

Witness Statement Ref. No.

137/1

NAME OF CHILD: Claire Roberts

Name: Andrew Sands

Title: Dr

Present position and institution: Consultant Paediatric Cardiologist, Royal Belfast Children for Sick Children, Belfast Health & Social Care Trust

Previous position and institution: Registrar in Paediatrics, Royal Belfast Hospital for Sick Children.
[As at the time of the child's death]

Membership of Advisory Panels and Committees: Member of Paediatric Drugs & Therapeutics Committee since 2008 and Chair since June 2010.

Member of Belfast Trust Drugs & Therapeutics Committee since June 2010.

Chair of appointments committee for regional 2nd Term Paediatric Senior House Officers 2004 -2006

Chair of Northern Ireland Paediatricians in Training 2000-2002

Regional Medical Cardiology Committee Co-Chair 2008-current

[Identify by date and title all of those between January 1995 - November 2011]

Previous Statements, Depositions and Reports:

[Identify by date and title all those made in relation to the child's death]

090-051 Statement by Dr Andrew Sands

091-009 Deposition of Dr Andrew Sands

OFFICIAL USE:

List of previous statements, depositions and reports attached:

Ref:	Date:	

IMPORTANT INSTRUCTIONS FOR ANSWERING:

Please attach additional sheets if more space is required. Please identify clearly any document to which you refer or rely upon for your answer. If the document has an Inquiry reference number, e.g. Ref: 049-001-001 which is 'Chart No.1 Old Notes', then please provide that number.

If the document does not have an Inquiry reference number, then please provide a copy of the document attached to your statement.

I. QUERIES ARISING OUT OF YOUR STATEMENT TO THE INQUEST

With reference to your Statement to the Inquest dated 6th July 2005 (Ref: 090-051-157), please provide clarification and/or further information in respect of the following:

(1) *"May I first express my sympathy with Claire Robert's parents and wider family, having spoken quite recently with them..."* (Ref: 090-051-157).

(a) State the date and location where you spoke *"quite recently with" "Claire Robert's parents and wider family"*.

I was expressing my sympathy with Claire's parents and wider family in my statement. I was referring to a meeting with Claire's parents only. The date of this meeting is recorded as 7.12.2004. The meeting took place in the Psychology Department of the Royal Belfast Hospital for Sick Children.

(b) Identify the persons with whom you spoke *"quite recently"*.

I spoke with Mr & Mrs Roberts at that meeting. I do not recall other family members being present.

(c) Identify any other persons present at that discussion other than *"Claire Robert's parents and wider family"*.

I recall Dr Heather Steen, Dr Nichola Rooney & Professor Ian Young being present at that meeting.

- (d) State the circumstances in which you came to speak "quite recently with" "Claire Robert's parents and wider family".

I was invited by Dr Steen to meet Claire's parents at that point.

- (e) State the reasons for you speaking to "Claire Robert's parents and wider family".

Dr Steen invited me to meet Claire's parents as I had met them at the time of Claire's admission and again after her death. Also it was suggested that I may have been able to help with specific questions from that time.

- (f) State whether you spoke to "Claire Robert's parents and wider family" at the request or direction of any person. If so, identify that person.

I was invited to meet with Claire's parents by Dr Steen.

- (g) State the nature of the discussion, and whether a record was kept of that discussion. If so, please produce that record.

I recall the discussion as being quite wide ranging. Minutes have been recorded by Dr. Rooney ref 089-002.

- (h) State in what capacity and upon whose behalf you were speaking to "Claire Robert's parents and wider family".

I believe I had been invited to the meeting with Claire's parents to discuss Claire's condition on 22nd October 1996.

- (2) "At the time of Claire's admission I was employed by the Royal Group Hospitals Trust. I had commenced my first substantive post as a paediatric registrar on the 7th August 1996. Previously I had worked as a locum registrar in paediatric cardiology. I was based in Allen ward in the Royal Belfast Hospital for Sick Children" (Ref: 090-051-157)

- (a) State the date when you commenced working at the Royal Belfast Hospital for Sick Children (RBHSC).

I commenced work at RBHSC on 2nd February 1994 to the 2nd August 1994 for a period of 6 months as Senior House Officer.

This was followed by one year working in Craigavon Area Hospital, before returning to RBHSC (see below).

- (b) State the positions you have held since you first started working at RBHSC, and the start and end date of each position and identify the locations where you worked in the hospital in relation to each position held.

I worked as a 1st term Senior House Officer in RBHSC between 2nd February 1994 & 2nd August 1994. This comprised 2 months working in Paediatric Surgery (predominantly in Barbour Ward and the Infant Surgical Unit), 2 months in the Accident & Emergency

Department and 2 months in General Paediatric Medicine (based in Musgrave Ward). These posts involved out of hours duties covering other wards also. I returned to RBHSC on 2nd August 1995. I worked as a Senior House Officer in Paediatric Cardiology (based in Clark Clinic) between August 1995 & October 1995. I then completed 3 months as Senior House Officer in Neonatology in the Royal Maternity Hospital, followed by 2 months as Paediatric Senior House Officer in the A&E Department (7th February 1996 - 31st March 1996). I was next appointed as Locum Registrar in Paediatric Cardiology based in Clark Clinic (1st April 1996 - 6th August 1996). My next appointment was as Registrar in Paediatrics 7th August 1996 - August 1997). This comprised 6 months as General Medical Registrar based in Allen Ward and 6 months in the Children's Haematology Unit.

- (c) Explain what you mean by "*my first substantive post as a paediatric registrar*".

The post commencing in August 1996 was my first Registrar post. Prior to that I had a short-term appointment as Locum Registrar in Paediatric Cardiology as outlined above.

- (d) Describe your work commitments to the Royal Group of Hospitals (Royal) from the date of your appointment as a paediatric Registrar and particularly over the period 21st October 1996 to 23rd October 1996.

I was working as a registrar in Paediatrics. I worked as part of the Allen Ward clinical team under consultant supervision. I cannot recall specific daily commitments. However the post entailed inpatient clinical work, including ward rounds, patient's admissions and discharges. There were also outpatient commitments plus on-call rota. In addition there would have been regular teaching commitments plus administration duties (letters etc) in relation to clinical duties. On the morning of the 22nd October 1996 I was carrying out a Ward Round in Allen Ward. This would have been conducted with any available Senior House Officer attached to Allen Ward and at least 1 nurse (usually a senior nurse). I cannot remember what additional duties I was scheduled to carry out that day.

- (e) State specifically whether you were :

- (i) a 'Senior Registrar'

I was not a Senior Registrar

- (ii) operating in a 'quasi-consultant' role

I was not operating in a 'quasi-consultant' role

over the period 21st October 1996 to 23rd October 1996.

- (3) "*I met Claire on the morning of 22nd October 1996.*" (Ref: 090-051-157)

- (a) Describe what you considered to be your role in relation to, and responsibilities towards, Claire and her family over the period from her attending A&E in RBHSC on 21st October 1996 until 23rd October 1996 when ventilatory support was withdrawn, and in particular:

- (i) From Claire's attendance at A&E at RBHSC until her arrival in Allen Ward

I was not on duty when Claire presented to A&E, nor when admitted to Allen Ward.

(ii) While Claire was in Allen Ward until her admission to PICU

I recall meeting Claire late on the morning of 22nd October 1996 when carrying out the morning ward round. I was therefore part of the team assigned to take over her care at that stage. I would have considered myself part of the team responsible for providing care for Claire and communication with Claire's family. I would have considered it my responsibility to work for the benefit of the patient under consultant supervision and instruction. My recollection is that I would have had other hospital duties to carry out on the afternoon of the 22nd October 1996. This may have been seeing additional patients, in other wards, as part of the medical "take in", teaching or outpatient work. After Dr Webb's attendance it was my belief that Claire was under joint care between General Paediatrics and Paediatric Neurology. I still had a role in Claire's care later in the afternoon and gave an intravenous dose of Sodium Valproate on Dr Webb's instruction. I would have considered it partly my responsibility to communicate information regarding Claire's condition to appropriate members of medical and nursing staff before my period of duty ended at approximately 5pm on 22nd Oct. 96.

(iii) From her admission to PICU until her death

I was not on duty beyond approximately 5pm on 22nd October 1996. This period of duty likely extended a little over the scheduled 5pm finish.

(b) State the times at which you were on duty between 21st October 1996 to 23rd October 1996 and in particular:

(i) Whether you were present in the hospital or

I was on duty and present in the hospital between approximately 9am and 5pm on 22nd October 1996. However the period of duty in the evening probably extended a little beyond the scheduled 5pm finish. I do not recall if I was on duty from 9am on 23rd October 1996.

(ii) Whether you were on call during that period

I was not on-call between the 21st & 22nd October 1996. I was not on-call prior to 9am on 23rd October 1996.

(iii) What contact you had with Claire and her family during that period including where and when that contact occurred

I met and examined Claire on the morning of the 22nd October 1996. I do not recall the exact time. However it seems likely that it was late morning. I recall Claire's mother was present at that time. Claire's father may also have been present. I recall speaking to Claire's mother in detail about my concerns, particularly about Claire's level of consciousness. This took place in Allen Ward, RBHSC. I do not recall if I had a further discussion with Claire's parents in Allen Ward that day. However I may

have done so. I was present in Allen Ward again to administer Sodium Valproate at 17:15. I may have spoken to the family again, if present at that stage.

(c) In regard to Claire's medical notes and records, identify precisely the entries that you made or which were made on your direction and state below:

(i) When each of the identified entries was made

(ii) The source of the information recorded in the entry

The first entry in the notes by me is "encephalitis/encephalopathy" (090-022-053). This follows the words "impression non fitting status" entered by the senior house officer. This entry was made after I had sight of the ward round entry and immediately after my first conversation with Dr Webb whom I recall mentioning the term encephalopathy. My second entry in the medical notes is the giving of Sodium Valproate at 17:15 on 22nd October 1996. My third, and final entry in the notes is on 11th November 1996 at 3:35pm. This reads "At the request of nursing staff, I spoke to Mr & Mrs Roberts". I believe this was in Allen Ward. I was asked to do this as I believe Dr Steen was not available to do so. As documented, I talked through the events before Claire's death. I also committed to passing on the need to talk to Dr Steen, particularly in relation to the post-mortem results.

(4) *"I was conducting a ward round with at least one senior house officer who recorded the ward round notes. It is likely also that there was a senior nurse in attendance. My recollection is that Claire's mother was also present."* (Ref: 090-051-157)

(a) Identify all of the senior house officers who accompanied you on the ward round when you attended Claire on 22nd October 1996.

Dr Roger Stevenson was the Senior House Officer and made the ward round note. I do not recall if other Senior House Officers were present.

(b) Identify the *"senior house officer who recorded the ward round notes"*.

I believe Dr Stevenson recorded the ward round notes.

(c) Identify all nurses in attendance on the ward round on 22nd October 1996 when you attended Claire, and in particular specify which of those nurses was *"a senior nurse"*.

I cannot recall which nurse or nurses were present on the ward round.

(d) Identify the members of the medical team on duty between Claire's admission on 21st October 1996 and her death on 23rd October 1996, and the positions each person held during that period.

From reading the medical notes, I believe the following to be true. Dr. Janil Puthuchery (SHO) saw Claire in A and E. Dr Bernadette O'Hare (Registrar) made the admission note, after seeing Claire in A and E. Dr Andrea Volprecht (SHO) entered the first set of Biochemistry Results. Dr Roger Stevenson (SHO) made the ward round note. Dr David Webb, Consultant Paediatric Neurologist made several notes. Dr Neil Stewart (SHO) prescribed rectal diazepam on 22nd October 1996 and made a note at 23:30 on the same day. Dr Brigitte Bartholome (Registrar) attended Claire with Dr Clarke (Anaesthetic Registrar) after a respiratory arrest at around 3am. Dr Webb and Dr Heather Steen (Consultant Paediatrician) made further notes followed by Dr McKaigue (Consultant Paediatric Anaesthetist). I believe the written report from Claire's CT scan may have been made by Dr Peter Kennedy. I am not certain of other clinicians present at that time.

- (e) Identify the members of the Allen Ward nursing team on duty between Claire's admission on 21st October 1996 and her death on 23rd October 1996, and the positions each person held during that period.

I am unable to identify members of the nursing team.

- (f) In October 1996, state whether nursing care was prescribed by doctors, nurses or both.

Nursing care would have planned and implemented mainly by nursing staff. However doctors may have asked for nursing care to be adjusted.

- (g) Identify the ward sister/nurse in charge of Allen Ward between 21st and 23rd October 1996.

