration of what all that meant in Dr Morrison's report, one can see that what that meant was an obliteration of the basal cisterns and that's what resulted in the raised intracranial pressure. So that was a very serious result to receive indeed in relation to Raychel. The only reason for going through all that -- we'd have gone through it at some point -- but the reason for doing it at this stage is the suggestion that that first CT scan should have given some hope as to the status of the pressures inside Raychel's head.

If I may, though, ask you, Dr McCord, because obviously you're not party to all of that, you wouldn't

have known all of that. As I understand your evidence, you were about when the first CT scan was coming off and the radiographer was looking at it.

A. Mm-hm.

Q. As I understand your evidence also, you didn't really have any direct communication with Dr Morrison to know what his view of that scan was and you didn't even know that there was a second one and what that might have shown; is that fair?

A. That is correct, yes.

Q. What Raychel's mother has said in her statement as to what she understood was the information that she was getting from you really goes to two points, and you yourself identified it. One is the clear point, the brain looked clear, and the next is to talk about a trickle of blood. I take it that if the brain looked clear, the radiographer wouldn't be commenting in that way, if that's what you overheard, if at the same time one could see a trickle of blood. Those two things, as I think you said in your evidence, are not consistent with each other. So if you're discussing with the parents the brain looking clear and also giving them some information in terms of the trickle of blood, does that suggest that you might have had two conversations with them?

A. I think it's the only way that it could have happened. In the same conversation -- you wouldn't say the scan's clear and in the same conversation say it's got abnormalities on it.

Q. Yes. So if you'd had the two conversations -- you have helped us a little bit with how you might have got to the first one about the brain looking clear after the scan. In terms of the second one, if that's not something that came at the same time as you were viewing things with the radiographer, do you know how you could have actually got that information?

A. I have no idea. I suppose there are a lot of people going around, junior staff, nursing staff. So I could have learned it from any of those, you know. Not necessarily directly from the radiologist or the radiographer.

Q. No. So it might be something that somebody in the presence of Dr Morrison has heard said and you have got that indirectly, if I can put it that way, and then had a further conversation with Raychel's mother and given her that kind of information?

A. Yes.

Q. In any event, I think you have acknowledged the difficulties on giving parents information of this sort, which can be misconstrued at a time when they're in

a very fragile state in terms of their daughter's condition.

A. Yes, you have to remember that the medical staff are in a fragile state too. It's not an easy state to be in.

Q. I'll move on to the meeting of 12 June, but can I just ask you this question: who did you think would ultimately sit down with Raychel's parents and explain what had happened and what, in their view, was going to happen?

A. I would have hoped, because Raychel had a surgical admission and had a surgical responsible clinician named on her -- at some stage, I certainly didn't expect it immediately. It'd have been great if they had been there, you know, to offer support to the family and to ourselves, but I thought at some stage that they may have taken that -- I would hope, on the paediatric side, if the roles had been reversed, we do invite parents back for debriefing -- I can't remember the technical term -- but for debriefing and discussion around sudden and particularly sudden unexpected deaths.

Q. Yes. When you said it would have been great if they had been there, by "they", do you mean --

A. Sorry, the surgical team.

Q. Let me be clear about that. Some members of the surgical team were there. A JHO was there, that was

Dr Curran. Then Mr Zafar, who's the SHO, was there. Mr Bhalla, who's the surgical registrar, he was there. So do you mean her consultant?

A. Ideally it would be the most senior person, so I think -- I would not expect a paediatric registrar to counsel parents in this very delicate situation. I would have anticipated that it would have been a consultant-level discussion.

Q. At some stage, perhaps before Raychel was actually transferred to the Children's Hospital, would it have been your expectation that Mr Gilliland would actually have come?

A. No, I wouldn't have expected that because things were fairly finite. She was going to adult intensive care and she could have been gone to PICU within half an hour. So it would be unrealistic to expect him to be here.

Q. Would you expect him to have been told that his patient was being transferred to the Children's Hospital?

A. Speaking personally, I would have liked to have known had the roles been reversed, so if I can answer it that way, yes, as the clinician responsible, with my name attached to that patient, I would like to have known.

Q. Through force of circumstances, other consultants from other disciplines have actually come to render

assistance to Mr Gilliland's patient. You're there as a consultant paediatrician, Dr Nesbitt's there as a consultant anaesthetist. Given that you're actually now -- as I say, through force of circumstance -- treating his patient, did either of you think that perhaps you ought to tell him that once you have treated his patient and matters have stabilised, that you ought to tell him what has happened and your involvement with his patient?

A. Not at the time. In retrospect, I think it would have been a courtesy for us to do that, so we failed on the communication. I suppose we kind of presumed it would have gone up the chain of command, through SHO, registrar, that way, because that's the way information of that delicate nature would be received by us.

Q. I can see from what you are saying that you might have thought that his own team would let him know, but consultant to consultant, you had rendered assistance to his patient in very serious circumstances.

A. In retrospect, we should have done.

Q. Leaving aside what would be the convention now, but in 2001, are you saying that you would have thought it appropriate if you had told him that?

A. In retrospect, yes. I think either myself or Dr Nesbitt should have given him a ring at some stage.

Q. If the roles had been reversed, would you have expected him to tell you?

A. Yes, indeed. I would have thought that that would be good to know if another clinician had been looking after my patient.

Q. And then at some stage, assuming you had been told, you might have expected him to take the responsibility of sitting down with the family?

A. I would have expected that. Again, I don't know how surgeons work, but certainly in the paediatric -- from personal experience, that's the way I would have taken ownership of it.

Q. I don't know if you've been in that situation when a patient of yours -- I suppose you might have -- has gone to the Children's Hospital, but would you have expected there to have been a communication between the consultant who was now going to be Raychel's named consultant in the Children's Hospital and Mr Gilliland as her named consultant in Altnagelvin?

A. Those sorts of lines of communication were a lot more fractured. We didn't automatically get notified, consultant to consultant, if there'd been a bad outcome. Often it would filter back -- more often through either junior staff, junior medical staff or nursing staff who'd been making enquiries and we were informed that

way. But ultimately, you would get, you know, from time to time, letters detailing the thing, but not every admission. It has improved of late, but we didn't always.

Q. Yes. Then before the break for lunch, I had asked you about what you thought Raychel's condition and prognosis was going to the Children's Hospital.

A. Sure, sure.

Q. And I think the upshot of it was you weren't prepared to rule out all possibility that something could be done for her there.

A. Yes.

Q. Those aren't the words you used, but does that capture it?

A. I think that's right. I didn't remove all hope. We had a situation where the sodiums were low. If the sodium was corrected, would that have made a difference, you know, on the background of children being notoriously resilient.

Q. Did you have any communication with the Children's Hospital to find out what had happened?

A. No.

Q. Did you know the Children's Hospital's view of Raychel's condition and what had led to it?

A. No.

THE CHAIRMAN: Sorry, doctor, at what point are you asking this question?

MS ANYADIKE-DANES: At any point after her transfer.

A. No.

Q. For example, can I pull this up for you? This is an attendance note that the coroner made of a conversation that he had with Peter Crean, who was a consultant anaesthetist in the paediatric intensive care unit in the Children's Hospital. 012-052c-275. This is a conversation that appears to be prompted by Dr Crean's enquiry because Raychel's parents want to speak to him. But the bit that I want to draw your attention to is the last three lines. This is Dr Crean's view:

"He said that there was mismanagement of this case in the Altnagelvin Hospital. She was admitted to have her appendix out, but in fact the appendix was normal. The fluid balance was the key to why her condition deteriorated [and I think that must be], dilutional hyponatraemia."

Were you aware of that view coming from the Children's Hospital?

MR STITT: The same question has been asked in a different form and the answer was in the negative. Secondly, even if this witness was aware of that it, respectfully, doesn't take us any further.

THE CHAIRMAN: It might take us further. It might take us into the critical incident review meeting, which was held on 12 September, if Dr --

MR STITT: 12 June.

THE CHAIRMAN: 12 June, so it might take us into that if Dr Crean's view had been expressed or had been picked up by anybody in Altnagelvin before the critical incident review.

MR STITT: That's a fair point, sir. I take that point.

THE CHAIRMAN: Thank you.

MS ANYADIKE-DANES: Thank you.

Had that communicated itself at all?

A. No. The first terminology I can remember of "dilutional hyponatraemia" was Dr Sumner's use of the term.

Q. But if we leave out the reference to dilutional hyponatraemia and deal with what apparently is being recorded as Dr Crean's view that there was mismanagement of this case in the Altnagelvin Hospital, is that anything that you remember emanating from the Children's Hospital?

A. No, no.

Q. Then if I can pull this up: 023-021-048. This is an e-mail that Stella Burnside, the chief executive at the time, is sending to the Chief Medical Officer. The date of it is 3 June 2004. What I'm going to take you to is

something that we have heard of before and certainly considerably pre-dates the date of this e-mail. It's the first point, really:

"1. Altnagelvin heard a rumour from paediatrics [sic] intensive care unit that the wrong fluids had been used. This rumour emerged from a nurse in paediatrics intensive care unit responding to an enquiry from Altnagelvin's ward nurse on the child's state on the Sunday."

Which would suggest was the Sunday after she'd died, or the Sunday when she died, which is 10 June. Were you aware of that, that there was some sort of rumour emanating from the Children's Hospital that the wrong fluids had been used in Altnagelvin?

A. I have heard it recently in terms of the nurses' testimonies and the transcripts. I cannot clearly remember that comment at the time.

Q. You cannot clearly remember. Does that mean that you might have been aware of something, although you didn't know the details?

A. There always were Chinese whispers from the tertiary centre coming back that the way we managed children was less good than what they hoped, you know. Whether that was factual or Chinese whispers, I don't know. It was always blamed on the nurses saying to another nurse and

things like that there. I never heard anybody say to me directly.

Q. Yes. But were you aware of any, as you have characterised it, Chinese whispers in relation to Raychel?

A. Not at that time. Only more recently when the nursing transcripts, you know -- for the inquiry.

Q. So not at any time when the critical incident review meetings or any of those subsequent meetings --

A. I wasn't aware of any at the critical incident ...

MR STITT: Sir, may I ask for a little clarification on this point? The document is written by Ms Burnside, so it's a Trust document.

THE CHAIRMAN: Yes.

MR STITT: But there's still an ambiguity in it, if I may say so. The expression "wrong fluids" can mean one of two obvious things and maybe more. It could mean that Solution No. 18 was inappropriate, when it should have been Hartmann's, or it could mean that some completely wrong fluid was used. Can I just ask for clarification? Are we dealing with the Hartmann's/Solution No. 18 point or is there some suggestion being put forward in the examination that there's a theory about that there was some third fluid which was the wrong fluid?

MS ANYADIKE-DANES: If Dr McCord had heard any of that or

was aware of it, I would have asked him for more details about it. His evidence is that he wasn't aware even of any Chinese whispers. It's not our document. We have actually been trying to identify who might be the nurses so that we can request a witness statement from them to see what was meant. As you say, it could mean a number of things. It could mean the wrong type of fluid, which is Hartmann's against Solution No. 18, it could mean too much of the fluid in that the rate was incorrect or given over too lengthy a period. We just don't know, but we are trying to find that out.

THE CHAIRMAN: It fits in more with the issue, which has been debated before, about whether the Royal had stopped using Solution No. 18.

MR STITT: It does, but if it's suggested that there was some evidence or some concrete suggestion that some other type of fluid was used, I would have thought it would be reasonable to put that to this witness at this point.

THE CHAIRMAN: That's not a suggestion that's been made. So far as we understand at the moment -- and this issue does go into the meeting on 12 June -- this is about Solution No. 18, subject to any further clarification [OVERSPEAKING].

MS ANYADIKE-DANES: Thank you very much, Mr Chairman.

That brings us now to the meeting of 12 June. Were you aware that the Trust had a critical incident protocol at that time?

A. I have never seen a document, which doesn't mean to say it didn't exist or I may not have been aware, but I wouldn't say I was cognizant fully with a protocol.

THE CHAIRMAN: Had you ever been to a critical incident review before Raychel's case that you can remember, even if it's not formally called a critical incident review? That or something like it.

A. I certainly have been -- I'm sure I've been to one other which was called a critical incident review, but I think it happened after Raychel.

THE CHAIRMAN: Thank you.

MS ANYADIKE-DANES: I beg your pardon, Dr McCord, I was requesting a document there. Had you said that you had attended?

THE CHAIRMAN: He thinks he attended one other critical incident review and thinks it was after Raychel's death.

A. It may have been after.

MS ANYADIKE-DANES: I think your first one was that you weren't sure you were aware of there being a critical incident review protocol.

A. In terms of a document stating out a protocol, no, I don't think I would have been conversant with that,

but I did attend the meeting.

Q. And you attended the meeting because you were asked to attend it; is that right?

A. I can't remember whether I was invited or requested, but I fancy it was invited.

Q. Can you remember who was present at that meeting?

A. A few. Dr Fulton I remember. Dr Nesbitt. Sister Millar, I think -- yes, Sister Millar. And I think Mr Gilliland -- I'm nearly sure Mr Gilliland was there. A range of junior staff -- I wouldn't have been knowledgable of all their names or their specialties.

Q. Were you told what the purpose of it was?

THE CHAIRMAN: Let's break that into two parts. Were you told in advance of the meeting what the purpose of it was?

A. In terms of purpose, often we would be -- a review meeting after an unexpected adverse outcome, you know ... I presume, I wasn't sat down and said, "Look, the purpose is A, B, C, D", but you'd be going along to that and to review the history, the progress and then see if there's any changes that could be made or any learning points that could be made.

MS ANYADIKE-DANES: 095-010-046u. That's the protocol.

A. Right.

Q. Sorry, I should have had it ready for you before when

I asked the question. Had you seen anything like that before Raychel's death?
A. No, no.
Q. One of the purposes, as you have put it, is obviously to find out what happened.
A. Mm.
Q. Another purpose is to see what could be learnt from it.
A. Yes.
Q. In fact, that's a very important purpose --
A. Oh, indeed.
Q. -- because that might avoid something similar happening in the future.
A. Mm-hm.
Q. Do you have a clear recollection of it?
A. No.
Q. No?
A. No, I don't. I don't I am sorry.
Q. It was the first one of that nature you'd attended.
A. Yes, indeed. It may have been called something else, you know, for other situations.
Q. But a pretty important event?
A. Oh, indeed, yes.
Q. Particularly as, at least from the surgeons' side, this was entirely unexpected.
A. Yes.

THE CHAIRMAN: Sorry, doctor, when you referred a few moments ago to having been at a review meeting after an unexpected adverse outcome, is that really a forerunner of what is now called a critical incident review?
A. Yes.
THE CHAIRMAN: Is that the old-fashioned name for it?
A. Or where ... Routinely after deaths, we would invite parents back for a discussion and so on and so forth.
THE CHAIRMAN: Well, let's be careful. This isn't a meeting with the parents.
A. Yes. I see the difference that you're making there.
THE CHAIRMAN: This is an internal meeting within Altnagelvin to look at what you described as history, progress and any learning points. Is that, in broad terms, the same as a review meeting after an unexpected adverse outcome?
A. An adverse outcome would be along those lines, yes.
THE CHAIRMAN: So am I correct to understand this as perhaps a more sophisticated or detailed version, or a new version, of what would be a review meeting after an unexpected adverse outcome?
A. The fact that there's a protocol would suggest that.
THE CHAIRMAN: So somebody has formalised to some extent something which happened occasionally before?
A. Yes. I think that's an accurate summation.

MS ANYADIKE-DANES: In fact, Dr Fulton produced a report for the inquiry, who is leading this as the medical director, dealing with what his purpose was. We don't need to pull it up, but the reference is witness statement 043/1, page 5. He says that it was held at 4 pm on Tuesday 12 June. Then he lists all the staff that were there, but he has subsequently reconsidered that and formed the view that maybe they weren't all there that he has on the list, but that he talked to all those people at some point.

Then he says that he restated the purpose of the meeting, which was:

"To establish an accurate detailed picture of all the events leading to Raychel's death."

And:

"I said that it was important to do this quickly while everyone had good recall of the details. I said everyone would find this difficult and distressing, but that it was essential to understand what went wrong so that we could reduce or avoid the likelihood of another death or injury. I also stated the purpose of the meeting was to establish facts and not to blame individual staff members and that this was the approach that had been recommended and to reassure all staff. I said I would not take detailed minutes of the meeting,

but we would have to produce an action plan to address any issues identified."

And that:

"[He] would need statements from key staff, which would contain a detailed description of their involvement in Raychel's treatment and that these would be available to the coroner at a coroner's inquest, as a coroner's inquest would probably be held and everybody agreed to that."

He said that:

"[He] was immediately struck at how subdued and shocked all of the nurses and doctors appeared at the start of the meeting and it was clear they regarded this as a very serious and highly unusual event."

Now, does that accord with any recollection that you have of that meeting?
A. Yes, I have read those words before.
Q. Are you saying you agree with that?
A. I've read those words, yes.
Q. Yes. So can you help with the issues, the main issues, that came out of that in terms of what went wrong?
A. I must say my focus was on what action points -- my recollection stems mainly from that in terms of what I was doing. But basically, you know, if memory serves me correct, inappropriate ADH was considered as

a significant factor.
Q. At that meeting?
A. At the meeting, as far as I remember. That's what I took away from it.
Q. Okay.
A. The issue of the type of fluid was discussed. I certainly would have felt they were offering the general paediatric, general medical paediatric viewpoint that the fluid was an appropriate fluid, but may not be the appropriate solution for surgical cases. But again, that wasn't my decision.
Q. No. Was there any discussion as to why that might be the case?
A. The terminology started to creep in about hypotonic fluid. That sort of is a slight misnomer in the sense that Solution No. 18 is not isotonic -- or is not hypotonic, it is isotonic.
Q. Yes, but does it not metabolise?
A. If that's the case, then half normal saline is hypotonic, Hartmann's is hypotonic, because you're relating it to the sodium content.
Q. Sorry, let's now be clear about what you're saying because inevitably I'm sure the inquiry's experts will want to comment on it. Can you revisit and say how you're characterising No. 18 Solution.

A. No. 18 Solution is isotonic. It's got the number -- 150 millimoles, it's isotonic and equal to saline. If you use hypotonic fluids, you will cause haemolysis, breakdown of red cells.
Q. So given that you characterise it as isotonic, what then was the discussion between you and the others in the room who might have been canvassing for a change of the fluid?
A. There would have been a -- not so much surgical, but anaesthetic impression that this was a hypotonic solution, but they were basing that mainly -- well, their view was that it was a hypotonic because of the metabolism. As you say, the glucose component is removed quickly, but nobody is sure how quickly that is removed from the fluid that's infused.
Q. Does that remain your view today?
A. No, no, no, no, but I did, you know -- because of the years of experience of using No. 18 Solution, I had not run into any major problems with it, you know. So call me a dinosaur, call me conservative, at that point I didn't think there was an issue.
Q. Yes.
A. And subsequently, from that meeting, there was -- well, very shortly after there was a divergence for a spell where the medical cases continued to use No. 18 Solution

and surgical cases were managed with Hartmann's.
Q. Yes. We can see the notices that refer to that. But if we stay within the meeting for the moment and the discussion and the points of convergence and divergence, if one can put it that way, amongst the clinicians and nurses who were there. The first you've mentioned is that there was a recognition that SIADH may have had a role to play.
A. Yes.
Q. The second is that there seems to have been a lively debate, if I can put it that way, between the paediatricians and the anaesthetists --
A. Mm-hm.
Q. -- about the appropriate IV solution to use --
A. Mm-hm.
Q. -- and whether the fact that the surgical children -- whether surgical children should be treated any differently from the children in general medicine; is that fair?
A. Well, general paediatrics.
Q. General paediatrics, I should say.
A. Yes.
Q. Was there anything else that you can recall?
A. Certainly, from the nursing point of view, the regularity, I think it was mainly -- no. You know,

remember we touched about the nursing concern about surgical access. It was to get U&Es done more frequently, more regularly, you know. That was an issue.
Q. In relation to the surgical patients or generally?
A. Well, Raychel was a surgical patient.
Q. I understand.
A. So it was primarily towards management of the surgical patients. There was an issue -- not an issue. There was mention made of the fluid volumes that were used.
Q. Yes. What was the view in relation to the fluid volume?
A. That Raychel had an amount greater than maintenance.
Q. Sorry?
A. That an amount greater than maintenance had been administered.
Q. Too much fluid had been administered?
A. An amount greater than maintenance. More than maintenance fluids is what she'd been given. I can't remember the actual words that was used to describe it, but it was ...
Q. Apart from the mention of that --
THE CHAIRMAN: Sorry. Are you drawing a distinction between "more than maintenance" and "too much fluid"?
A. No, no, no. I'm just saying about the terminology that may have been used. They both mean the same thing.

THE CHAIRMAN: Yes.
A. Just a different form of words.
THE CHAIRMAN: Thank you.
MS ANYADIKE-DANES: Apart from an amount in excess of what would be her normal maintenance level, was there a recognition that, in a more general sense, that she had simply received too much fluid?
A. Um ... I'm not -- no, I, I think it was couched in terms that she had received an amount over and above maintenance. I notice where you start your clock rolling from to judge when she had too much from because it would depend on what your start time was.
THE CHAIRMAN: I'm sorry, I don't understand that. I asked you a moment ago, doctor, whether when you were saying "more than maintenance" you were drawing a distinction between that and "too much fluid" and you said that you weren't.
A. No, am I not meaning the same thing there?
THE CHAIRMAN: That's what I thought. Ms Anyadike-Danes then asked you:
"Apart from an amount in excess of what would be her normal maintenance, was there a recognition that in a more general sense she had simply received too much?"
And you said:
"I think it was couched in terms that she had

received an amount over and above maintenance."
Are we still talking about the same thing, that it was recognised at the meeting that Raychel had too much fluid?
A. Her maintenance was running -- her fluids were running at and above maintenance rate. However, if you count up, depending on what your start time is, you can do the calculations and see whether periods before she went on IV fluids, you know, if you included those times when fluids weren't running, then on a 24-hour cycle the amount that she got in over a 24-hour period may not have been as marked. So it depends in some ways when you do your calculations.
THE CHAIRMAN: But what was the view that was expressed at the meeting?
A. I think that there was more than maintenance or -- yes, more than ... Um ...
THE CHAIRMAN: Sorry, was that a recognition that she got too much? Does "more than maintenance" mean she got too much?
A. It depends. Yes, it probably does, yes. Probably does.
THE CHAIRMAN: Thank you.
MS ANYADIKE-DANES: When we had heard from the nurses, or two nurses in particular, Staff Nurse Noble was clear in her evidence to the inquiry that there was general

agreement, if I can put it that way, during that meeting that Raychel had got too much fluid.
A. Okay.
Q. Dr Nesbitt has discussed her fluids in relation to maintenance levels and also fluid in relation to what he would have regarded as a reduction after surgery.
A. Right. Mm-hm.
Q. Let me pull this up for you, 095-010-038. If you see there about a third down, "I was concerned". So this is Dr Nesbitt, what he considered to be his contribution, if you like, at that meeting:
"I was concerned about the fluid administration and documentation around it."
That's a separate point which we don't need to get into:
"It appeared that the amount of fluid prescribed was too much for Raychel's weight. Raychel had been prescribed a rate of 80 ml per hour. By my calculation, this should have been 65 ml an hour, however initial fluid administration is often more than this figure to account for the fasting period prior to surgery. This fasting period results in a fluid deficit. Normal practice would be to replace one half of this deficit in the first half hour together with the maintenance fluids and the second half over the next two hours,

again together with the maintenance fluid. I would have expected the rate to then be reduced following surgery."
A. Right.
Q. So in his view, he comes to it from two perspectives. One, that the maintenance rate was simply too much.
A. Yes.
Q. Secondly, whatever that figure was, he would have expected it to be reduced after surgery. So that's his contribution. But do I understand that you have accepted the way in which the chairman had framed the evidence that we've heard so far that, leaving aside all these sorts of issues, the general consensus was that Raychel had simply received too much fluid?
A. Yes. I accept that and I got confused because of the other issues in the period prior to IV fluids.
Q. So we've got the too much fluid, we've got the issue of the kind of fluid that she'd received. There's the issue to do with the electrolyte testing that should be done more often. You might have mentioned it -- I'm sorry, I started to concentrate on this point, but had you also addressed the issue of accessibility of those? Was there any discussion about that?
A. Again, I can't remember that in detail.
Q. Let me help you with something.
A. I'm going by the action points.