I believe Mrs. Angela Pollock was Nursing Sister in Allen Ward at that time. However I do not know if she was on duty at that time.

- (5) *"As Claire was not drinking, intravenous fluids started, after admission were continued at maintenance dose. She was given (dextrose 4%/0.18% saline). This was standard fluid therapy at that time."* (Ref: 090-051-157)

- (a) Identify the person who prescribed continuing the type and quantity of IV fluid and rate of administration to Claire.

I believe Dr Volprecht wrote the initial fluid prescription for Claire. This was continued by Dr Stevenson. The decision to continue with the current fluid management was most likely part of the ward round discussion.

- (b) Explain the reasons for continuing the choice of this type and quantity of IV fluid and the rate of administration.

It is my recollection that this fluid was considered standard maintenance fluid for children at this time. The ward round team did not have a certain diagnosis in Claire's case. She did not appear to require additional quantities of fluid. This was likely considered an appropriate quantity of fluid for a child of Claire's weight. The fluid would have been

continued, pending a further check of urea & electrolytes. This was most likely also part of the ward round discussion as electrolytes were repeated later.

- (c) Describe any monitoring of Claire's consciousness and serum sodium concentration you directed or arranged on examining her on 22nd October 1996, and state when you directed/arranged this and who was responsible for that monitoring of Claire and any record made of it. If you did not direct or arrange for this, explain why not.

The ward round discussion, perhaps supplemented by my initial meeting with Dr Webb resulted in central nervous system observations being commenced. These were carried out hourly. Although no mention is made in the notes of repeating the serum electrolytes (including sodium), I believe this would have been part of the ward round discussion and planned to be carried out.

- (d) Explain the method of calculating Claire's fluid requirements at that time.

Although I did not prescribe Claire's intravenous fluids, one formula in use for maintenance fluid at the time was as follows:

- 4mls per kg per hour for the 1st 10kgs of weight
- 2mls per kg per hour for the next 10kgs of weight
- 1ml per kg per hour for any kg of weight above 20

An alternative is:

- 100mls per kg for the 1st 10kgs of weight
- 50mls per kg for the next 10kgs of weight
- 20mls per kg for each kg of weight above 20kgs

This gives a total daily maintenance of fluid requirement which would then be divided by 24 to give an hourly rate. As the fluids were prescribed by another doctor, I do not know which, or if either of these methods was used.

- (e) State whether there was a reassessment or review of Claire's fluid management on 22nd October 1996. If so, state when, by whom and the outcome of it. If there was not, explain why not.

I am not aware of a re-assessment of Claire's fluid management prior to Dr Stewart's note of 23:30 on 22nd October 1996. During the earlier part of that day I believe the ward team would have considered that Claire's fluid balance was stable. There was no additional electrolyte result to influence a change.

- (f) State whether you considered prescribing restricted fluids on 22nd October 1996. If so, state when you considered this and explain why you did not prescribe restricted fluids. If you did not consider this, explain why not.

I do not recall if this was considered. As part of the ward round team I may not have thought it necessary at that point to alter fluid management. It was not clear how far behind Claire was with her fluids on admission. However there is no record to suggest dehydration by the morning of 22nd October 1996.

Repeat electrolytes would most likely have been requested with the intention of using the result as a guide to further fluid management.

- (g) State whether you considered prescribing a higher sodium containing fluid on 22nd October 1996. If so, state when and the reasons for considering this. If you did not consider this, explain why not.

I do not recall considering a higher sodium containing fluid. There was no definitive diagnosis in Claire. Given that, providing maintenance fluid only was likely considered the best option.

- (h) State whether you were aware of the possibility of inappropriate ADH secretion in Claire's case on 22nd October 1996. If so, state whether and how you modified Claire's management and IV fluid regime to address that possibility. If you were not aware of this, explain why not. If you made no modifications to the IV fluid regime, explain why not.

In relation to Claire's case, during my involvement on 22nd October 1996, I do not recall whether or not I was aware of the possibility of inappropriate ADH secretion.

- (i) State whether the continuance of the *"intravenous fluids, started after admission"* and the application of *"standard fluid therapy at that time"* was reviewed and reassessed at any time on 22nd October and 23rd October 1996. If so, state when, by whom, the reasons for the review/reassessment at that time and what the outcome of any such review/reassessment was. If they were not reviewed and reassessed, explain why not.

Although not on duty at the time, my reading of the notes is that a re-assessment was made at 23:30 on 22nd October 1996, based on a further U&E result. A decision was made, between Dr Stewart and the Registrar on-call to reduce to 2/3 maintenance fluid, of the same sodium content. I do not recall a re-assessment prior to this. There may have been no definite evidence to suggest that fluids needed to be altered earlier in the day. No: 18 Solution appears to have been used as the maintenance fluid in the Intensive Care Unit, until 8am on 23rd October 1996. At that point fluids appear to have been changed to normal saline.

- (j) State if you regarded Claire as dehydrated, or potentially dehydrated at any time during your care and treatment of her.

No evidence of dehydration is recorded on the ward round note from 22nd October 1996. I do not recall noting this at the time.

- (k) In assessing, determining/reviewing Claire's fluid management, state what consideration you gave on 22nd October and 23rd October 1996 to Claire's urine output, urine sodium

and urine osmolality, when you considered this, what the result was of this consideration and where this is recorded in Claire's medical notes. If you did not consider this, explain why not.

As part of the medical team until 5pm approximately on 22nd October 1996, I do not recall whether detailed urine monitoring was considered. I do not recall if consideration was given to checking urine sodium or osmolality. However there is no evidence in the notes that this was considered. It seems likely that electrolyte balance was not considered a significant problem at that point in Claire's care.

- (6) *"Claire's past history of seizures and developmental delay were noted as were her elevated white cell count (16.4 thousands/Ul) and slightly low serum sodium (132mmol/l). On examination Claire's pupils reacted only sluggishly to light. She was largely unresponsive and appeared pale. She appeared to have bilateral upper motor neurone signs. I was very concerned that Claire had a major neurological problem and suspected she was in "non-fitting" status epilepticus. Other recorded differentials were encephalitis or encephalopathy..." (Ref: 090-051-157)*

- (a) Identify the evidence of *"non fitting' status epilepticus"* upon which you based your diagnosis.

Claire had a history of developmental delay and epilepsy, though was off treatment. Her GP had referred her to the A&E Department recording slurred speech and abnormal neurological signs. He/she had queried a further seizure. At the time of the ward round Claire's conscious level appeared depressed compared to normal. Her pupils were only sluggishly reactive to light and she is recorded as having bilateral long tract signs, suggesting tone was increased on both sides of Claire's body with abnormally brisk reflexes. Collectively these elements of history and examination were felt to point to a major neurological problem. At that point, further seizure activity, in the absence of abnormal movements was considered the most likely diagnosis. I believe encephalitis was discussed on the ward round as a possible cause or complicating factor.

- (b) Explain why you considered *"non fitting' status epilepticus"* as a likely diagnosis on attending Claire during the ward round on 22nd October 1996.

See above

- (c) Identify the author of the note in Claire's medical notes *"/encephalitis/encephalopathy"* after the note *"Imp. Non fitting status"*. (Ref: 090-022-053)

I wrote the terms encephalitis/encephalopathy to add to the list of differential diagnoses. This was immediately after speaking to Dr Webb and only a short time after I left the ward round.

- (d) State when the note *"/encephalitis/encephalopathy"* was made, the reasons for this addition to the medical notes and whether those 2 conditions comprised part of your diagnosis on the ward round, or whether they were part of a diagnosis by another person. If so, state by whom and when that was diagnosis made.

I believe Dr. Webb mentioned the term encephalopathy. I felt this was a more accurate list of differential diagnoses, following the ward round and my discussion with Dr Webb.

These were all only possible differential diagnoses. There was no firm diagnosis at this stage.

- (e) In particular, state whether you considered hyponatraemia and/or cerebral oedema as a diagnosis, and explain the reasons why/not. If so, state why this was not recorded in Claire's medical notes.

I do not recall considering hyponatraemia as a likely cause of Claire's symptoms. This was most likely based on the electrolyte results recorded in the notes on 22nd October 1996, which would likely have been read out on the ward round. However, I left the ward round to speak to Dr Webb and did discuss a CT scan to try and determine a cause of the apparent non-fitting status epilepticus. I do not recall what possible causes were discussed with Dr Webb. I believe that possible encephalitis was considered on the ward round. Cerebral oedema may have been considered in association with that.

- (f) Explain the extent to which you considered the possibility that Claire's reduced level of consciousness and poorly reacting pupils might have been caused by cerebral oedema related to hyponatraemia. If so, state when and explain why you considered this. If you did not consider this, explain why not.

During my period of duty on 22nd October 1996, I do not recall that I felt that cerebral oedema, specifically related to hyponatraemia was the cause of Claire's clinical condition. At the time, this may only have been considered in the presence of biochemical results showing falling sodium levels.

- (g) State whether you considered monitoring Claire's intracranial pressure at any time. If so, state when and explain why. If not, explain why not.

I do not recall that intracranial pressure monitoring was considered.

- (h) Other than *"non-fitting" status epilepticus... encephalitis or encephalopathy* state whether there were any other alternative diagnoses. If so, identify each of them and explain why they were not noted on Claire's medical notes.

I do not recall if alternative diagnoses were considered.

- (i) On attending Claire during the ward round on 22nd October 1996, state whether you considered that Claire's condition required to be investigated and/or treated as a matter of urgency. If so, state when and the reasons why you considered this, and what action you took as a result of that consideration. If you did not consider this, explain why not.

Having details of Claire's history and having carried out a clinical examination, I was concerned that Claire was very unwell from a neurological viewpoint and felt that urgent advice was required from a consultant neurologist. As a result of the ward round, a request was made that older notes from the Ulster Hospital be obtained. I left the ward round to speak to Dr Webb and asked for his advice, and raised the question of an urgent CT Scan. This required consultant authorisation. The ward round discussion had suggested a trial of rectal Diazepam. I believe that I checked that Dr Webb was in agreement with this before administration.

- (j) State precisely whether and how you communicated your diagnosis of Claire's condition during and following the ward round on 22nd October 1996 to the members of the medical and nursing team, and when this was done.

As a clinical team Claire's condition would have been discussed in detail on the ward round. I do not recall further discussions with members of the medical and nursing team, of which I was part. However it is likely that there was further discussion after my meeting with Dr Webb.

- (k) State whether you considered carrying out more extensive biochemical tests including liver function tests, calcium, glucose, ammonia and toxicology on 22nd October 1996. If so, explain why these tests were not conducted at this stage given Claire's condition. If not, explain why they were not considered.

Blood cultures and viral investigations were recorded as having been sent on admission. Blood glucose was also checked at that stage. Capillary blood glucose may have been checked further by nursing staff. Senior advice was sought in relation to Claire's condition at this stage. The medical team would have anticipated further direction by Dr Webb regarding additional investigations.

- (l) Describe the consideration, if any, you gave to carrying out a blood test on 22nd October 1996 to check Claire's serum sodium level. If you did not consider this, explain why not.

A further sample for serum electrolytes including sodium is recorded in the evening. I am not certain at what time that sample was taken. The request was most likely made earlier in the day, probably as part of the ward round discussion. I do not know why it was not carried out until the evening time. It would be normal practice to try and carry out blood investigations during laboratory office hours and particularly if siting an intravenous cannula. I believe Claire had at least one additional intravenous cannula sited on the afternoon of 22nd October 1996. At that time blood results were returned at around 5-6 in the evening. Out of hours blood investigations were requested as urgent, by telephone and usually phoned back.

- (m) State whether you discussed with a more senior clinician on 22nd October 1996 carrying out a test for serum electrolytes. If so, identify that clinician and state when this discussion took place:

I do not recall a discussion with a senior clinician regarding an electrolyte test.

- (i) State whether any decision was made as to whether a blood test for electrolytes was to be conducted on Claire. If so, what that decision was

See answer to (l) above

- (ii) Explain the reasons for not carrying out such a test until the evening of 22nd October 1996

See answer to (l) above

(n) State what consideration you gave to carrying out other tests on Claire:

(i) After assessing Claire during the ward round on 22nd October 1996

Any further investigations would likely have been considered during ward round of 22nd October 1996. I recall that a CT Scan of brain was discussed at that time.

(ii) After speaking to Dr. Webb

I have no recollection of further investigations considered after meeting with Dr Webb.

(iii) After Dr. Webb examined Claire on each occasion and

Dr Webb had suggested obtaining samples for viral cultures on 22nd October 1996 at around 17:00. His specialist advice had been sought regarding further investigation and management. I believe the ward round team would have anticipated his direction.