THE CHAIRMAN: I think Dr McCord did mention it a few moments ago. He said, under nursing issues, there were two. One was surgical access, which I understood to mean the nurses being able to contact the --

A. I think I had referred to that as being the issue previously in earlier discussions.

THE CHAIRMAN: Right.

MS ANYADIKE-DANES: The nurses who are on Ward 6 are nurses there who perhaps more generally are dealing with the medical paediatric patients.

A. The majority of admissions would be medical.

Q. That would be the majority, isn't it? And I think earlier in your evidence you were saying that if responding to the needs of the surgical patients, who should ordinarily be attended to by the surgical teams was taking their time too much away from dealing with the -- or even your own staff from dealing with the medical patients --

A. Mm.

Q. -- that would have been an issue for you and you'd have had some discussion about that.

A. Yes, if it had been repeatedly. A one-off, infrequent or irregular would have been --

Q. Yes. I want to pull up for you part of Sister Millar's evidence that she gave on 1 March. If we go to the

transcript of 1 March, page 58, and start at line 7. She is responding to similar sorts of issues that have been raised by Staff Nurse Noble and she says -- this is at the meeting:

"I said I thought it was totally unfair that the nurses had such responsibility for the surgical children. I felt it was unfair. I felt that we had to be the lead all the time in looking after the surgical children. We are nurses, we're not doctors, and whilst we do our very best, I don't think we should be prompting doctors. We would now maybe, but 12 years ago ... Or I don't think we should be telling a doctor to do electrolytes. It's different now, we're more knowledgable. We've had quite a bit of education, but in those days, really, we were leading the care, I feel, in looking after children."

And that is something that Staff Nurse Noble refers to as quite a robust statement that she made, maybe not literally those words, but that sentiment anyway, at the meeting; do you recollect that?

A. Only because I know Sister Millar and I know the phraseology she would use. I cannot remember the actual words being spoken at the meeting.

Q. The sentiment?

A. The sentiment would be -- because I've heard

Sister Millar, you know, echo that previously.

Q. Before Raychel?

A. Oh, I'm sure before Raychel, yes.

Q. And if you put those issues together, the junior doctors being at the front line for the surgical patients, the lack of electrolyte testing, certainly in the way that happened with the other patients on that ward, the amount of fluid that she received, the fact that it was recognised she received too much fluid, and a question mark at least over whether she received the appropriate kind of fluid, so put those things together as what was being discussed. Does that amount to a recognition amongst the clinicians and nurses there that you had all, in some way, failed Raychel in her care?

A. I think, yes, there were failings. I think it's like chaos theory. The butterfly flaps its wings in the Amazon jungle and one thing leads to another to another to another. In that respect, there are a lot of tiny creeks and eventually a floodgate opens. And I think there was no single one contributory event on its own, but the multitude of all the little things -- not the little things, all the factors coming together did lead to a serious incident that led to serious events for Raychel.

Q. Yes. And all those things didn't require the benefit of

hindsight or didn't require an expert to come and explain about anything, those were all things that all of you in that room could see and recognise and accept.

A. I think there was a general acceptance, yes, that things could have been done better.

Q. Yes. Was there a sense that we really need to communicate this to the family that we have failed her in this way?

A. I'm not sure whether that was discussed at that meeting. I honestly can't -- because again I ... Because I maybe shied away because Raychel was a surgical patient, I didn't make, you know, great cognisance of it, you know, about issues around -- but I can't remember any plans made directly from that to -- because post-mortem results hadn't been available or anything like that.

Q. But even ahead of that, the people who had treated her and nursed her had come together to discuss what happened and had formed a view that, collectively, they had failed her.

A. Mm.

Q. That's the -- you have just been explaining that, the ways in which they reached that view. Was there a recognition that that really ought to be communicated to her parents?

A. I don't think that was discussed. I don't think that

was discussed.
Q. And I ask you as a senior consultant, as you were then, do you not think that should have been communicated to her parents?
A. I think, yes. I mean, I think steps were taken to contact parents to discuss issues.
Q. No, I meant the view that you had all formed there that you collectively had failed her in those varying ways in her care. Do you think that that should have been communicated to Raychel's parents?
A. In what form? I mean ...
Q. By sitting down and talking to them.
A. Yes, but is that not what was planned to do eventually, you know, post-mortem --
Q. I haven't got to the plan eventually. What I'm just asking is: is that what you think should have been communicated to her parents?
A. I think that would be a very human thing to have done.
Q. And the correct thing to have done?
A. Yes, oh yes.
Q. Can I ask you a completely different question: had you heard anything about the death of a child called Lucy Crawford at the Erne?
A. No, I didn't know of Lucy's death, no.
Q. Were you and Murray Quinn colleagues?

A. Yes, professional colleagues, yes.
Q. Did you come to hear that, at some point, he had provided some input into an assessment of how she came to die?
A. Only, again -- not directly from Dr Quinn himself, but third-hand in terms -- was that the television programme?
THE CHAIRMAN: Did you know before the television programme?
A. No.
MS ANYADIKE-DANES: He never discussed it with you?
A. No.
MS ANYADIKE-DANES: Mr Chairman, if you allow me a couple of minutes just to check, I think that's all I have. (Pause). I don't have any further questions.
THE CHAIRMAN: Okay. Mr Coyle?
MR COYLE: No questions, sir.
THE CHAIRMAN: Mr Campbell, Mr Stitt?
Doctor, that brings an end to your evidence unless there's anything you want to say.
A. May I say a few words to the parents?
THE CHAIRMAN: Yes.
A. As you've heard, we failed -- Raychel was failed, regardless of any claim for negligence or liability. She was failed in the sense that she walked into hospital, but didn't leave in a better condition than

she left. Indeed, she left in a much, much worse -- and died. To lose a child is totally against the natural order of things. You nor I don't know what Raychel would have been capable of had she been here today. I have a daughter who died and shares Ballyowen with Raychel. I never got to know her. I do, however, have a young daughter of 10, just slightly older than Raychel, and to think of losing her is unimaginable and I cannot think what it must have been like for you as parents to have Raychel wrenched away from you in the fashion that it did happen.
I, as a -- parent to parent, would like to offer you my heartfelt condolences. I didn't have any chance formally to do that and I would like to have done it face-to-face, but didn't. In addition to that, then, I feel that communication difficulties, particularly on my part, have potentially added to your distress. For example, the false hope that was offered, and I professionally offer apologies for that.
On a third issue, can I reassure you that if any good comes out of this, things have changed and I think for the better? I can only claim a very tiny part for that, but I would like to commend my colleague Dr Geoff Nesbitt in great part for making those changes and being the shaker and shifter in trying to get things

moved along. So I respect you -- and I have met other family members, as you may know, in other clinical conditions -- so please accept my apologies, both professionally and my condolences as a parent. Thank you, Mr Chairman.
THE CHAIRMAN: Thank you very much, doctor. We'll take a break for five minutes and we'll start with Mr Makar.
(The witness withdrew)
(3.13 pm)
(A short break)
(3.25 pm)
MR RAGAI MAKAR (continued)
Questions from MS ANYADIKE-DANES (continued)
THE CHAIRMAN: You can take it you're still under oath from when you started to give your evidence. Have a seat, please.
MS ANYADIKE-DANES: Good afternoon, Mr Makar.
A. Good afternoon.
Q. Since you gave evidence last, have you discussed your evidence with anyone?
A. No, but I noticed, if I may, Mr Chairman, when I looked at the oral hearing in the website, there is a couple of things I noticed. One of the sentences which does not make any sense. Probably because I was out of the area where it can be heard or maybe my accent. It's like

a negation of the evidence. It's a sentence I was saying that -- my answer based on support from evidence about the faecoliths and the proteinuria -- I think in one of the two -- it is written as "isn't based on evidence" or "is not supported by evidence", but actually everything I was saying is based on evidence, so it does not make sense.

THE CHAIRMAN: Do you have the specific reference for that?

A. I have it, but the problem -- I forgot my Internet access. I was about to give you the exact page and the line, but I can do that.

THE CHAIRMAN: If you do that through your legal team, and I will consider your correction of the transcript because obviously if it records you as saying the opposite of what you said, I would like to know.

A. The opposite, yes, exactly the opposite.

THE CHAIRMAN: Right, okay.

A. There is other thing. Last time, I was discussing with the gentleman who types the enterobious vermicularis. I said "pinworm", but maybe I said it "ringworm". It is a pinworm, just for the record, because I forgot to mention it before I leave.

MS ANYADIKE-DANES: Thank you.

MR STITT: Can I just mention one thing -- and again sincere apologies to Ms Anyadike-Danes.

It's simply this: there's an issue cropped up outside and that's why I wasn't here when you came back in, sir, but it was quite important. It's this: Dr McCord has given his evidence, but I understand he will be recalled at the governance stage. I need some direction from you as to where I stand in relation to further consultation with him.

THE CHAIRMAN: You can consult with him about governance issues. That's not a problem.

MR STITT: Yes. I anticipated I could do that, but there is one issue which was mentioned to you earlier in relation to fluid and how we were going to deal with this question of fluid. I discussed it with Ms Anyadike-Danes earlier, the representation of bottles of fluid which was to be put into some form of statement and then could be disseminated and could be considered by other experts. And if I am asked to consult with him on that specific issue, that subsequent statement about what is the total volume of fluid over the given period, over roughly the 24-hour period, that's clinical.

THE CHAIRMAN: Yes.

MR STITT: And I need guidance from you as to whether I can do that.

THE CHAIRMAN: Let me come back to you on that when I find out more about it. We've had a brief discussion as the

evidence was starting this morning, but nothing since. Okay?

MR STITT: Yes.

MS ANYADIKE-DANES: Mr Makar, there are just a few questions arising out of your evidence last time that I would like to ask you about. That's largely because you brought with you a technical paper, if I can put it that way, which had references in and comments and observations that we hadn't seen before. So we needed some time to think about what you were saying there and it has given rise to a few comments which I wish now to put to you.

You referred in your clinical note and in your evidence, which you gave on 6 February, that Raychel had passed a bowel motion on the afternoon of 7 June, is that correct --

A. Yes.

Q. -- and that this was apparently normal? Where did you get that information from?

A. It is in my history taking, in the contemporary notes which I've done in the admission.

Q. My understanding is from the evidence of Raychel's mother is that when Raychel was initially complaining about her sore stomach, her mother suggested she might want to go to the toilet and Raychel said she didn't want to do that. At witness statement 012-025-135, you

can see a third of the way down:

"On her return, she [that's Raychel] was complaining that even after her dinner, the pains were still in her stomach."

It had started off by thinking that she had hunger pains and:

"She was complaining that, even after her dinner. The pains were still in her stomach. Raychel was in and out a few times and I told her to go to the toilet as I thought that may be her problem. When she returned, she did not go to the toilet saying she didn't have to."

It carries on that she is complaining of pain and so on, and ultimately that leads to her being taken to the hospital. So the point is where is it that you get that she passed a normal bowel motion? It's in your note, but that doesn't seem to fit with the mother's evidence.

A. If I had written in the notes, it means I got it from Raychel herself or her mother and the mother was there at that time, so it was from there. But it's written by me at that time because this is one of the things I would look for, you know. You want to know whether there is diarrhoea and whether there's constipation.

Q. In any event, your view is if you have written it in your note, you either got it from Raychel or you got it from her mother.

A. Yes.
Q. I understand. We can take that up with Raychel's mother. Then you also refer to the CRP, the C-reactive protein.
A. Yes.
Q. And the question for you is: where is the evidence from the clinical profile that that test was ever done?
A. It's not done.
Q. 020-007-012.
A. CRP is not done.
Q. It wasn't done?
A. No, no. I think that the context I got from the question -- I can't remember the question we done last time, but what other things we look at in diagnosis, and CRP is one of the things some unit look for, not all unit. In Altnagelvin at that time it wasn't at all a routine, so nobody do it as a routine at Altnagelvin for diagnosis of appendix.
Q. Could it be done at Altnagelvin?
A. It wasn't. It wasn't.
Q. I know it wasn't, but could it be?
A. As I mentioned, it's not one of the diagnostic tests -- it is one of the tests sometimes get done for the diagnosis of appendicitis. But by all means it's not a diagnostic and not all unit do it and there is a lot

of controversy about it, whether it is of value or not. That why I mentioned it, for completion.
Q. So this was just one of the things that could have been done, but you weren't suggesting it should have been done?
A. I didn't suggest it should be done, no.
Q. There was also an issue that, having examined Raychel when you did and formed the view that you did, then you should have taken further opportunity to examine her again just before she went to theatre, which is really the last opportunity to make a decision as to "Do we really need to perform an appendicectomy on this child?"
A. As I mentioned last time, the technique of reassessing patient in [sic] a frequent basis, it's usually when you are confused about the diagnosis or if you would like to assess in about four hours later or six hours later, but assessing within a couple of hours, again, it wouldn't be the way we do it or any surgeon would do it. Secondly, because there is no indication from anyone looking at Raychel at that time that there's a dramatic change. If there's a dramatic change in her condition, then I would have reassessed the situation.
Q. What would have constituted a dramatic change for you?
A. That she's moving round, out of bed, would like to eat. Because it's a few hours since she eaten. She didn't

ask for drinks. If she want to drink juice or something sweet, or to eat, out of bed, able to mobilise freely, then I would say okay there's something going on out of the what I think it is.
Q. This is 11 o'clock at night on a 9-year-old child. Would you have considered it normal for a 9-year-old child to want to eat anything at 11 o'clock at night?
A. If the child is not at home, outside of the home, own environment, and eaten at 4 o'clock or 5 o'clock finished eating, the child -- actually, most of the children who ask for something to eat later on before they go to sleep as far as I know. It's not absolute yes or no, it depend a lot of variations. But if you're outside the hospital, you haven't eaten or drinking anything from 5 o'clock and it is 11 o'clock and you still awake, you have child -- children who would ask for something.
Q. If you were going to use that as a way of gauging whether she had significantly improved, would it have been appropriate to ask her parents what her normal routine was? We understand that the meal that she'd had at about 5 o'clock or thereabouts was her main meal and ordinarily would be her last meal. So it may, for this child, not have been unusual for her not to have been up and out of bed at 11 o'clock or wanting to eat something

at 11 o'clock. So if you're going to use that as a way of gauging her level of improvement, would it have been appropriate to speak to her parents?
A. There's no one way to gauge. We are looking retrospectively now. In prospective, if you see and diagnose appendix, and the child is not at home and in hospital and will be awake, it won't be what is normal. It is not a normal way. So you cannot really absolutely gauge it one way or another. You rely on what the people around you say. If the nurse on the ward says they've done it before and the patient is getting worse, they call us. If there's any change from out of ordinary, they will let us know. They would say she's completely normal, she's moving normally, and even in the bed she's moving normally, we think she's okay completely, then of course I would reassess the situation. If the Raychel mother on the way to theatre or in theatre says, "She looks fine, I don't think she needs any operation", we would cancel the operation in theatre. We don't -- if there's any change which ... Because at the end of the day we do what we find is the safest option to save the patient from getting complications --
Q. Yes.
A. -- and if there's any reason that I don't need to do the

operation, I will go right for it. I will go and say we cancel the operation. Many times you cancel the operation.

Q. Yes. You see, my understanding of Raychel's mother's evidence is that she did regard her as considerably improved. She did think she had and, in fact -- well, you know her evidence was that she thought that Raychel would only be having her operation if, in fact, she deteriorated further. But when they left Raychel, they felt that Raychel, between them -- her mother and father -- was pretty much back to her normal self. So from their perspective, they had seen an improvement.

If I pause there and ask you this: if you had spoken to them and asked them, "How does Raychel seem to you?", and they had answered, "Well, she seems so much better, she's back to almost where she was", if they had given you that information, what would have been the effect of that?

A. I would reassess her. If the family says that they think she's back to normal, I would reassess the patient. If the nurses say they think there's a difference from the admission to now, I would reassess the situation. I am there to find the best way to treat the patient and if it is the case, then I'll do it of course. But as a routine, if I admit appendix and if

there's no -- if the diagnosis is vague, we go to the technique of reassessing, reassessing and observation. And normally you do it after four hours, six hours and so on, until you get a diagnosis. And the diagnosis might be at the end appendix or not. But if you have a diagnosis, then you go ahead and have a plan and you change that plan because you might change it in a way that although you had a plan and there is no change in the conditions and you might take a wrong decision at that time.

Q. Can I ask you this: you said that obviously you would take note if the nurses gave you information as to an improved condition and also if the parents had. I think you also said even if the parents came at the point where you were on the way to theatre, if they had at that stage told you that Raychel seemed very much improved and that she seemed fine to them, you would even at that stage have re-assessed her and considered whether surgery at that time was still appropriate?

A. Yes.

Q. Is that correct?

A. Definitely. Because we've done it before.

Q. Do you think that you conveyed that to Raychel's parents so that they were aware of the fact that they could give you that information, if that was their view, and it

could have that effect?

A. When we go through the condition of -- I can't remember this exactly, to be honest. But when we go through the condition of assessment and the diagnosis of appendix and the possibility to go to theatre, it's part of it that if at any time they feel that -- but I can't remember exactly what I said at that time so I cannot really ... It would be unfair for me to say anything about that, about this specific issue.

Q. Yes.

A. But as a routine, we say that to the patient or the family.

Q. That's what you would want to do and what you would normally did, but you just can't --

A. We normally do because we normally say that we can always cancel, even on the table. It's part of the consent, when I consent.

Q. I understand.

A. But whether I -- which way I said it, I can't remember, but this is a routine I do -- we do.

Q. Yes. Then a question about the prescription. You prescribed, on 7 June, intravenous metronidazole. We can see that at 020-017-032. That seems to be incorrect. Can we try 020-017-033? Thank you.

Is your prescription in there?

A. Yes. It's for PR, rectal suppository.

Q. Which is the one that's your prescription?

A. The third line.

Q. So that's "TID".

A. Yes.

Q. Which means?

A. Three times a day.

Q. And then I think we can look at the -- sorry, I'm just trying to compare it. Did you also prescribe for the same drug, but to be given orally, 500 milligrams?

A. No.

Q. 500mgs?

A. Orally, no. I've written IV and I cancelled -- and I had a signature on the cancellation line. And I dated it. Because I've done them the same time. Because I was checking the BNF, you know.

Q. Is that 020-017-035? Is that your cancellation there, the second one at B? Is that your cancellation?

A. Yes. There's a signature, I don't know -- or this is just a line. It's my handwriting:

"Metronidazole [which is Flagyl] 200 milligrams, IV versus PR, 8-hourly, two doses total to be given."

And then I have cancelled it, I have put a line round it and I have signed it and dated it. So I signed it and dated it.

Q. What did you actually want her to have?
A. I wanted two doses, at that time, metronidazole, but because I've written "IV versus PR". To avoid confusion, so I have taken it out because I didn't want her to have IV at the time, and then I've written it "PR, three doses".
Q. And in what form would that dose take that she was actually going to receive?
A. Suppository.
Q. Suppositories?
A. Yes, yes. Because I cancelled it in theatre, I dated it, and I put a line across it to be able -- so anybody can see what I cancelled. Just one line across.
Q. The question I am asked to put to you is: would not a single dose or a single IV dose of that medication have been sufficient? It's an antibiotic, isn't it?
A. Yes. It is metronidazole, antibiotic. It's not as strong as a cephalosporin, but it's a weaker one. But we give it routinely in Altnagelvin for children. Paediatric patients after appendicectomy.
Q. The question is: would not a single dose have been sufficient?
A. No, at that time. We used to give two or three doses.
Q. Why is that?
A. This is the practice we have been doing in Altnagelvin,

except if the patient has a perforated appendix or badly inflamed appendix, we give them up to five days IV or mixture IV and suppository.
Q. So is this a practice that you met in Altnagelvin?
A. Yes.
Q. Is it one that you have used in other hospitals?
A. Yes.
Q. So although --
A. Different techniques, different dosing.
Q. Different dosage?
A. Yes.
Q. More or less?
A. Some hospitals use for three days, some hospitals use it only for one day. I can't remember which one do which to be honest after 12 years, but I know that they used to use it because at that time there were some evidence that it decreased the intra-abdominal collection and wound infection after appendicectomy.
Q. Thank you. I wonder if I can now come to what happened afterwards. So when you were giving your evidence last, I think we got to the point where you had been in the ward at the same time or roughly the same time as Mr Zafar was. You said that you didn't have a handover as such between the two of you. You met Raychel's father and Raychel and you satisfied yourself that

everything was all right, so far as you could tell, afterwards. And thereafter her care was being managed by the day team, if I can call it that.
When Mr Zafar gave his evidence and Sister Millar, it seems that the two of you did meet, however briefly. Do you remember that?
A. I can't remember that. Could I comment on one of the sentences you mentioned now?
Q. Yes.
A. You said there is no handover between the two of us.
Q. Yes.
A. I wouldn't know that I have to hand over to Zafar specifically at that time. Because when we meet in level 9, I speak normally to the registrar or the team at that time. I can't remember Zafar was there or not, but I wouldn't know at that time that Zafar is the SHO who I need to hand over to.
Q. Well, did you hand over to anybody that morning?
A. We must have had. We were always ... If it is a critical patient, we hand over. If the patient is waiting for theatre, we hand over, we discuss that. And we have the handover list because the handover list -- Raychel would be on the handover list. Whether I mentioned Raychel's operation to someone, I'm bound to have handed over that I've done an operation last night

or an appendicectomy. That's why Raychel would be in the system to be seen by the team who work with the consultant on call. Not the on-call team of that day, the team who work with the consultant on call. So this I wanted to clarify.
Q. Thank you. You have clarified it in some ways, but in other ways not because your evidence last time -- and it may be we are at cross-purposes. If we go to the transcript for 6 February 2013 and go to page 227. Perhaps if it can be done, bring up 228 alongside it.
Just to lead into the answer that you're giving, which is my question on the previous page, I had been asking you about handovers. I said:
"Question: Let's come to a situation like Raychel. Raychel has had her operation in late evening, so she's going to be part of the post-take ward round the next morning?
"Answer: Yes.
"Question: Is there a handover at the post-take ward round between those who were caring for her in the evening and those who were going to care for her during the day?
"Answer: It is not a routine -- there is no routine handover meeting in Altnagelvin Hospital at the time. What happened normally, if there is a patient unwell

admitted overnight or if there is inpatient ..."