(iv) During 22nd October 1996

to try to explain her symptoms and condition, and explain why these tests were not carried out.

See (i) and (iii)

(o) State whether you were aware at that time:

(i) That acute cerebral illness can result in the syndrome of inappropriate antidiuretic hormone secretion leading to hyponatraemia,

I am unable to recall my knowledge at the time (Oct 1996) of the statement that "acute cerebral illness can result in the syndrome of inappropriate anti-diuretic hormone secretion, leading to hyponatraemia." However I would have gained some theoretical knowledge of the syndrome of inappropriate ADH secretion through studying for the MRCP examination, which I completed in July 1995.

(ii) That hyponatraemia in itself can cause cerebral oedema with its resulting neurological symptoms, and

Of the need to monitor sodium levels, conscious level and fluid balance.

I am unable to recall my knowledge at the time (Oct 1996) of the statement that "hyponatraemia in itself can cause cerebral oedema with the resulting neurological signs, nor of the need to monitor sodium levels, conscious level and fluid balance."

If so, explain the reasons why you were aware of this. If you were not aware of this, explain why not.

(p) State whether on 22nd October 1996 you considered and discussed with any other person carrying out an urgent electro-encephalogram (EEG) to diagnose non-convulsive status epilepticus. If so, state:

(i) With whom you discussed this.

I do not recall discussion of an electroencephalogram (EEG). However this may have been discussed on the ward round and with Dr Webb. A consultant neurologist would have been needed to authorise this.

(ii) The time, location and outcome of the discussion and any document recording the discussion.

See (i)

(iii) If not, explain why you did not consider carrying out an EEG.

See (i)

(iv) Whether you made enquiries about whether a technician and equipment was available to carry out an EEG, the outcome of those enquiries and identify any note of your enquiries and whether a technician or equipment was available to carry out that test.

I am unable to recall whether such enquiries were made by me or other members of the clinical team. See (i) above.

(v) Describe the EEG service available in RBHSC on 22nd October and 23rd October 1996, and how long it would have taken to arrange an EEG for Claire.

I am unable to describe the EEG service at RBHSC at that time.

(q) State whether you considered and discussed with any other person carrying out a MRI scan on Claire on 22nd October 1996. If so, explain why and if not, explain why not.

(i) If so, state with whom you discussed this, the time, the location and outcome of the discussion and any document recording the discussion.

I do not recall discussion of an MRI scan for Claire. I think it likely that this would only have been requested by a consultant neurologist.

- (ii) State whether you made enquiries about whether a technician and equipment was available to carry out a MRI scan, the outcome of those enquiries and identify any note of your enquiries and whether a technician or equipment was available to carry out that test.

I do not recall such enquiries. See (i)

- (iii) Describe the MRI scan service available in RBHSC on 22nd October and 23rd October 1996 and how long it would have taken to arrange a MRI scan for Claire.

There was no MRI scanner in the RBHSC.

I believe the MRI Scanner was installed in Carrickmannon House (RVH) in around 1993. However I am unable to describe the MRI Service to RBHSC on the 22nd October 1996.

- (x) State whether you considered closer observations of Claire on making this diagnosis and when the medicines (diazepam, midazolam and phenytoin) were being administered. If so, state when and how you considered this, and the result of it. If not, explain why not.

Following the ward round, central nervous system observations were started and were carried out hourly. This would represent quite close observation. I do not recall whether additional observations were requested on starting the medications recorded.

(7) *"However I (and the ward team) felt that she was really unwell."* (Ref: 090-051-157)

- (a) Identify all members of *"the ward team"* and specify their position at that time.

My statement that I (and the ward round team) felt that Claire was really very unwell reflects the ward round discussion and the feeling that Claire was very unwell from a neurological viewpoint. It prompted my action of going to discuss with Dr Webb as soon as possible. I believe the ward team would have included Dr. Stevenson, any other SHOs present and on-duty nursing staff.

- (b) Identify the person who managed, had charge of and had responsibility for *"the ward team"* on 22nd October and 23rd October 1996 in relation to Claire.

On the ward round I believe that I was the most Senior Doctor, although still under consultant supervision. The advice, in paediatrics in general and RBHSC in particular, has always been to seek senior help when concerned regarding a paediatric patient. I believe I and colleagues on the ward round felt it appropriate to look for this help.

- (c) Identify the members of "the ward team" who "felt that she [Claire] was really very unwell," and state what was done about this.

I believe it was the combined feeling of the ward round team that Claire was very unwell neurologically. I recall that this included medical and nursing staff on the ward round (see above).

- (d) State whether you or any other member of "the ward team" conveyed those concerns to Dr. Heather Steen at any time. If so, identify who conveyed those concerns, and state when this was done, by what means and what information was given to Dr. Heather Steen on each occasion.

I recall that Dr Steen was informed (on the afternoon of 22nd Oct. 1996) that Dr Webb had been consulted regarding Claire. This was by telephone, as Dr Steen was not in the hospital. I believe it was me who spoke to Dr Steen. I do not recall if this was my only conversation with Dr Steen or whether other members of the ward team also spoke to her.

- (e) State what action was taken or instruction given by Dr. Heather Steen on receipt of information about the ward team's concerns about Claire, and when this occurred.

I do not recall what Dr Steen's response was.

- (8) "A dose of diazepam was given rectally (5mg). I believe this was after contacting Dr. Webb (consultant paediatric neurologist)...." (Ref: 090-051-157).

- (a) Identify who prescribed and who administered the diazepam and state whether and how Claire responded to that medication and her condition after administration of that medication.

I believe that the dose of diazepam was prescribed by Dr Stewart. This would have been following discussion. It was given by a member of nursing staff per rectum. It seems that Claire may have more alert following this medication. Dr Webb mentions this in his note.

- (b) State the time when you first contacted Dr. Webb on 22nd October 1996, the means of contact, nature of your discussion with him and any direction or advice given by Dr. Webb at that time, and whether this contact was prior to you personally going to talk to Dr. Webb.

My recollection is that I spoke to Dr Webb in person regarding Claire. I believe this was a short time after seeing Claire on the ward round. I do not recall the exact time. I recall raising the question of a CT scan, but cannot remember other details. I do not recall whether efforts were made to contact Dr. Webb by telephone or pager prior to that.

- (c) When the "dose of diazepam was given", state whether you:

- (i) Considered requiring an urgent EEG, CT scan and electrolytes to be tested at that time. If so, explain why. If not, explain why not.

I do not recall a further discussion of EEG, CT Scan or electrolytes when Diazepam was given.

- (ii) Discussed an urgent EEG, CT scan and testing electrolytes with a consultant. If so, identify that consultant and describe the nature and outcome of your discussion and when that discussion took place. If you did not discuss this, explain why not.

I recall discussing a CT scan with Dr Webb. I do not recall whether I also discussed this with Dr Steen. I do not recall discussing an urgent EEG with Dr Webb. However this may have been part of our initial discussion. I do not recall discussing electrolyte testing with Dr Webb.

- (d) State whether you requested Dr. David Webb and/or the neurology team to take over Claire's care, management and treatment. If so, state when and where you made this request, identify any persons present at that time, and any document containing a note of that request, and Dr Webb's response to your request.

I do not remember Dr Webb formally taking over Claire's management. I cannot confirm if there was a discussion regarding this. Such an agreement would usually be between consultants. I do not recall whether Dr. Webb had other members of the neurology medical team accompanying him. It was my understanding that Claire was being jointly cared for by the medical and neurology team.

- (i) If you did not request Dr. David Webb and/or the neurology team to take over Claire's care, management and treatment, state what input and role you requested they provide/fulfil.

As junior doctors in the children's hospital we were advised to seek senior help promptly about any child we were concerned about. It is likely that I, and other colleagues present at that time would not have specified what role Dr. Webb/the neurology team fulfil. This was more usually discussed between consultants.

- (e) Explain what authority you had to consult Dr. David Webb about Claire on your own initiative on 22nd October 1996

At the time I believe that I (and the ward team) considered the consultant neurologist on-call was the most appropriate person to provide that help, particularly in the knowledge that Dr. Steen was not in the hospital.

- (f) State whether you discussed:

- (i) Your request on 22nd October 1996 to Dr. David Webb to examine and assess Claire

The request to ask for Dr Webb's help would have been discussed on the ward round. I believe Dr Steen was informed of this after I had spoken with Dr Webb.

- (ii) The input and role of Dr. David Webb and/or the neurology team in Claire's case and his/their responsibility for Claire's care, treatment and management

Dr Steen would therefore have been aware of Dr Webb's involvement in Claire's case.

- (iii) Any transfer of care of Claire to Dr. David Webb and/or the neurology team

with Dr. Heather Steen or any other Paediatric Medical Consultant between 22nd October and 23rd October 1996. If so, identify that consultant, state the nature, outcome, date, time and location of this discussion, and identify any record or note about that discussion.

I do not recall discussing transfer of care to the neurology team. However I, or other staff may have discussed this with Dr. Steen.

- (g) Identify any protocols from 22nd October 1996 to date governing the request for and provision of a specialist opinion by another consultant, and the transfer of care and management of a child to another consultant, and furnish copies of it.

I am not aware of any protocols for provision of a specialist opinion from that time. However all junior staff were encouraged to ask for senior help when concerned regarding a patient.

- (9) "*Hourly CNS observations were started.*" (Ref: 090-051-157)

- (a) Identify the person who decided that "*[h]ourly CNS observations were [to be] started*" and state at what time this instruction was given and identify the note/document recording the instruction that those "*[h]ourly CNS observations*" commence.

Hourly CNS observations were most likely commenced as a result of the ward round discussion. This most likely a collective decision. It may also be that they were suggested during my initial discussion with Dr Webb.

- (b) State the time at which those "*[h]ourly CNS observations*" actually "*started*".

Nursing notes record that CNS observations were started at 1pm. This may have been at a time between 12MD and 1pm as "normal observations" appear to conclude at 12MD on the observation chart.

- (c) Explain the reason/s why on the Central Nervous System Observation Chart the column entitled "*2pm*" is either struck out or not completed. (Ref: 090-039-137).

I cannot comment on why the CNS observation chart has 2pm struck out or not completed.

- (d) Explain why those "*[h]ourly CNS observations were started*".

CNS observations were started because it was felt that Claire's level of consciousness and neurological status was abnormal.

- (e) Explain why "[h]ourly CNS observations were started" at 1pm on 22nd October 1996 and not from the time of admission on 21st October 1996.

I cannot explain why CNS observations were not started until 1pm on 22nd October. I was not on duty until the morning of 22nd October 1996 and I believe the ward round did not reach Claire until quite late into that morning.

- (f) State whether you considered increasing the frequency of Claire's central nervous system and respiratory observations and monitoring of her vital signs on 22nd October 1996. If so, state when, the reasons why you considered this, and the reasons why no change was made to the frequency of the observations/monitoring at all. If you did not consider this, explain why not.

I do not recall if I considered increasing the frequency of observations.

- (g) State whether you discussed increasing the frequency of Claire's central nervous system and respiratory observations and monitoring of her vital signs with any other person. If so, identify that person and state when and where you discussed this, and the outcome of the discussion. If not, explain why not.

I do not recall discussions regarding increasing the frequency of observations.

- (h) State whether you considered directing 1:1 nursing care for Claire on making a diagnosis of non-convulsive status epilepticus on 22nd October 1996 or at any time thereafter. If so, state when and why you considered this. If did you not consider this, explain why not.

I do not recall if consideration was given to directing 1 -1 nursing care for Claire. This would usually be under consultant direction.

- (i) State whether any consideration was given to admitting Claire to PICU on 22nd October 1996 or in the early hours of 23rd October 1996 in light of her recorded GCS results (Ref: 090-039-137). If so, state when this was considered, by whom and the result of this consideration. If not, explain why it was not considered.

I do not recall if consideration was given to admitting Claire to Paediatric Intensive Care on 22nd October 1996. This would have been a consultant decision.

- (j) When the hourly CNS observations were started, state whether you considered passing a naso-gastric tube. If so, state when and how this was considered and what was the outcome of it. If it was not considered, explain why not.

I do not recall if consideration was given to passing a naso-gastric tube.

By the time Claire was seen on the ward round of 22nd October 1996 Claire's vomiting appeared to have largely ceased. It may have been decided that a naso-gastric tube was not required at that time.

- (10) *"The paediatric consultant under whom Claire was admitted was unavailable: although I believe she was kept informed by telephone."* (Ref: 090-051-158)

- (a) Identify the paediatric consultant on call on the evening of 21st October and the morning of 22nd October 1996.

I believe that Dr Heather Steen was the consultant on-call on the evening of 21st October 1996. I believe she was also the consultant responsible on the morning of the 22nd October 1996.

- (b) Identify "[t]he paediatric consultant under whom Claire was admitted".

Dr Steen was the consultant under whom Claire was admitted.

- (c) State what you mean by "unavailable" and how and when you first became aware that the consultant was "unavailable".

I do not recall where Dr Steen was on the 22nd October 1996. I believe she was not in RBHSC but was contactable by telephone.

- (d) State the period of time on 22nd October 1996 for which that consultant was "unavailable".

I do not know for what period Dr Steen was out of the hospital, or not able to attend.

- (e) Explain why "[t]he paediatric consultant under whom Claire was admitted was unavailable".

I am unable to answer this question, though my understanding was that the consultant under whom Claire was admitted was not present in the hospital.

- (f) State the number of times on 22nd October and 23rd October 1996 that the consultant was "informed", whether "by telephone" or otherwise, of Claire's condition, when this occurred, the reason/s for the contact with the consultant on each occasion, what the consultant was told on each occasion and what the consultant advised or directed on each such occasion in relation to Claire's condition, treatment, management and plan of care.

My recollection is that Dr Steen was contacted at least once by telephone by myself in relation to Claire. I believe this was on the afternoon of the 22nd October 1996. I believe I advised of Claire's condition and Dr. Webb's involvement. However, I cannot recall specific detail. I am unable to recall the time or whether additional contacts with Dr Steen were made by myself or other members of the ward team.

- (g) Identify the person/s who "kept" that consultant "informed by telephone".

I believe I made contact with Dr Steen by telephone on the afternoon of the 22nd October 1996. I am unable to recall whether I made other contact with Dr Steen regarding Claire, or whether other members of the clinical team contacted her.

- (h) State whether you "kept" that consultant "informed by telephone". If so, state when you did so, what information you gave to that consultant in relation to Claire and all advice or directions you received from that consultant to you about Claire.

It is my recollection that I contacted Dr Steen by telephone on the afternoon of the 22nd October 1996. I believe I advised of Claire's condition and Dr. Webb's involvement. However, I cannot recall specific detail. There may have been other contacts with Dr Steen by myself, or other members of the ward team. I cannot recall the exact time of contact with Dr Steen.

- (i) Explain whether the "paediatric consultant under whom Claire was admitted" managed Claire's care and treatment while she was "unavailable". If so, state how this was accomplished. If not, explain why not and whether provision was made for another paediatric consultant to take over Claire's management and care during that period of unavailability.

I recall discussing Claire's case with Dr. Steen, having seen the patient and spoken to Dr. Webb. I do not recall Dr. Steen's response or advice, though I would have followed advice given in relation to Claire's management. I do not know if Dr. Steen had additional communication with other members of medical or nursing staff in relation to Claire's management.

- (j) Specify that consultant's involvement in and contribution to Claire's care and treatment between Claire's admission on 21st October 1996 and 04.00 on 23rd October 1996.

I recall that Dr. Steen was contacted by telephone on at least one occasion on 22nd October 1996. I believe that I spoke with Dr Steen at that time. I do not recall details of that conversation. I do not recall if there was further input by Dr Steen by way of communication with other ward staff.

- (k) Describe any protocols, if any, in place at the RBHSC on 22nd October 1996 for referral of a patient from the admitting consultant to another consultant due to the unavailability of the admitting consultant.

I do not recall any protocols in place in RBHSC on 22nd October 1996 for referral of a patient from the admitting consultant to another consultant due to unavailability of the admitting consultant. However as stated junior staff were encouraged to seek advice from a senior (consultant) colleague with the appropriate expertise to help with patient management.

- (l) Identify the Consultant/s whom you believed to be responsible for Claire and her treatment between her admission on 21st October 1996 and her death on 23rd October 1996, and explain the basis for this belief.

I believe that I felt that Dr Steen was responsible for Claire's care, until the time I asked for Dr Webb's advice. Thereafter I would have felt that Claire was under joint management with increasing responsibility being passed to the neurology team, given the nature of Claire's condition. However I believe I would have expected Dr Steen to retain an interest in Claire's case throughout the time she was in hospital. This approach of shared-care would, I believe have been appropriate to this situation with one team either formally or informally taking over eventual care. "Out of hours" care may have also been provided by other consultant paediatricians/neurologist, depending on consultant rotas.

- (m) Identify the paediatric consultant who was responsible for Claire's care, treatment and management from 17.00 on 22nd October 1996 and thereafter.

I do not know who the on-call paediatric consultant responsible for Claire's care would have been at that time.

- (n) Identify the duty paediatric consultant on call on the evening of 22nd October and the morning of 23rd October 1996.

I do not know the duty paediatric Consultant on-call on the evening of 22nd October and the morning of 23rd October 1996.

- (o) State what communication you had with Dr. Heather Steen in relation to Claire between 21st October 1996 and 04.00 on 23rd October 1996 including:

- (i) The date and time each communication was made

I had no contact with Dr Steen before 22nd October 1996. I recall at least one telephone conversation with Dr Steen. I believe this took place after my contact with Dr Webb. This was on 22nd October 1996. I believe it was at the earliest opportunity, likely in the afternoon.

- (ii) The means by which communication was made e.g. in writing, telephone, in person

This communication was by telephone.

- (iii) Identify who initiated each communication and the reason for each communication being made

I believe I initiated this communication. I believe this was to inform Dr Steen of Claire's condition and the referral to Dr Webb. I do not recall if additional communications were made.

- (iv) State what information you gave Dr. Heather Steen about Claire during each communication

I do not recall details of what information was given to Dr Steen. However I recall advising that Dr Webb was helping with Claire's management.

- (v) State what advice/instructions Dr. Heather Steen gave you in relation to Claire on each occasion and what the plan of care was for Claire following each communication

I do not recall what advice or instructions Dr Steen gave in relation to Claire during the telephone call I have mentioned, or any additional communication.

- (vi) Identify any document where each communication is recorded and produce any copies.

I do not believe there is documentation in Claire's notes relating to communication with Dr Steen.

(vii) If no communication was made, explain why not.

See above

(p) State whether Dr. Heather Steen attended and examined Claire at any time before 04.00 on 23rd October 1996. If so, state the date and time when this examination occurred. If not, explain why not.

I do not know whether Dr Steen attended and examined Claire at any time before 4am on 23rd October 1996.

(q) Identify who should have kept Dr. Steen informed by telephone and when Dr. Steen ought to have been so informed and the reasons for your answer.

I believe it would have been appropriate for Dr Steen to have been kept informed by telephone by a member of the Allen Ward team, preferably a member of medical staff (or Dr. Webb). If possible, this would be done, promptly after adequate information on a patient had been gathered, so that the consultant in question knew of any important clinical issues and could give advice and assistance.

(r) State whether you requested Dr. Steen to attend and examine Claire. If so, state the date and time of your request, and Dr. Steen's response to your request.

I do not recall whether I requested Dr Steen to attend and examine Claire.

(11) *"I personally went to talk to the consultant paediatric neurologist on call.... I described Claire's problems to the paediatric neurologist and told him I thought a CT scan of brain might be required. He came and assessed Claire in Allen ward. He also saw her once if not twice more during the afternoon and prescribed further treatment."* (Ref: 090-051-158)

(a) State the time at which you *"personally went to talk to the consultant paediatric neurologist on call..."*

My recollection is that this was very shortly after seeing, examining and discussing Claire on the ward round on 22nd October 1996. It seems likely this was late in the morning, or shortly after 12MD.

(b) Explain why you *"thought a CT scan of brain might be required."*

I felt an urgent CT scan of brain might be required as Claire seemed to have major neurological problems and may warrant a scan.

(c) State whether you asked Dr. Webb, or whether Dr. Webb informed you, of the likely time of his attendance to see Claire. If so, state the time at which Dr. Webb indicated he would likely attend. If not, explain why not.

I do not recall whether the timing of Dr Webb's attendance was discussed.

- (d) State the time on 22nd October 1996 at which Dr. Webb first "*came and assessed Claire in Allen ward*" and whether you were present during that attendance with Claire. Identify all other persons who were present during Dr. Webb's first attendance with Claire.

I believe that Dr Webb assessed Claire in Allen ward at approximately 2pm. I believe I was not present when Dr Webb assessed Claire first. I am unable to confirm who was present when Dr Webb saw Claire initially. However there is likely to have been a SHO and nursing staff present.

- (e) State the other times when Dr. Webb saw Claire in Allen Ward during the afternoon of 22nd October 1996, and specify at which of those attendances you were present. Identify all other persons who were present during Dr. Webb's further attendances with Claire.

Dr Webb saw Claire later that afternoon. His note is from 17:00. I may have been present at that stage as I gave a dose of Sodium Valproate shortly after that, as requested by Dr Webb. I do not recall which other persons were present at that time. However it seems likely that Dr Stevenson, the senior house officer was present. Dr. Webb may also have been present between his attendance at approximately 14:00 and that at 17:00 as IV midazolam appears to have been prescribed during that period.

- (f) Describe the "*further treatment*" "*prescribed*" by Dr. Webb during the afternoon on 22nd October 1996.

Intravenous midazolam was started during the afternoon of 22nd Oct 1996. This appears to have been on Dr. Webb's instruction.

Dr Webb has also recorded a treatment plan which is;

1. Cover with Cefotaxime and Acyclovir
2. Check viral cultures
3. Add IV Valproate 20mg per kg IV bolus followed by infusion of 10mg per kg IV over 12 hours.

- (g) State whether Dr. Heather Steen was kept informed of Claire's condition, management and treatment during 22nd October 1996 and Dr. Webb's actions/decisions. If so, state when, by whom, how, and what information was conveyed to her. If not, explain why not.

I do not recall further discussion with Dr Steen later in the afternoon of 2nd October 1996. However this may have taken place.

- (h) State whether Dr. Heather Steen and Dr. Webb communicated with each other about Claire on 22nd October and 23rd October 1996. If so, state when, how, the nature of this communication and what was done as a result of it. If not, explain why not.

I am unable to answer this question.

- (i) Explain what you understood to be the normal procedures for cross-referral between consultants on 21st October 1996 and the basis of your understanding.

Junior doctors would always have been encouraged to promptly seek senior advice in connection with an unwell patient, depending on that patient's problems. I do not recall formal arrangements for cross-referral.

- (j) Describe your role and responsibilities in Claire's care and treatment on 22nd October and 23rd October 1996 after you requested Dr. David Webb to assess Claire.

I recall that I believed Claire to be under joint medical and neurological care once Dr Webb was contacted and given Claire's medical problems. I believe I expected that her care would most likely be fully taken over by the neurology team given Dr Webb's further assessment and treatment plan at 17:00. However, I believe that I, and other colleagues from the medical team would have provided ongoing care and treatment for Claire as directed by Dr. Webb and any other consultant involved.

- (12) *"I do not recall being present in the mid-afternoon. It may be that I had teaching or other duties. However, I did not feel that Claire's condition had changed. I did administer an intravenous dose of sodium valproate as requested by the neurologist, at 5.15pm.... At 5.15pm she remained very unwell."* (Ref: 090-051-158)

- (a) State the period of time to which you refer as *"mid-afternoon"*.

I believe this period to be approximately 2.00 - 4.30pm. However I do not recall the exact time and I may have returned to Allen ward, at least briefly during that time period. (see (c) below)

- (b) Explain how and by whom Claire's care and treatment were managed on 22nd October 1996 if you were not *"present"* due to *"teaching or other duties"*.

The remainder of the ward round team of senior house officer or officers plus nursing staff would have continued Claire's management under the supervision of Dr Webb and/or Dr Steen.

- (c) State when you were *"present"* on Allen Ward on 22nd October 1996, specifying the times to the best of your recollection.

I believe I was present in Allen Ward on the morning of the 22nd October 1996, returning there in the afternoon, perhaps between 4.00pm & 5.00pm. However, I may also have called back on more than one occasion in the interim period. This would often have been the case if attending to other clinical duties.

- (d) State whether you were *"present"* during Dr. Webb's attendance with Claire at 17.00 on 22nd October 1996 recorded in the clinical notes. (Ref: 090-022-053)

I do not recall being present at this time however I may well have been there as I gave Sodium Valproate as instructed by Dr Webb at 17.15pm.

- (e) State whether Dr. David Webb communicated to you in terms of the urgency and timing of when Claire's blood sample was to be taken. If so, explain why he provided for this advice on timing of the sample; and state when and where Dr. Webb communicated this to you.