You go on to essentially describe a situation where there's a problem and that is what is addressed. And then you go, over the page, on 228, to say:

"Friday morning, I cannot remember what happened in the handover, but we normally do not hand over all the patients; we hand over the problems."

THE CHAIRMAN: "And all the patients will be on the list to be seen by the team who look around."

And that's your point: you put Raychel on the list of the team that was going to see the patients that morning?

A. It is the only thing I can't remember for sure how much discussion we have done. Because this list is built based on me letting the houseman on call with me during the night know what admissions I've done and what things I'm doing independent of the houseman. So the houseman will keep track of the patients I admit. I might admit ten patients. How would the houseman be sure about continuation of care in the ward? So I speak to the houseman and this way I handed over the names to be on the list, which would be the list of the houseman for the handover in the morning with the rest of the team, which mainly would be the houseman and whoever is going to be there.

So this stage 1, about the handing over. It is not like handover nowadays. Nowadays, we sit in a big room and all of us there, and we go on the list, patient by patient. So it's not done this way. It's done based on what the person is going to hand over, but the list is handed over in a way. Because the houseman will know -- if for example I admit a patient who's unwell, the houseman might miss it because the houseman look after the patient in the ward. So the houseman find two patients, three patients or ten patients in the ward, he or she doesn't know anything about. So this is stage 1 of a way of handing over.

MS ANYADIKE-DANES: In that list, do you indicate if there are particular problems?

A. Oh, yes.

Q. So let's say, as it happened, Raychel's surgery was uneventful, but if it hadn't been uneventful, if something had happened and was the sort of thing you feared might happen if you waited longer, if that had happened, would be that recorded on that list?

A. Yes, if there's a problem. Because the houseman looks after the patients on the ward. If I admit a patient who has a problem or she has a problem, and I need certain things to be done, I hand over that to the houseman. Because the houseman needs to know that there

is a patient coming to the ward, there's a patient going to be in that ward, so in the morning the patient not gets missed. It would be in the PAS system.

Q. I'm going to ask you that. What happens to those lists?

A. I don't know. This I don't know. Because this list is like the list I carry myself for the patients I admit. So I write it with my handwriting. After that it gets shredded. So this is a temporary list and as soon as the next houseman of the daytime, before this houseman leaves -- and usually there are three of them or more -- knows and all the patient in continuity of care has been ensured. This is different from the meeting we have in the morning, which is not a systematic way like the meeting we have nowadays, which is based on list one by one. It's based on me talking or the SHO on call talking to the registrar and the team who comes in the morning, usually a couple of registrars, SHO. The houseman says, "Okay, yesterday watch(?) form, I've done appendix and these three patients we need to take care and this patient waiting for CT scan and there is a patient who is in for theatre and this is the names".

THE CHAIRMAN: Okay. If you look on the screen, on the right-hand side, page 228 at line 3:

"All the patients will be on the list to be seen by the team who look around. So if there is 20 patients

admitted and you have three or four patients unwell, then we will talk about them because they are more complex. Other patients they get seen when they are going in the round."

That's it?

A. Because the diagnosis will be there.

MS ANYADIKE-DANES: That's where I was going to come to next. Do you remember if there was any discussion about Raychel?

A. I can't remember, because everything was straightforward. But as Raychel had an appendicectomy done and what time this would be there --

Q. Yes.

A. At least someone will know at that morning, that this when I was standing with the registrars or before I go somewhere else, in this quick time I will let him know all the important events happen at that night. So they know -- at least they have a baseline they can start from.

Q. So if you're going to communicate anything, that's the person to whom you communicate it, which fits with the fact that he's got a list which has got your brief comments of the most significant things about each patient that you've been dealing with? So can we come now to the evidence that Sister Millar has given and

Mr Makar, I think accepted it, that you and he --
THE CHAIRMAN: Mr Zafar.
MS ANYADIKE-DANES: I beg your pardon, Mr Zafar. You and he met each other as he was leaving, if you like. Can you recall that?
A. No, I can't. But may I comment on that?
Q. Yes.
A. Even if I have seen Zafar -- I can't remember if I have seen him, but if Sister Millar says that we met, what I can say? You cannot see things you don't know. So if she has seen it, it might have happened and it might be my memory which is not getting me there. But even if I say she's right, although I cannot remember that I met Zafar, I wouldn't -- it wouldn't allow me anything because I wouldn't know ... I didn't know at that time that Zafar has seen Raychel. And I have written it in my first statement or my second statement in 2003 or so. I didn't know, because what I was told, before I go and see Raychel, is Raychel has been seen by the registrar. This is the message I got and this is the message I have written and this is the message in my memory. So I never knew that Zafar is the person, the same person, who has seen Raychel.
Q. If you had met each other briefly in that way, is there anything that you would have communicated to him?

Because you would presume, given that he's a surgical SHO, that he's there dealing with her in a clinical capacity. Is there anything that you'd have communicated to him?
A. I haven't seen him in the same day.
Q. If you had.
A. Even if I seen him, where? Where I have seen him?
Q. If you had seen him coming out of the area where Raychel was, would you have told him anything about your care of Raychel the previous evening?
A. I don't think I had seen him. Because in this bay, from my memory, it's two patients.
THE CHAIRMAN: What Sister Millar said was that she and Mr Zafar were leaving as you arrived, that she said that Raychel had just been seen by Mr Zafar, that you and Mr Zafar spoke in passing, and that you then went on in to see Raychel and spoke to her father.
A. May I ask, is it in the corridor or is it in the bay? Because in the corridor, yes, I might have had. And maybe he is leaving the ward or going somewhere else. Because from memory, I think the room -- they bay where Raychel was is the start of the ward or so. In fact, I might be wrong. This is what I remember. And she was in the first bed on the right-hand side and there was another patient on the left-hand side. So I think it's

only two bed that bay, not more. From memory. I might be wrong. I remember she was the first bed on the right-hand side. So it is beside the door.
MS ANYADIKE-DANES: My question to you is very simple though. If you had had an opportunity to speak to him -- if you had -- what would you have told him, if anything, about Raychel?
A. I would have asked him how she is. Definitely.
Q. And would you have wanted to give him any information yourself from your treatment of her?
A. I would listen to what he said.
Q. No, would you have wanted to give him any information from your treatment of her?
A. It depends. If he comes and I know he have seen Raychel, I will ask him how she is. And probably he knows that she had appendicectomy. He bound to know from the list or from the meeting at level 9 when we speak about what event happen at that day. I will tell him that it was a straightforward appendicectomy and the appendix had a faecolith in it and, of course, we send it to the lab and I expect that she will be able to eat and drink and probably go home the next morning.
Q. So anything that you would have told him would be all to the direction that things were fine so far as you could tell from the work that you had done?

A. Yes, yes.
Q. Thank you.
THE CHAIRMAN: And that would fit with Mr Zafar because, if you met Mr Zafar as he was coming out, his evidence is that she was fine. So it would mean any conversation between the two of you would be very brief.
A. It would be very brief and I still am going to see her as well.
THE CHAIRMAN: Yes. Because you'd expect her to be fine because the operation, as far as you were concerned, was uncomplicated.
A. Expected her to eat and drink and maybe go home later in that day or the next morning.
MS ANYADIKE-DANES: You go off duty after your on call from about 1 o'clock in the afternoon; is that right?
A. This is -- yes, this is the whole of Altnagelvin, yes.
Q. Sorry. Your evidence to the inquiry at reference 022/2, page 10, in answer to question 7(e) you say:
"I went off duty after my on call at 1 pm."
A. Off duty is not the on-call 1 pm. The on-call in Altnagelvin stops at 8 o'clock in the morning and the on-call SHO continued to look after elective work, not on call any more, until 1 pm. Some days I stayed until 5. I've done clinics in Limavady between 1 and 5 when I'm on call. The next day, it's fine, it's up to me,

I choose where to go.
Q. But can you remember what you did on 8 June?
A. No.
Q. Well, can you remember if you were still in the hospital in the afternoon of 8 June?
A. Afternoon, no. I don't think so, no. That day, I didn't have a clinic in the afternoon. Usually what I do, if I have to go with Mr Neilly at that time to Limavady, usually Tuesday, I think, afternoon, if my memory is correct. Because he will be alone, so I used to go, even if I'm on call on Monday. So I go as to give an extra pair of hands if I find there's no help. On site, if it's the clinic on site, I may not do that, but I remember that if it is Limavady I used to go, even if I was on call the day before because I used to go with Paul Neilly, who's no longer with us, he passed away, but I used to go with him in the afternoon.
Q. But this is Friday afternoon.
A. Friday, I didn't have a clinic.
Q. That's the point.
A. So I don't think I had anything on Friday afternoon.
Q. I'm really directing you towards these particular days in relation to Raychel's admission. When you say then, "I went off duty after my on call from 1 pm" -- I'm simply giving you your own words from your statement.

When you say that, does that mean that you effectively went off the hospital premises?
A. I live in the hospital.
Q. Okay, went home to where you live in the hospital.
A. And my family in England, so I used to stay there.
Q. Ah, okay. But you wouldn't consider yourself available, to be contacted in terms of offering care to a patient? That would fall to others on duty; would that be right?
A. Yes.
Q. I take it then when you did hear what had happened to Raychel, it would have come as a surprise to you.
A. It was a devastating surprise, yes.
Q. Mr Zafar's evidence had been that actually, given how Raychel appeared to him when he did the ward round, he was really expecting her to be reasonably quickly off her IV fluids, perhaps then taking a light diet, with a view to probably going home the next day. That's what he expected for her given how she appeared to him. Would you share that view?
A. I share that when I went in the morning, Raychel was sitting up, I asked her about the pain, she was pain-free at that time. And I asked as well to know whether it is appendix because I know there's faecoliths and I know it wasn't that badly inflamed and if she is pain-free I will link that it is the -- the faecoliths

is the reason and she was completely pain-free at that time. And I spoken to Raychel's father and at that time we didn't have any concern that something will go wrong. So my understanding, at this stage, is that she will start drinking and take something light like a biscuit or jelly or ice cream, usually they give the children, and then by afternoon she's eating normally.
Q. Thank you. When did you first hear that Raychel had died?
A. I can't remember. This I can't remember. I can't remember the timing.
Q. Okay.
A. I heard and then I attend in the meeting.
Q. Yes, I'm going to come to the meeting. Can you remember the circumstances in which you learnt that she had died?
A. No, I can't. She just vanish. The way I can't remember. Maybe because it was devastating to me at that time, produced a gap in my memory, but I can't remember.
Q. But you do remember that you were asked to attend the risk management meeting?
A. Yes.
Q. Did you know that Altnagelvin had a critical incident protocol?
A. Any hospital should have a critical incident --