I do not recall Dr Webb speaking to me regarding the urgency or timing of Claire's blood sample.

- (f) State whether Dr. Webb's request for an *"intravenous dose of sodium valproate"* was made to you directly or indirectly, orally or in writing.

I do not recall if Dr Webb's request was spoken to me directly or only written in the notes.

- (g) State whether you believed at that time that the IV sodium valproate was appropriate.

I do not recall if I felt IV Sodium Valproate was appropriate. However Dr Webb had fully assessed Claire and recommended this treatment.

- (h) Explain why you did not administer the acyclovir and cefotaxime ordered by Dr. Webb at 17.00 when you attended Claire at 17.15 to administer the sodium valproate.

Other staff may have given these intravenous medications, I do not recall.

- (i) After your initial discussion with Dr. Webb when you went to speak to him personally about Claire, state whether you had any further discussions or communication with Dr. Webb in relation to Claire on 22nd or 23rd October 1996. If so, state when, where, who was present and the nature of those discussions.

I think it likely that if present when Dr Webb saw Claire again at 17:00 approximately we would have spoken. I do not recall details of any discussion.

- (j) At 17.15 on 22nd October 1996, state what your differential diagnosis of Claire's condition was, particularly in light of her deteriorating condition and lack of improvement following anti-convulsants.

Dr Webb was directing Claire's treatment, I do not recall formulating a further differential diagnosis.

- (k) State whether you were aware of the recorded CNS observations (Ref: 090-039-137), and in particular the GCS observations, at 17.15 when you *"administer[ed] an intravenous dose of sodium valproate"* to Claire. If so, state what you did as a result of it and the reasons for this. If not, explain why you were not aware of these CNS observations.

I do not recall being aware of CNS observations at the time I gave an intravenous dose of sodium Valproate. I do not know if CNS observations were discussed with me at that stage.

- (l) In particular, at 17.15 when you *"administer[ed] an intravenous dose of sodium valproate"* to Claire, state what action you took in light of the recorded fall in Claire's GCS to 6 at 16.00 and 17.00. (Ref: 090-039-137).

I do not recall if Claire's GCS at 4pm and 5pm was discussed with me. This was at a similar time to Dr Webb's attendance.

- (m) State whether you were aware of Claire's elevated respiratory rate at 30 breaths per minute when you administered *"an intravenous dose of sodium valproate"* at 17.15. If so state how you became aware of this, and state what action you took in relation to it. If you were not aware of this, explain why not.

I do not recall if I was aware of Claire's respiratory rate at the time I administered an intravenous dose of Sodium Valproate at 17:15. I do not recall if Claire's respiratory rate was discussed with me.

- (n) State whether you were aware at 17.15 on 22nd October 1996 that Claire had failed to pass urine for approximately 6 hours. If so, state what action you took in relation to this failure. If not, explain the reasons why you were not aware of this failure.

I do not recall being aware that Claire had not been documented as having passed urine for 6 hours. I do not recall if Claire's urine output was discussed with me.

- (o) Explain the reasons why you *"did not feel that Claire's condition had changed."*

At that time, I recall felt that Claire remained very unwell neurologically. It was my impression at the time that her condition had not improved.

- (p) On attending Claire *"at 5.15pm"*, state whether you considered that Claire's condition required to be further investigated and/or treated as a matter of urgency. If so, state when and the reasons why you considered this, and what action you took as a result of that consideration. If you did not consider this, explain why not.

As earlier in the day, I felt Claire was very unwell and had tried to ensure urgent management by asking for Dr Webb's help. I do not recall if I had reiterated my concerns to Dr Webb at around 17:00 on 22nd October 1996 when we may have met at Claire's bedside.

- (q) Given that you *"did not feel that Claire's condition had changed"* and that Claire *"remained very unwell"*:

- (i) State whether you examined and reassessed Claire and in particular the underlying cause of her condition. If so, state your findings at that time. If not, explain why you did not examine and reassess Claire.

I do not recall examining Claire again at that time. She had just been reassessed by Dr Webb.

- (ii) State whether by 17.15 on 22nd October 1996 you continued to attribute Claire's condition and reduced level of consciousness and motor signs to uncorroborated sub-clinical seizure activity. If so, explain why.

I do not recall if I considered other diagnoses at this stage. Prior to Dr. Webb's note at 17.00, Dr. Stevenson has recorded "S/B Dr. Webb. Still in status."

- (iii) State whether you considered that Claire's deterioration, "seizures" and reduced conscious level and motor signs might be attributable to rising intracranial pressure and/ hyponatraemia and/or cerebral oedema by 17.15 on 22nd October 1996. If so, explain why. If you did not consider this, explain why not.

I do not recall considering these signs as attributable to rising intracranial pressure and hyponatraemia and /or cerebral oedema at that time. I believe I would have followed Dr. Webb's advice on management.

- (iv) State whether you considered and/or took any steps to discuss Claire with a PICU Consultant who could have assessed Claire on Allen Ward and given advice, whilst also being pre-warned about a possible later admission. If so, state when you considered this and what steps you took to do so. If you neither considered this nor took any steps, explain why not.

I do not recall whether I considered discussion with an ICU consultant. Such discussions would normally have been initiated by a consultant.

- (v) State the system of referral to PICU in RBHSC in October 1996.

I do not recall the system of referral to PICU at that time. However admission to ICU would usually be arranged between consultant staff. An exception to this would likely have been cardio respiratory arrest.

- (vi) State whether the process to seek advice from a Paediatric Intensive Care Specialist in October 1996 in RBHSC was solely via the treating Consultant or whether junior medical staff could seek support from PICU between 17.00 and 09.00 without necessarily informing their Consultant.

I do not recall the process to seek advice from a Paediatric Intensive Care Specialist in October 1996. However I believe that this type of further specialist advice would usually have been requested by a consultant.

- (vii) State what the plan was for Claire's care and treatment from 17.15 on 22nd October 1996 onwards and overnight.

I do not recall what the plan was for Claire's management from 17:15 on 22nd October 1996 and overnight. However I believe there would have been a handover from day

time staff to on-call staff. This may have involved a discussion between junior medical staff from the day-time paediatric medical team and probably neurology team, together with on-call medical staff. These staff may have included a general paediatric medical SHO, (SHO covering specialities, including neurology) and/or paediatric registrar.

- (viii) Explain why you did not require further serum sodium and full blood count tests at 17.15.

I do not recall if a further full blood count and electrolytes was discussed at 17:15. However I believe there would have been an expectation that this had been carried out already and the result awaited.

- (ix) State what provision was made for a paediatric consultant or paediatric registrar to review and reassess Claire from 17.15 onwards on 22nd October 1996 and overnight.

I do not recall what provision was made for review of Claire on the evening of 22nd October 1996 and overnight.

- (x) Identify the paediatric consultant and members of the medical team who were responsible for managing Claire's ongoing medical care and treatment, and reviewing and reassessing Claire from 17.15 on 22nd October 1996 onwards and overnight.

I do not recall who the on-call medical staff were. However Dr Neil Stewart, Dr Bridgette Bartholome, Dr Webb, Dr Steen And Dr McKaigue have all made entries in the notes from that night.

- (xi) State whether on 22nd October 1996 at 17.15 you understood that Claire's ongoing acute care and management remained with the paediatric medical team with Dr. Webb providing specialist advice only, or that Dr. Webb had taken over Claire's care completely and that he was prepared to be consulted about all aspects of the care and treatment, and explain the basis of your understanding at that time. If you were unclear in your understanding at that time, state the steps you took to clarify who was responsible for Claire's ongoing care and management and the time when you took those steps.

By 17:15 on 22nd October 1996 I believed Dr Webb's team to be primarily responsible for Claire's care. However I would have expected the medical team to still help with Claire's care, particularly as she was still in Allen Ward. All of Claire's direct consultant care had been given by the paediatric neurologist on duty.

- (xii) Identify the consultant's name attached to Claire as at 17.15 on 22nd October 1996.

I believed this to be Dr. Webb and Dr. Steen.

- (xiii) State whether you had any communication with Dr. Heather Steen in relation to Claire and her care and treatment. If so, describe the communication and state when and where it occurred, and what resulted from it. If not, explain why not.

I believe that Dr Steen was informed of Claire's management by telephone on 22nd October 1996. I recall that I spoke to Dr Steen by telephone on at least one occasion regarding Claire.

- (xiv) State whether you communicated your concerns/views to Claire's parents/family at any time. If so, state what you told them, to whom and when and where you communicated this. If not, explain why not.

It is my recollection that I expressed by concerns to Claire's mother at least on seeing her first on the ward round. I may well have had brief further discussions with other family members. However Dr Webb would have taken the lead in this as the Senior Doctor.

- (xv) State whether you informed Mr and Mrs Roberts about the severity of Claire's condition whilst they were in attendance on 22nd October 1996, including the diagnosis of status epilepticus, encephalitis/encephalopathy and complications, whether further investigations were to be carried out, and whether a transfer to PICU might be necessary.

1. If so, state whom you informed, when and where you informed them, who else was present, the nature of the information you gave them and where this was recorded at the time.

2. If you did not inform them, explain why not.

3. If the information given was not recorded, explain why not.

I do not recall the detail of my discussion with Mrs Roberts on the ward round on 22nd October 1996. However I believe I did express my concerns. I think it likely that at least one SHO and one or more nurses would have been present at that time. I would have deferred to Dr Webb regarding further detailed discussion regarding Claire's diagnosis and prognosis.

- (xvi) State whether Mr and Mrs Roberts expressed any concerns to you about Claire at any time. If so, state when, the nature of their concerns, where you recorded the concerns and your response to them.

I recall Claire's mother telling the ward round team how Claire usually was. Although Claire could be quite lethargic when unwell, discussion with her mother suggested that this was far from Claire's usual condition.

- (r) State the time at which Claire was further reviewed and reassessed by the medical team after 17.15 on 22nd October 1996 and overnight, by whom and what was the outcome of the review/reassessment.

I was not present in the hospital at this time, and cannot add anything beyond what is recorded in Claire's medical notes.

- (s) State if you authorised the rewriting of the Prescription Sheet at 9.30pm by Dr Hughes (Ref: 090-026-075). If so, explain why you did so and the reasons for the sheet being rewritten.

I have no knowledge of this.

- (13) "I do not recall if Claire's care had been formally taken over by the neurology team" (Ref: 090-051-158)

- (a) Identify the members of "the neurology team".

The neurology team I referred to was the neurology medical team, usually comprising a consultant neurologist, one or more registrars and one or more senior house officers. I do not recall the names of these junior medical staff.

- (b) Explain why you are uncertain as to whether the neurology team had "formally taken over" Claire's care.

Sometimes one consultant would have verbally asked another to take over care. This would, in some cases be written in the notes. I do not recall if verbal discussion took place between consultants regarding transfer of care in Claire's case. This is no documentation of this in Claire's notes.

- (c) Identify the consultant whom you believed to be responsible for Claire and her management, care and treatment between her admission on 21st October 1996 and her death on 23rd October 1996, and explain the basis for this belief.

I believe that Dr Steen was the consultant responsible for Claire's care on admission and until Dr Webb was contacted. I believe that Claire was then under joint care between the neurology and paediatric medical team given acknowledgement of the neurological nature of her problems. I also believed that the neurology team were the main specialty managing Claire at around 5pm on 22nd October 1996, accepting that Claire was still being cared for in Allen ward and was likely to have some of her care delivered by on-call general medical staff.

- (d) Identify the persons who would have been responsible for checking electrolytes and prescribing fluids between Claire's attendance at A&E on 21st October 1996 and 04.00 on 23rd October 1996 and supervising that it had been done, regardless of whether or not the neurology team had formally taken over care of Claire.

Prior to my period of duty other paediatric medical staff would have been responsible for checking electrolytes and prescribing fluids. As I was not on duty until approximately 9am on 22nd October 1996, I am unable to provide further information covering this period.

Between approximately 9am and 5pm on 22nd October 1996 the medical team or teams looking after Claire would have been responsible for these tests. This included the consultants Dr Steen and Dr Webb, myself, Dr Stevenson, any other SHO attached to Allen ward and perhaps also other medical staff from the neurology team. After 5pm, checking of electrolytes and fluid prescription would have been the roles of the on-call medical staff. Again, I was not on duty during this period.

- (e) State precisely how a paediatric patient's care was usually "*formally taken over*" from the paediatric medical team to the paediatric neurology team on 22nd October 1996, and specify the documents which would record that formal take over.