Q. Did you know that Altnagelvin had one?
A. Before that, I should say I don't know, but I know that all hospitals have a risk assessment and risk management protocol.
Q. I'm just asking you a different question. Had you known the particular one that Altnagelvin had?
A. I attended the meeting.
Q. Before the meeting.
THE CHAIRMAN: I'm sorry, it's a very simple question. Did you know that Altnagelvin had a critical incident review policy?
A. I can't answer it now. I know that we have a clinical incident form we fill if there's anything happened in the ward or anywhere else. This I know.
THE CHAIRMAN: Right. Okay.
A. Sorry if I'm not helpful.
THE CHAIRMAN: Your view was that, at that time, every hospital should have a critical incident review policy?
A. Yes.
THE CHAIRMAN: Thank you.
MS ANYADIKE-DANES: You attended the meeting on 12 June. Who asked you to go?
A. It could be Mr Bateson or Mr Gilliland. Because Mr Bateson at that time, he was the clinical lead or the clinical director of surgery, and I discussed what

happened with him. So probably Mr Bateson or Mr Gilliland.
Q. Sorry, you discussed what happened with him before you attended the meeting?
A. Yes, Mr Bateson --
Q. Yes.
A. -- because Mr Bateson's the clinical lead.
Q. I understand, I'm just checking the chronology of it. Before you attended the meeting, you'd had a discussion with Mr Bateson.
A. I think so, I'm not 100 per cent sure. I know I discussed with him, I had spoken with Mr Gilliland. One of the two consultants who got me to the meeting, but I don't remember Mr Gilliland or Mr Bateson.
Q. Did you, as surgeons, speak together about Raychel's death before you attended the meeting?
A. We've spoken about what happened at that time.
Q. Yes.
A. Yes.
Q. And who was involved in that discussion? You have said Mr Bateson.
A. It would be me and a consultant. Nobody else. But I cannot give you exact, but in my memory I remember that I've spoken to Mr Bateson and I have spoken to Mr Gilliland. I might have spoken to Mr Bateson more

because he was the clinical director at the time -- the surgical director at that time. The chronology of it I cannot tell you 100 per cent is pre or after, but I spoken with him because he always liked to know what's going on everywhere and I worked with him a lot actually, so I was close to speak to Mr Bateson about any problem and he was the first person I worked with when I came. Mr Gilliland had spoken to me as well, so I spoken to both consultants.
Q. Do you know how Mr Gilliland came to know that Raychel had died?
A. Now it's from my memory, I might be wrong, okay?
Q. Yes.
A. I think it was a confusion who was the consultant who look after Raychel at that time. From my memory, I think that it was another consultant who probably was on call. But a swap happened between the consultants and that's why Mr Gilliland was the actual on-call consultant other than what we thought is the consultant on call.
Q. Who did you think was the consultant?
A. I thought that probably Owen Thompson(?), I think, at that time.
Q. Sorry, let me be clear. I am distinguishing between the consultant who might have been on call at the time and

Raychel's consultant.
A. The on-call consultant which we knew shortly, I don't know when, it was Mr Gilliland's on-call consultant, okay? And he would look after Raychel.
Q. Yes.
A. But there's some confusion about Thursday, who was the actual consultant on call. I think it because of the rota, printed rota, had a name on it, which is different from what the admission and the A&E and the switchboard knows. So this made a little bit of confusion at that time. But by -- this is as far as I remember from memory. Then after that, we knew for 100 per cent sure that it was Mr Gilliland and Mr Gilliland who would look after Raychel.
Q. Were you unsure while you were treating Raychel who her consultant was?
A. I wouldn't normally look to exactly who's the consultant because usually I speak to the registrar, the registrar knows who the consultant is. If there's a new rota from the rota I have, then we will know from the switchboard who's the consultant. So if we want to contact the consultant, we know for 100 per cent sure who is from the switchboard and from the admission, but sometimes the rota changed --
Q. Yes.

A. -- in the interim.
Q. When you say you wouldn't normally know, would you not have to know really to fill in your surgical report? Would you not have to know who the consultant was?
A. As I mentioned, it's always written before we write anything on it. In the theatre, the surgical -- the operative notes, in the first lines you write who's in theatre, who's the anaesthetist, who's the consultant and everything. And when the stickers -- it should appear on it who's the consultant as well, but it doesn't always work this way.
Q. It didn't for Raychel because, in fact, we drew your attention to that. We don't need to pull it up, but it's at 020-009-17, which is the start of the report. We can see that there is a -- what looks like a sticker there and there's -- in fact, let's pull it up so you see what I'm talking about. 020-009-017. Can you pull alongside of that 020-010-018?
On the left-hand side is the anaesthetist's report, or a part of it, and there is a thing like a sticker on the right, do you see that, with "consultant", which is not completed. Then on the right-hand side is the surgeon's report. You can see that there is a space there to complete who the consultant was and that's not completed; yes?

A. Yes.
Q. And when you were giving evidence I asked you about that and you acknowledged that you should put who the consultant is. Does that mean that either it's just one of those things, a slip, and everyone makes them at some point, or does that indicate that there was some uncertainty about who Raychel's consultant actually was at that stage?
A. It's not uncertainty, it is what normally happens, the sticker should have it. Sometimes the sticker doesn't, and, in the left-hand side, you find my name and written "Dr Jamison" and the anaesthetist. And it is not my handwriting. So what happened, this part routinely get done in theatres. So the operative note is ready, has a sticker on it, has the names on the top and I go and write below that. It is not because there's uncertainty at the time. I think maybe the anaesthetic -- sorry, the staff nurse didn't know. So I didn't know about that, no, I'm not sure why it happened.
Q. The only reason I took you to that is because you yourself had mentioned that there was an issue perhaps as to who actually was Raychel's --
A. This is after the day. This is after what happened.
Q. So during --
A. I know after that there is a talk that a swap happened

and maybe that's why there's some confusions.
Q. Let's take that in stages. So during the course of her treatment, there is no issue that Mr Gilliland is her consultant as far as you're concerned?
A. At that time, I can't remember what was my understanding. This is something that would not strike my mind at the moment. So it doesn't allow my brain in any way to give you an answer about that. But I know -- after that, what I have learnt is that there is an issue who was on call that day. And it may be because there's a difference between the rota and the swap which happened, something that happened.
Q. Okay. That started because I was asking you if you knew how Mr Gilliland first learnt that Raychel had died. Is the answer that you don't know?
A. No, I don't know. This is the reason because I think that there was some confusion.
Q. Can you remember what you discussed with Mr Gilliland?
A. It is patchy in my brain, but I know that we've spoken about the presentation, what happened, how was the operation, what I found out in the operation, what exactly I've done in the operation, what my impression and all of that.
Q. Yes.
THE CHAIRMAN: And the same with Mr Bateson?

A. It would be the same, yes.
MS ANYADIKE-DANES: Then either then or before then, at some point you go to the critical incident enquiry meeting.
A. Yes.
Q. And can you recall who's there?
A. Dr Nesbitt was there, Mr Gilliland was there. I'm not sure whether Mr Bateson was there the whole meeting or he came to nearly the door and left. I can't remember what happened. I think Sister Millar was there. A radiologist was there and a paediatrician, which I don't know the name. But the way the discussion was running, it looks like a radiologist and paediatrician.
Q. Did you know what the purpose of the meeting was?
A. The purpose of the meeting was to identify -- it is. In a way, risk management identify what exactly happen and what the reason for the outcome, why Raychel died, if we can answer the question. And it looked at the details of the process of what happened until that point.
Q. Yes. Were you here when I was asking a similar set of questions to Dr McCord?
A. I didn't attend because I didn't want to affect my memory in any way.
THE CHAIRMAN: I think Mr Makar was outside, not in the chamber.

MS ANYADIKE-DANES: You didn't hear it though? Because there are places you can hear the evidence.
A. No, I didn't want to hear because I didn't want deviation of my memory.
Q. The only reason I ask you that is because I didn't want to repeat something -- I would ask you slightly different if I was aware of the fact that you'd heard the evidence.
A. I didn't hear whatsoever.
Q. Then if I can pull up then a statement that Dr Fulton made, who was medical director at the time, for the inquiry, setting out what the purpose of the meeting was and how it was to be conducted. It's at witness statement 043/1, page 5. He has listed there all those who he thinks attended. He subsequently said he's not entirely sure about that. Then if one looks later down that page, you can see he starts off with:
"... how subdued and shocked all the nurses and doctors appeared at the start of the meeting and that they regarded this as a very serious and highly unusual event."
Then he says that:
"[He] restated that the purpose of the meeting was to establish an accurate detailed picture of all the events leading to Raychel's death and that it was

important to do this quickly while everyone had good recall of the details and that everyone would find it difficult and distressing, but it was essential to understand what went wrong so that they could reduce or avoid the likelihood of another death or injury."

And then he finally goes on to say that:

"[He] stressed that the purpose of the meeting was to establish facts and not to blame individual staff members and to reassure the staff [he] would not take detailed minutes of the meeting, but they would have to produce an action plan to address any issues identified."

Then he also said that:

"[He] would need statements from the key staff, which would contain a detailed description of their involvement in Raychel's treatment, which would be made available to the coroner as they regarded a coroner's inquest as inevitable, and that everybody agreed with that."

Do you recognise that as something that was said or the way in which the meeting was going to be conducted?

A. My understanding is that it is about fact and what happened. I understand the sentences used. I cannot remember them as they are, but I understand what I took from the meeting. It's about looking -- yes, I remember

they said it's not a blame environment or not trying to blame anybody. And that -- I was the first one actually to say what happen at that time. I know the conclusion at the end of the meeting that we're saying that because a lot of discussion was --

Q. I want to ask you about that discussion before we go immediately to the conclusion. Can you remember the main points that were being discussed?

A. I remember very well, we've spoken about IV fluid. When we went through the chronology of events, we've spoken about No. 18 Solution. Because when we linked the information about the possible ... Of what happened to Raychel and the brain oedema, one of the things you would look at is the solutions, the hyponatraemic or the hypotonic solution. Then we said No. 18 because -- we discussed that Hartmann's is more isotonic compared to the hypotonic Solution No. 18 and Solution No. 18 has a higher risk to produce problem in retrospect.

Q. I want to just focus on the discussion. In the context of the fluids, was there also any discussion about the amount of fluid that Raychel had received?

A. Amount, no. The amount, volume?

Q. The volume, yes.

A. No.

Q. Was there any discussion about the rate at which she had

received fluid?

A. We didn't speak about the rate because there's no evidence at that time about the rate, about the relationship between hyponatraemia and the rate. But we looked in evidence before the meeting and we got papers about -- some scattered papers about the hyponatraemia with hyponatraemic solutions, but --

Q. No, that's not quite what I meant. What I meant was, Dr Nesbitt gave evidence in his statement to the PSNI that what he was concerned about was that the rate of administration of the Solution No. 18 was too high. In his view, the maintenance rate should have been about 65 ml an hour and Raychel was receiving 80 ml an hour. So that's one point he mentioned. He also said, quite apart from that, he would have expected, after the surgery, for the rate to be reduced and that that hadn't happened; she had carried on receiving the rate of fluid at 80 ml an hour. And as a result of all of that, he felt that she was receiving too much fluid. Do you recall any of that?

A. I might not have a complete memory about it, so what Dr Nesbitt says, and ... I cannot comment on that. What I can remember very well is that we got the paper which -- a couple of papers from that. Everyone looked and we looked at the paper what they say. And the

understanding at the time that it is the solution type is the issue and we've spoken about No. 18. That's why we changed to Hartmann's solution. Whether there was a mention about the rate -- it is higher than 65 because we know maintenance fluid is 65. We know about that. I think it may be has been mentioned in the meeting.