A formal agreement might simply be a verbal agreement between consultants or given by a consultant to other staff. This would sometimes have been recorded in the notes. Sometimes transfer of care would be less formal and dictated by the patient's main condition.

- (f) Specify all protocols, guidelines and procedures on 22nd October 1996 that governed how a paediatric patient's "*care [was] formally taken over*" from the medical team by the neurology team.

I am not aware of any guidelines, protocols or procedures in October 1996 governing how a paediatric patient's care was taken over by one team from another.

- (g) Identify the person/s who decides whether a paediatric patient's care is "*formally taken over*" from the medical team to the neurology team and the timing of any such take over.

If there is a written or verbal agreement this would often have been by a consultant. However in practice care would also be taken over informally as described.

- (h) State whether you knew that there was a separate out-of-hours neurology team or, if that team had taken over care during the day, whether it would be delegated to paediatric junior staff and/or the consultant paediatrician on call after 17.00/18.00.

I believe I would have known at the time that a speciality SHO would have been covering neurology and other paediatric sub specialities. I do not recall how care was handed over to the on-call staff. This is likely to have involved the general medical and probably the specialties staff.

- (i) If there had been a formal takeover of Claire's care from the medical team to the neurology team, state:

- (i) Whether Claire would have normally been moved to another ward

Claire may have been moved to the neurology ward in such circumstances. This would be partly dependent on bed availability and perhaps time of day. If later in the day patients may be kept in the same ward. This is especially true where nursing care has been established and continuity is seen to be important.

- (ii) How, when and by whom this formal take over by the neurology team would normally have been communicated to Claire's family and the members of the paediatric medical and nursing teams.

I believe that sometimes this would have been made explicit to the family and medical and nursing staff. This may have been done by medical staff. However at such times communication may have been deferred or needed clarification. This might be particularly the case if a patient's condition was gradually becoming more defined.

- (14) *"I was not on call that night but heard of Claire's sudden collapse subsequently."* (Ref: 090-051-158)

- (a) State the time at which you ceased being on duty on 22nd October 1996.

I ceased to be on duty at around 5pm on 22nd October 1996. However often one needed to be present for a time after this to help with outstanding duties.

- (b) State the time at which you left the RBHSC on 22nd October 1996.

I do not recall at what time I left RBHSC.

- (c) State whether you made a formal handover. If so, explain why no note was made.

I do not recall what handover was made, nor who may have been involved with this. I think it very likely that there was a handover. This may have been relatively informal. Brief personal notes may have been made by the person or persons receiving the handover.

- (d) Identify the Paediatric Registrar to whom you 'handed over' Claire's management, treatment and care, and the time at which you handed over this care.

I do not recall with whom I spoke to discuss Claire's ongoing care on the evening of the 22.10.96. This is likely to have been with medical members of the paediatric and/or neurology teams.

- (e) State whether it was clear to you to whom you should hand over on the evening of 22nd October 1996 after giving the IV injection at 17.15.

I do not recall it being unclear to me at the time, to whom I should hand over on the evening of 22.10.96. I think it likely that I would have spoken to members of the on-call paediatric team. I may also have spoken with junior members of the daytime neurology team eg. SHO/registrar, requesting their handover to the on-call paediatric specialities SHO. This would have been quite typical practice.

- (f) State what information you gave that Registrar about Claire's condition, care and treatment and plan of care.

I do not recall what information I gave to the on-call medical team.

- (g) Identify the paediatric consultant on call on the evening of 22nd October and the morning of 23rd October 1996.

I do not know who the consultant on call was on the evening of 22.10.96 and the morning of 23.10.96.

- (h) State what information you gave that Registrar about the identity of the consultant who was responsible for Claire's treatment and care on 22nd October and 23rd October 1996.

I do not recall what information was given to the on-call medical team regarding the consultant responsible for Claire.

- (i) Identify the Paediatric consultant responsible for Claire's care and treatment who was on duty/call on the evening of 22nd October 1996.

I do not know which consultant was on call/duty on the evening of 22.10.96.

- (j) Identify the persons on the medical and nursing teams responsible for Claire to whom you 'handed over' prior to you coming off duty on 22nd October 1996, and state exactly what you told them about Claire, her condition, the plan for Claire's care and treatment and the identity of the consultant who was responsible for Claire's treatment and care on 22nd October and 23rd October 1996.

I believe the on call paediatric staff were Dr. Neil Stewart (SHO) and Dr. Brigitte Bartholome (registrar). I do not recall which nursing staff were on duty. I do not recall who the junior members of the neurology medical team were at that stage, nor the on-call speciality SHO. I do not know who the on-call consultant paediatrician and paediatric neurologist was on the evening/night of 22.10.96. These consultants may still have been Dr. Webb and Dr. Steen. I do not recall what information was given to members of the medical teams.

- (k) State when, where and from whom did you first hear "*of Claire's sudden collapse*" and state what you were told and in particular the reasons for her collapse.

I believe I was given a factual account of what had happened to Claire by Dr. Bartholome. This may have been on 23.10.96 or shortly after. I do not recall any other information being given to me at that time.

- (15) *"After her death I was asked by nursing staff to speak to Claire's mother and father on the ward. I did this on 11th November 1996 as recorded. I explained, as far as I was able, the course of events but said that I would ask Dr Steen to discuss the post-mortem findings (of which I was not aware) as soon as possible."* (Ref: 090-051-158)

- (a) State when you were *"asked by nursing staff to speak to Claire's mother and father on the ward"*.

I believe I was asked to speak to Claire's parents on the morning of 11.11.96. I believe Claire's parents may have contacted Allen ward by telephone, or come to the ward directly. However, to my recollection it was not a pre-arranged meeting.

- (b) Explain why, after Claire's death, you were *"asked by nursing staff to speak to Claire's mother and father on the ward"*, rather than a paediatric consultant and in particular Dr. Heather Steen or Dr. David Webb.

As far as I can recall Dr. Steen was either not able to come to Allen ward at that time, or nursing staff had not been able to reach Dr. Steen to tell her that Claire's parents were present and needed to talk to someone. I was advised that they were naturally distressed and was asked to speak to Mr. and Mrs. Roberts. I do not recall if Dr. Webb was asked to meet Claire's parents.

- (c) Explain the reasons why, after Claire's death, the nursing staff, rather than a paediatric consultant, asked you *"to speak to Claire's mother and father on the ward."*

I believe Claire's parents had contacted Allen ward directly, in person (by coming to the ward) or by telephone. I believed this had not been prearranged.

- (d) In October 1996 when a paediatric patient died in RBHSC, identify the person/s who would normally speak to the patient's family/parents after the death.

Normally a consultant would do this in a pre-arranged way, or as required, if they were present.

- (e) Identify all protocols, guidelines and procedures on 23rd October 1996 governing which clinicians/medical staff speak to the patient's family if they have died in RBHSC.

I do not recall any protocols, guidelines and procedures in place in RBHSC for such situations.

- (f) Describe in detail what you told Mr. and Mrs. Roberts to *"explain [ed] ... the course of events..."* and in particular about the cause of Claire's death and also about Claire's serum sodium results and/or hyponatraemia. If the serum sodium and/or hyponatraemia were not mentioned to Mr. and Mrs. Roberts, explain the reasons why not.

I do not recall the details of my discussion with Claire's parents. Claire's notes may not have been available to me at that time, as the note I made was at 3.35pm and refers to the conversation as having taken place that morning. My note suggests that I spoke in quite general terms as a junior doctor at the time.

- (g) Identify all documents which record what you told Mr. and Mrs Roberts on 11th November 1996.

My entry in the chart from 11.11.96 at 3.35pm records my meeting with Mr. and Mrs. Roberts.

- (h) Identify all persons who were present at the meeting on 11th November 1996 with Mr. and Mrs. Roberts, and state where this meeting took place.
- (i) Apart from and Claire's parents and myself, there may also have been a nurse present. However, I cannot be sure of this. I believe we mostly likely met in an office in Allen ward.

II. QUERIES ARISING OUT OF YOUR DEPOSITION

With reference to your Deposition to the Coroner taken on 25th April 2006 (Ref: 096-003-015), please provide clarification and/or further information in respect of the following:

- (16) *"I have also stated that I thought a CT scan of [the] brain may be appropriate. At the time this required the sanction of a consultant neurologist. My immediate worries for Claire were probably allayed to some degree by Dr. Webb's assessment..."* (Ref: 096-003-017)

"In 1996 there was not a CT scanner in RBHSC. I thought a CT scan might be necessary" (Ref: 096-003-020)

- (a) Explain why you thought a CT scan of the brain might be *"appropriate"* and *"necessary"*.

I recall that my impression, and that of the ward round team was that a CT scan may be appropriate and necessary to help determine the cause of Claire's apparent neurological problem. I believe, at the time, that I felt that it might have shown evidence of encephalitis and perhaps helped to rule out other conditions such as intracranial bleeding.

- (b) State the length of time necessary in October 1996 to arrange:

- (i) An urgent CT scan for a very unwell paediatric patient.

I would estimate that a CT scan for a very unwell paediatric patient (at that time) could be arranged within perhaps three hours, depending on the availability of a scanner and personnel in "A Block" (Royal Victoria Hospital) or main X-ray (RVH). It would have been necessary to arrange an ambulance also for this transfer and this could also lead to delays.

- (ii) A non-urgent paediatric CT scan.

A non-urgent paediatric CT scan would have been carried out according to clinical priorities. For in-patients this may have meant a scan in 1-2 days. However, this is only an estimate.

- (c) State whether you revisited and reviewed the need for a CT scan during 22nd October 1996 after speaking to Dr. Webb in person, and also after Dr. Webb had examined Claire on each occasion. If so, state the nature of your review. If not, explain why not.

I recall suggesting a CT scan to Dr. Webb on speaking to him on 22.10.96. However, I do not recall if I reviewed the question of a CT scan later in the day. It may have been raised again with Dr. Webb.

- (d) State whether you discussed the need for a CT scan again with Dr. Webb on 22nd October 1996 in light of Claire's deteriorating condition, other than your initial discussion in person with Dr. Webb on 22nd October 1996. If so, state the nature and outcome of the discussion. If not, explain why not.

I do not recall whether or not I discussed a CT scan again with Dr. Webb later on 22.10.96.

- (e) Explain why a CT scan was not arranged for Claire on 22nd October 1996, both initially after your conversation with Dr. Webb in person and Dr. Webb's first assessment of Claire, and also during the course of 22nd October 1996.

I and other staff would have followed Dr. Webb's advice regarding a CT scan of brain. It is my recollection that this investigation required consultant authorization.

- (f) State whether Dr. Webb refused to sanction a CT scan for Claire on 22nd October 1996, both initially after your conversation with Dr. Webb in person and Dr. Webb's first assessment of Claire, and also during the course of 22nd October 1996. If so, explain why.

I do not recall Dr. Webb refusing to sanction a CT scan on 22.10.96. My impression was that he did not feel it was necessary as an urgent investigation at that time.

- (17) *"The initial sodium result did not seem out of keeping in many hospitalized children. We do not know at what time the second test of electrolytes was requested or taken. Claire had at least one further intravenous cannula inserted before 5pm. This is often when blood samples are taken in children (to avoid another needle). With hindsight, further investigations may well have drawn attention to sodium loss or fluid retention...."* (Ref: 096-003-017)

"At 5.15pm she remained very unwell. I cannot recall if I considered a blood test." (Ref: 096-003-020)

- (a) Explain why you did not request further serum sodium and full blood count tests:

- (i) On the ward round in the morning of 22nd October 1996

Although not specified in the ward round notes, further electrolytes are likely to have been requested. This would often have been documented by a SHO on a separate piece of paper or book as "work to do".

- (ii) During the afternoon on 22nd October 1996 in light of Claire's condition.

Although not specified in the notes, further electrolytes and or a full blood count may have been requested later on 22.10.96.

- (b) Explain why a blood sample requested by a paediatric consultant at approximately 17.00 was not taken until approximately 21.30 when Claire *"remained very unwell"*.

Dr. Webb recorded an instruction to check viral cultures, including from blood. If this was not carried out until 21.30pm, I do not know the reason for this. However, such viral cultures may have taken several days to yield a result. I am not aware of Dr. Webb requesting other blood tests at that time.