Q. Can we stay with that point for the moment?

A. But we didn't say that one of the reasons of brain oedema is the rate of fluid, we didn't say that. We recognised at the time 65 is the maintenance fluid, I remember that we talked about -- because I mentioned that I used higher for the preoperative. And we mentioned about No. 18, but a big part of the discussion was ... Because No. 18 was the issue. That's why the outcome of that meeting is to change immediately to Hartmann's.

Q. I appreciate that. Can we just stick to this point that I would like to you help us with? In fact, you have just started it there by saying that you mentioned that you had given the higher rate of 80 ml an hour before her surgery.

A. Yes. And I answered that before.

Q. I understand that. That's not what I'm asking you. You also gave evidence to say that, in your view, what would happen is that after her surgery, her fluid needs would

be assessed and somebody would write a prescription for what was the appropriate fluid and rate of fluid for her to receive, having factored in anything that happened during her surgery or as a result of her surgery. That was one thing. The other thing that you said when you gave evidence previously is, if you had thought that the IV fluid prescription that you had provided for her pre-surgery would simply be reinstated after her surgery, you would have been very concerned about that --

A. Yes, definitely.

Q. -- and you'd have made your concerns known --

A. Yes, because at that time we didn't know that.

Q. Yes. Just allow me to ask the question.

So now you're in this meeting, both Dr Nesbitt and Dr Fulton have said that Raychel's medical notes and records were available at the meeting. You're in this meeting and you would know from what Dr Nesbitt has said that in fact that rate that you had established as appropriate for her pre-surgical condition had in fact simply been continued on.

Now, when you heard that, did you make any comment about that practice?

A. I must say I can't remember exactly this part. I remember we've spoken about the rate, but what

I was ... At that time most of the discussion was about the type of fluid because even if you give 80 of Hartmann's solution, you wouldn't expect hyponatraemia.

Q. No, I'm simply directing you to comment --

A. It is the solution type is the issue.

Q. I'm coming to the solution type. I'm simply directing you to the comment that Dr Nesbitt made. His contribution was, so it would appear from his statement to PSNI, to start with the rate and to say that Raychel was getting too much fluid. Okay? Why I'm asking this particularly of you is because you had expressed your own view as to your concerns if your pre-surgical rate had simply been continued on. And you would have learnt in that meeting that that is exactly what happened: it continued on with no apparent review of her needs post-surgery. So then I'm asking you, when that becomes clear during the meeting, do you not make your concerns known then?

THE CHAIRMAN: Sorry, just a moment. He has said he recalls no discussion about the volume or rate of fluid. Now, if he doesn't remember any discussion about the volume or rate of fluid, then unless his memory is triggered by what Dr Fulton has said, he can't say any more on it. It's a bit surprising because, on this witness's previous evidence, the preoperative rate should not have

become the post-operative rate. But if he says he doesn't remember any discussion about volume or rate, then I'm not sure how much further we can take this issue of the critical incident review meeting, important as that element is.

MS ANYADIKE-DANES: Thank you, Mr Chairman.

THE CHAIRMAN: Is that still your position, Mr Makar, before I leave this point, that despite being reminded of what Dr Nesbitt or Dr Fulton has said, you don't remember any discussion about the rate of fluid?

A. I cannot remember it sharply. I only remember most of the discussion was about the type of fluid. About the rate, if it happened, I cannot remember. I remember we have spoken about the initial amount, 65. This we talked about. But what is after that about continuation of fluids, the same rate or is it the same prescription, I can't remember that. Because I didn't know that it is the same prescription except recently, actually, when we discussed last time for me to know it as it is.

THE CHAIRMAN: Well, do you remember any discussion on a related issue about who should be responsible for prescribing the post-operative fluids which a child will receive from the end of surgery until that child is back on the ward and for the next few hours?

A. This part, they are about to look at it as far as

I remember, because the consensus is that that should be the anaesthetist.

THE CHAIRMAN: So you remember that being discussed?

A. Yes.

THE CHAIRMAN: Right, thank you.

MS ANYADIKE-DANES: You then say that you do remember the type of fluid being discussed. Can I take it from the way you have answered the chairman previously that you don't recall any general agreement that Raychel had received too much fluid?

A. I don't recall that. I think it was mainly the type. No. 18 is hyponatraemic.

Q. The reason I put that to you is because two nurses who attended it -- certainly Staff Nurse Noble was of the view that, in general terms, those who attended that meeting agreed that Raychel had received simply too much fluid. Okay? You don't remember that? Then let's go on to the type.

Was there some debate about the appropriate type of fluid to administer to post-surgical paediatric patients?

A. At that time, it wasn't the view of No. 18 and the half normal saline wasn't strong at the day. There is this view exist, as you know, in the medical arena about that children should have dextrose and half-normal saline or

No. 18, but this view wasn't strong at that point. The view was because -- we've spoken about Hartmann's is the one which is used for resuscitation and Hartmann's is isotonic solution and from the papers we have from -- it was from United States, I think, as far as I remember -- was about the Hartmann's solution. And even -- sometimes they comment even normal saline for the post-operative.

At that stage, Hartmann's solution did not get any resistance, really, any major resistance about implementing it. After this meeting, I think a letter was distributed everywhere in the nursing stations and to everybody that Hartmann's should be the solution used. After that, some changes happened with no further discussions. They said maybe half normal saline, then they shifted back to Hartmann's. This is later on down the line. But immediately after the meeting was Hartmann's --

Q. So the consensus, if that is the correct way to put it, at that meeting was Hartmann's is a fluid that should be used or could be used for the post-surgical paediatric patients?

A. Should be at that stage. It came as Hartmann's is the recommended solution to be used and not No. 18 --

Q. So did that --

A. -- but this changed after that.

Q. I'm still at the meeting. Did that mean that in view of the meeting that the post-surgical patients, in terms of their fluid administration, would be treated differently from the other patients?

A. You mean paediatric patients?

Q. Yes, the other paediatric patients.

A. I can't remember this part. I can't remember. We did not go across to say to the paediatricians what they use in a patient with liver failure or patient with other medical issues because they cannot -- liver failure or liver disease, they cannot take Hartmann's because of the lactate in it.

There is a lot of complexity in the IV fluid. I'm not trying to put it on now, but I don't think we went at that time to make it as an absolute. It wouldn't be the right way to say: okay that's it, everybody will use Hartmann's. So I don't know what the paediatrician agreed, whether half-normal saline, I think they agreed about, but in this meeting was Hartmann's for surgical patients and this is the stop point at this meeting.

Q. And can you remember anything in the meeting about a view that Raychel's electrolytes should have been checked more frequently?

A. Yes. At that meeting, because I've written the

electrolytes on the page when I clerked Raychel in and it was there. And we knew that the sodium was okay at that time, but we don't know in the morning or the afternoon or what happened after the vomiting.

I remember that Dr Nesbitt and the other consultants say, "Okay, we should, if the patient or paediatric or -- actually it's in adult patients who do that. If the patient on IV fluid, they should have an electrolyte checked because -- well, doing something, we need to see the result of it. Then any patient on IV fluid should have electrolyte be checked. The time interval, I cannot give you that. Is it 12 hours or is it the next morning? I cannot remember that. But I know in the morning all the blood gets sent for all the patients, so it would be in the morning. But the time interval, I cannot remember. But it has to be done, yes.

Q. Yes. You remember that as an agreement that that would have to happen. Prior to that meeting, what was your understanding of when surgical patients on IV fluids -- this is paediatric ones -- would have their electrolytes checked? What was your understanding?

A. My answer will be ... It will be a lot of noise in it in another word. It means that my memory will not be solid enough to give you a good answer because my memory will be affected by what's happening. So now, compared

to last month, my memory will be affected by what's happening, so I cannot give you an answer on that now.

Q. Was there any discussion so far as you can recall about the accessibility of the surgeons to nurses?

A. What do you mean, sorry? I don't understand.

Q. How easy it was for the nurses to reach the surgeons to discuss with them issues arising in relation to their patients.

THE CHAIRMAN: This is specifically Ward 6 nurses.

A. In my -- if you ask them, they will know I'm very accessible, so I was very easy to get.

MS ANYADIKE-DANES: I don't mean --

A. I don't know -- I'm one of the surgeons. But concerning -- I was SHO, so I'm one of the -- they ask the housemen, then the SHO, so this is the first line they look for actually. How accessible they are to the consultant, I cannot answer that.

THE CHAIRMAN: No, it's a different point. The point is that because the paediatricians are readily available to the nurses on Ward 6 because the paediatricians are generally working on Ward 6 or some of them are. The surgeons are not generally working on Ward 6, the surgeons are generally elsewhere. The nurses had raised an issue at this meeting, which they had apparently raised before, that they sometimes had difficulty in

having surgeons available to them, not because of a fault on the part of the surgeons but because you might be in Limavady, as you said, you might be on other wards, therefore if they wanted a surgeon to do something, you might be rather more difficult to contact or even when you were contacted, you might be in the middle of doing something else and you couldn't get back to the ward. Do you remember that being discussed at the meeting?

A. I can't remember. I don't think it was discussed.

THE CHAIRMAN: Thank you.

A. I remember that they tried to get somebody at night-time or so, but not the major discussion part.

MS ANYADIKE-DANES: Was it in your expectation that at some point Raychel's consultant would speak to her family?

A. You ask me now or you ask me as an SHO at the time?

Q. In 2001, would you have expected, given that Raychel actually died, would you have expected that her consultant would speak to her family, or her parents more to the point?

A. At that time as an SHO, I wasn't sure who's speaking to the family, but I learned at that time that Dr Nesbitt had spoken to the family. I wasn't asked to be involved in these meetings and I think part of it -- I'm the SHO and I was traumatised by it, so they didn't want to put

me in an extra burden.

Q. No, I don't mean you.

A. So as a consultant, I cannot answer about consultant surgeon Mr Gilliland, whether he was asked to go in person and speak with the family or whether at the time Dr Nesbitt already had spoken to the family and maybe ... But I didn't know who. I know that Dr Nesbitt had spoken to them, but I wasn't sure whether Mr Gilliland had spoken to the family or not.

Q. That's why it's a slightly different question, Mr Makar. The question is: would you have expected Raychel's own consultant, given that she'd died, to at some stage have spoken to her parents? It's a simple question. I'm not asking you whether you knew what arrangements had been made, simply would you have expected that?

A. But you asked me for me as what capacity I am. As one of the doctors?

Q. As a surgeon.

A. Or as a person, as a human being?

Q. Oh well, let's start with you as a human being. Would you have expected that?

A. As a human being, the family would like to communicate with the people involved in the care of their daughter. So they might want to communicate with me, might want to communicate with everyone involved and I respect that as

a human being. As an SHO, it may not be the case because in this stage ...

Q. Sorry, I'm not talking about you speaking to the family. Raychel's consultant Mr Gilliland was responsible for her care and treatment all the time she was there in Altnagelvin.

MR STITT: Mr Chairman, it's obvious what the thrust of the question is. Does it really take this inquiry any further whether this junior doctor, as he was in 2001, has an opinion as to whether or not the consultant -- you, sir, can form a view, we'll hear evidence from persons who should be able to answer that question. I respectfully suggest that this is not the appropriate witness to push and push on this question.

MS ANYADIKE-DANES: Well, I will rephrase it because I wasn't entirely sure, given the answer I was getting, that Mr Makar had understood the point. The reason I'm asking it is because what I am trying to see if I can establish -- and I've asked it to a number -- is what is the culture amongst the surgical team.

MR STITT: The --

MS ANYADIKE-DANES: Sorry, if I may just --

MR STITT: -- specific issue where Raychel was to die, which was a very unusual circumstance, so the culture doesn't come into it when it comes to a consultant talking to --

MS ANYADIKE-DANES: If I may just finish the point that I was making. An SHO, a JHO, they're all trainees and they're being trained by their consultants by watching them, emulating them and discussing matters with them. What I'm trying to see is whether there was a sense that he grasped that when something like this happened, the person who really should be addressing the parents is the person in charge of that child's care and treatment.

That is what I'm trying -- it may be that Mr Makar's answer to that is, "I don't know, we never discussed that sort of thing", in which case he can simply say that and that's an end of the matter. That's what I'm trying to ascertain.

MR STITT: What's being sought is his opinion as to whether he feels that a consultant -- not whether it's being taught that a consultant should or should not, it's whether he feels that a consultant should or should not. The answer to that, I respectfully suggest, is valueless.

MS ANYADIKE-DANES: Well, do you know?

A. As to what happened in Altnagelvin at that time?

Q. At Altnagelvin in 2001, you're a member of the surgical team that was responsible for Raychel's care. The person who is overall responsible for Raychel's care was Mr Gilliland, her consultant. So far as you're

concerned, was it your understanding or expectation that Mr Gilliland in that capacity would at some point have spoken to Raychel's parents?

A. If you like for my opinion, it depends on the case and the rapport. If there is a rapport -- yes.

MS ANYADIKE-DANES: Mr Chairman, I have perhaps maybe just one or two questions, but there's something that I just need to check if you could give me just a few minutes to do that. Meanwhile I'll also take an opportunity to check if there are any other questions from the family or, for that matter, anyone else.

(4.46 pm)

(A short break)

(4.49 pm)

MS ANYADIKE-DANES: I just have a few points and I want to start first with the one in relation to the nurses and the accessibility point, which you had answered largely by talking about your own personal accessibility.

I want to put to you the extract from the evidence of Sister Millar when she was making a more general point in relation to surgeons. If we can have the transcript for 1 March and put page 58 up. You can see from line 7, she is now commenting on something that Staff Nurse Noble said. Her evidence came first; she gave evidence on this point. Sister Millar is being asked to comment

on it and this is her comment on it:

"I said that I thought it was totally unfair that the nurses had such responsibility for the surgical children. I felt it was unfair. I felt that we had to be the lead all the time in looking after the surgical children. We are nurses, we're not doctors. And whilst we do our very best, I don't think we should be prompting doctors. We would now maybe, but 12 years ago ... Or I don't think we should be telling a doctor to do electrolytes. It's different now, we're more knowledgable, we've had quite a bit of education. But in those days really we were leading the care, I feel, in looking after children."

So that was her concern. I put that concern to Dr McCord and he said that he was aware of that concern and it was something that Sister Millar had voiced before. So in other words, this is not the first time she's making this kind of comment. Were you aware of it?

A. No, I can't remember that.

Q. Did you remember hearing that at the meeting?

A. I can't remember.

Q. Is it correct? Irrespective of whether you were aware of it, are the problems that she's identified -- do you recognise them?

A. I must say that the nurses in the paediatric ward usually are the first line who look after the patient and we rely very much on knowing from them what's going on. This is because they are the first line who look after the patient. And this, of course, puts them under pressure because they are the ones who would alarm the surgical team to come to the ward and see the patient, the child. And yes, we are not based on Ward 6, we are based on 9, which is three floors above, or theatre or somewhere else. And definitely they might have felt at some stage that there is no surgical doctor there all the time, like we have the house officer on 9, 8 and 7; in three floors you have house officers present there physically all the time. And the surgeons were not physically in Ward 6, the paediatricians physically in Ward 6.

Q. So --

A. So it might have put them in this feeling. But I cannot say that I heard it before, but it is --

Q. You recognise what she's talking about?

A. It could be there because it's the fact that we are not on the ward, so they might be under pressure.

Q. Thank you. The other point that I would like to ask you about: following on from the discussion about the type of fluid, Dr McCord in his evidence characterises

a little bit of a sort of debate because the paediatricians had their view as to what was appropriate and the surgeons had their view and maybe the anaesthetists might have had another view as well. But he characterised it as a bit of a debate as to what was the appropriate fluid. In your evidence, though, you said whatever that debate might have been, there was no resistance, so far as you're concerned, to Hartmann's being the fluid at that stage to be used for post-surgical paediatric patients; is that correct?

A. Yes, it wasn't a strong side of the debate. It was mainly -- [inaudible] debate for the Hartmann's at that point, in other words.

Q. Can I pull up something and see if you recognise this. This is a letter that Dr Nesbitt wrote to Mr Bateson, who was the clinical director of the surgical directorate. It's dated 3 July 2001 and the reference is 095-010-046ab. This letter is coming from Dr Nesbitt, who, as you can see at the bottom, is the clinical director of anaesthesia and critical care. He's really updating Mr Bateson on how matters stand. You can see that he says:

"There are several papers outlining the hazards associated with the use of hyponatraemic fluids in children who retain fluid due to ADH and vasopressin

release."

Then he points to the fact that the Children's Hospital no longer uses No. 18 Solution and most other units are trying to change.

If I just pause there for the minute, were you aware of that, that the Children's Hospital had stopped using No. 18 Solution?

A. In Belfast?

Q. Yes.

A. After Raychel?

Q. No, no, no, before Raychel. Were you aware of that?

A. No.

Q. Okay. Then he goes on to say:

"The problem in the children's ward [that's Ward 6 in Altnagelvin] seemed to be that even if Hartmann's was prescribed, it was changed to No. 18 by default. I therefore asked Sister Millar to change this policy so that for surgical children the default solution became Hartmann's."

And that's what you were saying was something that was agreed during the meeting; is that correct?

A. For surgical patients, yes.

Q. "And with agreement, it may also be possible for the paediatricians to undertake the fluid management of surgical children. Obviously this impacts on surgical

care and needs your support."

Then it's the next paragraph that I want to direct you to:

"Some clinicians evidently feel that No. 18 Solution is the fluid they wish to prescribe and have disagreed with the regime suggested. Obviously, clinical judgment is important and I am sure that there is a place for No. 18 Solution, but I am concerned that my attempt to put in place a safe policy has met with resistance so quickly."

Were you aware of that?

A. I think probably that letter is based on further discussion after that meeting.

Q. Yes.

THE CHAIRMAN: It is.

MS ANYADIKE-DANES: What I'm asking you is: were you aware of that issue that is being raised in that paragraph that Dr Nesbitt felt there was some resistance to the regime that, from your point of view, had been agreed during the meeting? Were you aware of that?

A. As resistance from the paediatricians? It's expected to be resistance from paediatricians.

THE CHAIRMAN: No, I'm not sure it is a resistance from paediatricians. We'll hear more about this. But this letter is being sent to the surgical director; okay?

And what Dr Nesbitt seems to be saying in the third paragraph is that what was agreed at the meeting on 12 June and over the next couple of days is a new policy, a new safe policy, but it is already meeting with resistance from surgeons. So the order of things seems to be: Raychel dies, there's a meeting on 12 June at which there's discussion about the solutions, what solution to use. Within a couple of days, it is decided not to use Solution No. 18 for surgical patients, and, in effect, Dr Nesbitt is writing three weeks later and expressing concern to Mr Bateson that this new policy is already being met with resistance. And what Ms Anyadike-Danes was asking you was: do you remember in those weeks in late June/early July 2001 that the new policy was being resisted already?

A. I might have misunderstood it because I saw that the paediatricians are the ones who would not be feeling safe with Hartmann's solution and there is a big resistance from the paediatricians at that time. It may be that's why it explains that later we had a temporary period where they were going to introduce half normal saline rather than No. 18 and I think this has been reverted again to Hartmann's. But I didn't know it is in the surgical directorate that a problem with the surgeons --

THE CHAIRMAN: I'm inferring it's a surgical problem because the director of anaesthesia is writing to the director of surgery to raise the problem, rather than writing to other anaesthetists. You understand?

A. Yes.

THE CHAIRMAN: If Dr Nesbitt was having a problem with the anaesthetists on his team, he would have written to the anaesthetists. This letter is sent to the man who, at that time, was in charge of surgery. And, in effect, Dr Nesbitt seems to be asking Mr Bateson to sort out his surgeons. Does this ring a bell with you; do you remember any problem about this?

A. Within the surgical directorate, I didn't -- I don't remember that there is a big problem because surgeons usually use Hartmann's anyway.

MS ANYADIKE-DANES: Not when their patients are on Ward 6. You said surgeons use Hartmann's anyway and I said to you, "Not when their patients are on Ward 6".

A. Yes, at that time, but all the other patients get Hartmann's and normal saline.

Q. Did you hear any information from the Royal, the Children's Hospital, as to what they thought had been the problem with Raychel?

A. I know that there was a talk that it could be subarachnoid haemorrhage.

Q. How did you hear that?
A. I heard that after the event that there was a talk that there might be subarachnoid haemorrhage. However, it is a brain oedema rather than subarachnoid haemorrhage.
Q. Did you hear that in Altnagelvin or did you hear that from the Children's Hospital?
A. I didn't go -- I didn't communicate to the Children's Hospital at all, so probably I heard it from somebody in Altnagelvin, but I don't know who.
Q. And in addition to the possibility of there being a haemorrhage, did you hear anything about what the Children's Hospital thought had been the problem with Raychel?
A. At that meeting, we know there was a problem with the brain oedema.
Q. You knew that there was cerebral oedema?
A. Cerebral oedema.
Q. At that meeting?
A. As far as I remember.
Q. And that that was the cause --
A. -- [OVERSPEAKING] why we talked about No. 18.
Q. I'm just going to pull up something else and see if you can help if you heard anything of this sort. It's 023-021-048. It's the first paragraph. It's much after the event, but it's talking about something that

happened -- this e-mail is from -- I should explain it. The e-mail is from Stella Burnside, who was the chief executive of the Trust at that stage. She is sending this information to the Chief Medical Officer; okay? So although she's sending it in 2004, in point number 1 she's talking about something that happened round about the time, if not the actual day, of Raychel's death. What she says is:

"Altnagelvin heard a 'rumour' from paediatrics intensive care unit that the 'wrong fluids' had been used. This 'rumour' emerged from a nurse in paediatrics intensive care unit responding to an enquiry from Altnagelvin's ward nurse on the child's state, on the Sunday."

And by that we take it to mean Sunday 10 June, which is the day that Raychel died. Now, did you hear anything like that whilst you were at Altnagelvin?

A. I cannot comment. I don't know.
Q. No, did you hear anything like that?
A. About wrong fluid?
Q. No, did you hear anything about what is referred to under that first paragraph?
A. I don't know about that, but it -- at that time maybe they were thinking it's subarachnoid haemorrhage. I'm not sure where ... I don't know.

MS ANYADIKE-DANES: Thank you very much, Mr Chairman. I have no further questions.
THE CHAIRMAN: Mr Quinn, Mr Campbell, Mr Stitt?
Okay, Mr Makar, thank you very much for coming back again today. Unless you have anything more that you want to add, your evidence at the inquiry is now complete.
A. Okay, thank you very much, Mr Chairman.
THE CHAIRMAN: Ladies and gentlemen, tomorrow morning at 9.30 for Mr Bhalla, followed by Mr Gilliland.
(5.05 pm)
(The hearing adjourned until 9.30 am the following day)

I N D E X