- (18) *"I have a clear recollection of quite lengthy discussions with Claire's mother on 22/10/96. Although this was as much to help me understand Claire's condition I believe that I also explained my concerns whilst avoiding alarm. I would have deferred to the senior doctor in attendance for more definitive counselling..."* (Ref: 096-003-017)

"The senior doctor I have referred to was Dr. Webb." (Ref: 096-003-020)

- (a) Explain the reasons why you refer to Dr. Webb as *"the senior doctor"* rather than Dr. Heather Steen

Dr. Webb was the senior doctor whose help I, and the ward team, was seeking in relation to Claire and whose expertise seemed appropriate to help manage Claire's condition. My recollection is that Dr. Steen was not present in the hospital, at that stage.

- (b) Explain what you mean by *"more definitive counselling"* and what information this counselling would have conveyed to Claire's mother/family.

More definitive counselling may have entailed a specialist opinion on the likely cause(s) of Claire's clinical condition, a management plan and perhaps prognosis if possible.

- (c) State whether you discussed *"more definitive counselling"* in relation to Claire with Dr. Webb. If so, state when, where, the nature of the discussion and what resulted from that discussion.

I do not recall discussing *"more definitive counselling"* with Dr. Webb.

- (d) State whether Dr. Webb provided *"more definitive counselling"* to Claire's mother/family on 22nd October 1996. If so state when, where and what was said to them and identify the record of it. If Dr. Webb did not provide *"more definitive counselling"*, explain why not.

I do not recall being present when Dr. Webb first met Claire. I cannot recall being present when Dr. Webb saw Claire again later in the afternoon. However, if not I believe I was at Claire's bedside very shortly after giving a dose of sodium valproate. I do not recall Dr. Webb's discussion with Claire's family.

- (e) State precisely the time at which and the terms in which you *"explained [your] concerns"* that Claire *"was really very unwell"* and about *"Claire's level of consciousness on the morning of 22/10/96"* during the *"quite lengthy discussions with Claire's mother on 22/10/96"*.

My discussion with Claire's mother (and probably her father) occurred on the ward round of 22.10.96. I believe this was quite late in the morning, perhaps between 11am and 12MD. I recall taking a history of how Claire was before this illness and the events leading to her admission. My recollection is that Claire's mother felt that Claire could be quite lethargic at times, when unwell. However I recall that Claire's mother was clear that this was not how

Claire was usually, even when unwell. I recall saying that we (the ward round team) were concerned that Claire's level of consciousness did not appear normal. I believe I would have mentioned the abnormal neurological signs, though some of these may have been longstanding. I believe I also explained that we would ask for a specialist opinion from a paediatric neurologist.

- (f) State whether you had any further discussions with Dr. Webb on 22nd or 23rd October 1996 in relation to Claire and her condition, care and treatment. If so state the number of discussions, when, where, who else was present, the nature of the discussions and the outcome of each discussion. If not, explain why not.

I do not recall whether or not there were further discussions between Dr. Webb and myself later on the 22.10.96. I was not on duty during the early morning of 23.10.96.

- (g) After Dr. Webb's first attendance with Claire, state what the plan was for Claire's diagnosis, medical care and treatment.

Dr. Webb had written a management plan as follows.

(i) Starting IV phenytoin 18mg/Kg stat followed by 2.5mg/Kg 12 hourly. Will need levels 6 hours after loading dose.

(ii) Hourly neuro obs.

(iii) CT tomorrow if she (Claire) doesn't waken up.

I believe this is the management plan that the Allen ward team would have followed. I believe Dr. Webb also recommended starting midazolam. I do not believe this would have been started by junior medical staff, unless under direction of a consultant paediatric neurologist.

- (h) State whether this plan was reviewed and reassessed on 22nd October 1996 at any time. If so, state by whom, when, where and what was the result of the review/reassessment. If not, explain why not.

I believe Dr. Webb reviewed the management plan above at around 5pm.

This reads

Plan

1) Cover with cefotaxime + acyclovir X 48 hrs - I don't think meningoencephalitis v likely

2) Check viral cultures ?enterovirus - stool, urine, blood + T/S

3) Add IV sod valproate 20mg/Kg IV bolus followed by infusion of 10mg/Kg IV over 12 hours.

(19) *"I agree that the fluid regime for Claire between 8p.m. and 2a.m. was not an important issue for what happened to Claire thereafter."* (Ref: 096-003-020)

(a) Explain what you mean by *"what happened to Claire thereafter"*.

I believe this statement refers to Claire's subsequent respiratory arrest at or just before 3:00am on 23rd October 1996.

(b) Explain what you mean by *"the fluid regime for Claire between 8p.m. and 2a.m."*

I believe this statement refers to the fact that Claire may have received approximately 70ml/hour of fluid in total between 20:00 and 02:00. This was with the combination of drug therapy. Some of this fluid was in the form of 0.9% saline (normal saline).

(c) Identify the person/s with whom you *"agree"*.

I do not recall who originally stated that an additional 6ml/hour of fluid during this period was not an important reason for Claire's subsequent deterioration. However, I believe this answer was in response to a question from the Coroner.

(d) Explain the reasons why *"... the fluid regime for Claire between 8p.m. and 2a.m. was not an important issue for what happened to Claire thereafter"*.

Although only an opinion, it seemed likely that an extra 6ml of fluid per hour, some of which was of a higher sodium content was not an important issue in what happened to Claire subsequently.

(20) *"I commenced in Allen Ward on 7th August 1996 as a Paediatric Registrar. It was a general paediatric medical ward. Then I had heard nothing of the death of Adam Strain or fluid management issues. I had no issues then with Claire's fluid regime. I have no recollection of knowing of a linkage between fluid management and hyponatraemia (in relation to No. 18 solution)."* (Ref: 096-003-020).

(a) State what training or information you had been given in relation to fluid management prior to 21st October 1996.

I do not recall what training or information I was given in relation to fluid management prior to October 1996. It seems likely that basic instruction would have been part of the undergraduate curriculum, perhaps during the anaesthetics component of training. Instruction thereafter is likely to have been mainly through experience at ward level.

(b) Prior to 21st October 1996:

(i) Describe your state of knowledge and awareness of the case of Adam Strain, his inquest and the issues that arose therein.

Prior to the 21st October 1996, I do not recall knowing about the case of Adam Strain.

- (ii) State the source of this knowledge/awareness and the date/time when you acquired this knowledge.

See (i)

- (iii) Describe how this knowledge/awareness affected your care and treatment of Claire Roberts.

I do not believe that Adam's case affected my care and treatment of Claire Roberts.

- (c) Since 21st October 1996:

- (i) Describe your state of knowledge and awareness of the case of Adam Strain, his inquest and the issues that arose therein.

I believe I only heard of the case of Adam Strain when Claire's case was mentioned to me, during late 2004, and then only in limited detail.

- (ii) State the source of this knowledge/awareness and the date/time when you acquired this knowledge.

I do not recall the source of this limited knowledge, nor the date and time.

- (iii) Describe how this knowledge/awareness affected your work.

I believe that my knowledge and practice in relation to fluid management (and that of colleagues) had changed some time before I came to know any details of the Adam Strain case.

- (21) *"I cannot remember if a blood test was specified by me on the day I examined her. Probably I examined her that morning but I cannot be more exact."* (Ref: 096-003-020)

This excerpt in the coroner's handwriting reads. "I cannot remember if a blood test was specified by me on the day I examined her. Probably I examined her late morning, but I cannot be more exact". I believe the second sentence was in response to a different question.

- (a) Identify any note in Claire's clinical notes where you require a blood test between 21st and 23rd October 1996.

I cannot identify such a note in Claire's chart.

- (b) Explain why you did not specify a blood test on 22nd October 1996.

I believe it is likely that a blood test for repeat electrolytes was requested during 22.10.96. This appears to have been carried out later that evening. Any electrolyte test would often have been planned during the ward round, perhaps without a definite time specified. However, the time of sampling would usually have been between 9am and 5pm.

(22) *"What I saw was outside my experience and I then contacted Dr. Webb."* (Ref: 096-003-020).

- (a) State what contact you made or attempted to make on 22nd October 1996 with Dr. Heather Steen, the admitting consultant, given what you *"saw was outside [your] experience"*.

I do not recall what attempt I made to contact Dr. Steen immediately after seeing Claire on the ward round on 22.10.96. I believe I would have been aware that she was not present in the hospital, though would likely have known her location. I do not recall whether she was immediately contactable by telephone. This, as well as Claire's clinical condition would have influenced the decision to ask for Dr. Webb's assistance.

- (b) State the time at which you made or attempted to make contact with Dr. Heather Steen.

I do not recall the time but I remember making contact with Dr. Steen by telephone, following my contact with Dr. Webb.

(23) *"I cannot recall if I was aware of the blood test results or how they were relayed to me. The reading of 132↓ would not have caused extreme concern... I cannot recall if I considered a blood test."* (Ref: 096-003-020).

- (a) Given the 2 references to Claire's blood results in her medical notes:

" Na 132↓... WCC 16.5↑...

22/10/96 W/R Dr. Sands... U&E - Na+132 - FBC - WCC↑16.4..."

(Ref: 090-022-052)

State whether you were aware of the blood test results when you conducted the ward round on 22nd October 1996, and if not, explain why not.

I do not recall whether I was aware of the blood test results when conducting the ward round on 22.10.96. However, I think it likely that these results were mentioned as part of the presentation of Claire's case on the ward round. I think it unlikely that I would have known the exact timing of that blood sample.

- (b) State whether the blood test results would have caused you any concern at all. If so, the nature of and reasons for your concern, and what steps you took to address, monitor and manage that concern over the course of 22nd October and 23rd October 1996. If the test results caused you no concern at all, explain why not.

I believe I, and the ward round team would have recognized that the serum sodium was lower than the normal range (though not markedly so) and that the white cell count was slightly elevated. I believe that, at that time, the electrolyte result is one that would have prompted a request for a repeat electrolyte sample, but probably not as a matter of urgency. At the time I think it unlikely that these results would have prompted a higher level of monitoring, or action.

(24) "I produce my formulation of the cause of death C7. I cannot rank accurately the causes I have given at 1(b)...." (Ref: 091-009-057)

"...1(b) Meningoencephalitis, status epilepticus, excessive anti-diuretic hormone secretion with associated hyponatraemia..." (Ref: 091-009-057)

HM coroner asked doctors present at Claire's inquest to individually formulate a certificate of the cause of death.

(a) State the basis upon which you state that "*meningoencephalitis*" gave rise to Claire's cerebral oedema.

I thought it likely that Claire was admitted to hospital with meningo-encephalitis. This was based on her clinical presentation, course and also post mortem findings, including cerebrospinal fluid microscopy. Meningo-encephalitis is a known cause of cerebral oedema.

(b) State the basis upon which you state that "*status epilepticus*" gave rise to Claire's cerebral oedema.

I thought it likely that Claire did have sub-clinical (and overt) frequent seizure activity. This was based on her history, presentation and course. This view was supported by Dr. Webb's assessment at the time of Claire's admission and evidence to the coroner. Status epilepticus may be associated with cerebral oedema.

(c) State the basis upon which you state that "*excessive anti-diuretic hormone secretion*" gave rise to Claire's cerebral oedema.

I thought it likely that Claire did have high levels of antidiuretic hormone (ADH) secretion mainly based on the additional biochemistry result of sodium of 121 recorded at 11.35pm on 22.10.96.

(d) Explain what you mean by "*with associated hyponatraemia*".

Hyponatraemia was present in Claire's case. This biochemical finding seemed likely due to high levels of ADH.

(e) Please clarify whether you state that hyponatraemia caused Claire's cerebral oedema or not.

I believed that it was a component of the cerebral oedema in Claire.

(f) Please clarify whether you state the hyponatraemia was caused only as a result of the "*excessive anti-diuretic hormone secretion*" or by any other cause. If the latter, identify the other cause/s.

I considered that excessive levels of ADH were the likely cause of hyponatraemia and did not state other possible causes. I did not feel able to rank the "underlying morbid conditions" leading to cerebral oedema.

III. ADDITIONAL QUERIES

(25) *"Plan. Rectal Diazepam.*

Dr. Webb

D/W Dr. Gaston re PMHx" (Ref: 090-022-053)

(a) State what "PMHx" means.

This note was not written by me, but I take it to mean - past medical history.

(b) State whether you had any discussion with Dr. Gaston about Claire's "PMHx" between 22nd October and her death. If so, state the number, date, time and nature of each of these discussions, and identify any record or note of each of these discussions.

I do not recall speaking to Dr. Gaston myself regarding Claire's past medical history. However, I believe that information was requested and faxed to RBHSC.

(26) *"21/10/96 10pm - 7am Urine direct ✓*

O+ S ✓" (Ref: 090-040-140)

(a) State the results of the analysis of the urine samples taken on the ward.

I believe a urine sample was recorded in the nursing notes, taken it seems sometime between 10pm on 21.10.96 and 7am on 22.10.96. I was not on duty at the time this sample was collected and apparently sent for analysis. However, the notes suggest it was sent for direct microscopy and culture to look for urinary infection. The results are recorded in the chart with no growth.

(b) Identify where these results are noted or recorded, and by whom the record or note of the results was made.

These printed results are recorded in Claire's chart 090-030-094 and 090-030-097

(c) If there is no note or record of them, explain why not.

(d) State whether you were aware of and took account of the results from the urine analysis in making your diagnosis of Claire. If not, explain why not. State whether you took any steps to ascertain these results or to repeat the urine analysis. If you did not, then explain your reasons.

I believe the urine culture result was not printed until 23.10.96 and would not have influenced management.

- (e) State whether you considered measuring Claire's urine output on admission. If not, explain why you did not consider it.

I was not on duty when Claire was admitted.

- (f) State whether you considered catheterising Claire on 22nd October or 23rd October 1996. If so, state when you considered this and the reasons why. If you did not consider this, explain why.

I do not recall if catheterisation was discussed on the ward round of 22.10.1996, or later that day. I believe that, at the time this would have been an infrequent procedure in a 9 year old girl in a general medical ward and usually at consultant request.

(27) *"22/10/96 11.00 PU large →lab"* (Ref: 090-038-135)

- (a) State the results of the laboratory analysis of the urine sample taken at approximately 11.00 on 22nd October 1996.

I do not know the result of another sample of urine collected at 11am on 22.10.1996.

- (b) Identify where these results are noted or recorded, and by whom the record or note of the results was made.

See (a) above

- (c) If there is no note or record of the said results, please explain why not.

See above

- (d) State whether you were aware of and took account of the laboratory results from the urine analysis in making your diagnosis of Claire. If not, explain why not and state whether you took any steps to ascertain these results or to repeat the urine analysis and your reasons for not doing so.

See above

(28) *"Reassess after fluids... Observe and reassess AM"* (Ref: 090-022-052)

- (a) State whether there was any reassessment of Claire *"after fluids"*. If so, identify who carried out that reassessment, when it was carried out and what was the outcome of that reassessment. If not, explain why not.

I believe this entry has been made by Dr. O'Hare. She recorded that Claire was slightly more responsive at 12MN.

(29) *"Suggest i) starting IV phenytoin 18mg/kg stat followed by 2.5mg/kg 12 Hrly. Will need levels 6hrs after loading dose."* (Ref: 090-022-054)

- (a) State whether you or any other member of the paediatric team caring for Claire considered arranging an EEG for Claire on 22nd October 1996 at the time the phenytoin was contemplated, to confirm the diagnosis of a high rate of sub-clinical epileptic seizure activity.
- (b) If so, explain your consideration and the reasons why an EEG was not organised.
- (c) If not, explain the reasons why not.

(a-c) I do not recall a discussion regarding an EEG. I believe this would have required authorization by a consultant neurologist.

- (d) State whether you believed that IV phenytoin was appropriate at that stage on 22nd October 1996 without proof that non-convulsive status epilepticus was present.

I do not recall my view of the use of IV phenytoin at that time.

- (30) Describe the equipment, service and facilities available to RBHSC patients in RBHSC and on the RVH site in October 1996:

- (a) During working hours (09.00-17.00) Monday - Friday
- (b) Out of hours (17.00-09.00) Monday - Friday
- (c) At weekends

for carrying out a paediatric

- (i) CT scan
- (ii) MRI scan and
- (iii) EEG.

(i) (a,b,c) There was no CT scanner in RBHSC at that time. I recall that in order for an in-patient CT scan to be carried out, a consultant request was needed. This would be true of both "working hours", out of hours and weekends. I believe CT scans were carried out in A-block (RVH), or in the main X-ray department (RVH). A child could be transported by ambulance to one of these venues. I believe this was the case during working hours, out of hours and at weekends. Additional staff may have been required to facilitate this out of hours or at weekends.

(ii) (a,b,c) At this point, I cannot recall the provision for MRI for children in Oct 1996. Although a MRI scanner for N. Ireland had been installed prior to this date, I do not know if it was being used to scan children at the time and if so what provision was in place.

(iii) My recollection of EEG provision at that time is very limited. However, I assume it was available during working hours. I am not sure if it could be carried out at the bedside in Oct 1996.

(31) Identify the other medical or clinical staff who would be required to carry out and report on a paediatric:

(a) CT scan

This would entail accompanying medical and nursing staff, radiologist and radiographer to carry out the scan and report it. A neurologist may also be required to help interpret a cerebral CT scan. An anaesthetist may also have been required in some cases.

(b) MRI scan and

I believe MRI scanning would also have involved the above.

(c) EEG

EEG would require technical staff (1 or 2 persons) plus Consultant Neurologist for interpretation, plus perhaps nursing staff to assist.

and describe their availability:

(i) During working hours (09.00-17.00) Monday - Friday

(ii) Out of hours (17.00-09.00) Monday - Friday

(iii) At weekends.

in October 1996.

I do not recall what the availability of these staff members would have been in October 1996.

(32) State whether you or Dr O'Hare considered requesting:

(a) a CT scan and/or

(b) an MRI scan and/or

(c) an EEG

on examining Claire on 21st and 22nd October 1996. If so, explain why and if not, explain why.

(a-c) I recall discussing a CT Scan with Dr Webb on speaking to him in the late morning or early afternoon of 22nd October 1996. I believe that I and the ward round team felt this investigation may be helpful in trying to determine the cause of Claire's condition. We may also have discussed an EEG. However I do not recall this. I do not recall discussing an MRI scan with Dr Webb. I do not know Dr O'Hare's thought regarding CT, MRI or EEG.

(33) State what the threshold was for requesting a paediatric:

(a) CT scan

I believe that if a child was considered to need a CT scan of brain or other organs, this would have been requested by a consultant. Carrying out of such a scan required moving a child by ambulance. I cannot state a threshold.

(b) MRI scan

I do not know what the threshold was for requesting a paediatric MRI Scan in October 1996.

(c) EEG

I do not know that the threshold was for requesting a paediatric EEG in October 1996. Although these were carried out as routine outpatient investigations, I am uncertain whether a bed-side EEG was available in October 1996.

in RBHSC in October 1996.

(34) State what authorisation was required for obtaining a paediatric:

(a) CT scan

A consultant was required to authorise a paediatric scan in 1996.

(b) MRI scan

I assume the same was true of MRI.

(c) EEG

As far as I can recall a Consultant Neurologist was required to authorise an inpatient EEG. An outpatient EEG was likely less restricted.

in RBHSC in October 1996.

(35) If you had requested a CT scan, MRI scan and/or an EEG of Claire on 22nd October 1996 state where that would have been carried out and how Claire would have been transferred to the venue for the CT and/or MRI scan and/or EEG.

A CT Scan or MRI would be requested by a consultant. Claire would have been transported by ambulance to a scanner in A block in the RVH or to main x-ray in the RVH. If an EEG had been requested by a Neurologist it may not have been possible to carry out in the EEG department due to access. I do not recall if it was possible to carry out a bedside EEG at that time.

(36) "22/10 Time 3.10pm Lasted frequently strong seizer (sic) at 3.25.

Duration 5 min

State afterwards sleepy

Initial Mum" (Ref: 090-042-144)

- (a) State whether you or any other member of the medical team were informed of this seizure at 15.10 or at any time thereafter. If so, identify by whom and state when and where you were so informed. If not, explain why not.

I do not recall if I, or other members of the medical team were informed of the seizure at 15:10.

- (b) State whether Dr. Webb was aware of this seizure at any time on 22nd October 1996. If so, state when and how he became aware of it. If Dr. Webb was not aware of it, explain why not.

I do not know if Dr Webb was aware of this seizure.

- (c) State whether you considered that Claire's seizures on 22nd October 1996 may have been provoked by a drop in sodium level and cerebral oedema. If so, state when and the reasons why you considered this. If you did not consider this, explain why.

I do not recall if I considered Claire's seizures on 22nd October 1996 may have been provoked by a drop in sodium level and cerebral oedema. I think it likely that I was not present in Allen Ward when that seizure was recorded. However the sodium result discussed on the ward round may not have raised concern to the extent that low serum sodium was considered a likely cause of Claire's symptoms.

(37) "22/10 4.30pm. teeth tightened slightly.

Duration few secs.

State afterwards asleep." (Ref: 090-042-144)

- (a) State whether you or any other member of the medical team were informed of this seizure at 16.30 or at any time thereafter. If so, identify by whom and state when and where you were so informed. If not, explain why not.

I do not recall if I, or other members of the medical team were informed of this observation.

- (b) State whether Dr. Webb was aware of this seizure at any time on 22nd October 1996. If so, state when and how he became aware of it. If Dr. Webb was not aware of it, explain why not.

I do not know if Dr Webb was aware of this observation on 22nd October 1996.

(38) "22/10/96 17.00..."

Plan i) Cover to cefotaxime and acyclovir x 48 hrs - I don't think meningoencephalitis v likely"
(Ref: 090-022-055)

- (a) Identify the conditions/illnesses which cefotaxime was to address and state the time at which this medication was administered to Claire on 22nd October 1996.

I did not write this note. However I believe Dr Webb considered it appropriate to prescribe an antibiotic with broad cover, in case of any cerebral bacterial infection. It appears that the first dose was given at 5.30pm (likely by nursing staff) and again at 11.20pm. Please see part (c) below.

- (b) Identify the conditions/illnesses which acyclovir was to address and state the time at which this medication was administered to Claire on 22nd October 1996.

Again I did not write this note. However I believe Dr Webb considered it appropriate to prescribe this anti-viral agent in case of herpes viral encephalitis/meningitis. The first dose of this medication appears have been given at 9.30pm. Please see part (c) below.

- (c) As Dr. Webb decided to "cover" Claire with these medications to treat Claire for certain conditions/illnesses, explain why you did not administer these medications promptly or urgently, and the reasons why these medications were not administered until approximately 21.30 on 22nd October 1996.

The doctor prescribing Cefotaxime has written the dose for 600mg 4 times daily IV. A dose was planned for 5.30pm. It appears that this medication, marked "C" has been given at 5.30pm. This may have been by a member of nursing staff. According to the prescription sheet the first dose of Acyclovir (marked D) was given at 9.30pm, as prescribed. I do not know if a "stat" dose of either medication was requested by Dr Webb. However the first dose of Cefotaxime is recoded as being given shortly after his written note of 17.00.

(39) "22/10/96 11pm IV phenytoin erected by doctor and run over one hour - cardiac monitor in situ throughout infusion." (Ref: 090-040-138)

- (a) Explain why a cardiac monitor was in situ throughout the infusion of IV phenytoin.

I was not on duty at this time and am unable to comment.

- (b) State whether there was "cardiac monitor in situ throughout" the IV infusions of phenytoin administered at approximately 14.45 and 21.30 on 22nd October 1996 (Ref: 090-026-075). If so, explain the reasons for this, and if not, state the reasons for this also.

I do not know if a cardiac monitor was in situ during the infusions of Phenytoin.

- (40) Explain the nature and status of the document entitled 'Discharge/Transfer Advice Note' at Ref: 090-007-009, identify who completed that document and state when and where it was completed.

These forms are to allow capture of patient episodes in different units of RBHSC. However I do not know why it has been partially completed in this case.

- (41) State whether you are a member of a medical defence organisation. If so, state whether you have communicated with that organisation in relation to the treatment and death of Claire. If so, state when you communicated with it.
- (42) Describe your perception of the seriousness or otherwise of Claire's condition during your care of her, and the reasons for this.
- (a) State precisely what you told the members of the medical and nursing teams to communicate your view of the seriousness or otherwise of Claire's condition on and throughout 22nd October 1996, and in particular, identify each member of each team to whom you spoke and state when and where you communicated your perception and what you said to each member.

I felt that Claire was very unwell, from a neurological viewpoint when I first met her and believe that I conveyed this to members of the medical and nursing team. I do not recall what I said to the team, nor to whom I spoke. I believe that I went promptly to see Dr Webb because of my concerns, and those of colleagues on the ward. Dr. Webb's assessments of Claire may have lessened some of my concern.

- (43) Describe your communication with Claire's parents and family and in particular:
- (a) State what information you communicated to Claire's parents and family, and what information they gave to you.
- (b) Identify to whom you gave this information.
- (c) State when and where you told them this information.

(a-c) I recall speaking, at least with Claire's mother on the ward round of 22nd October 1996. Her father may also have been present. After obtaining a history from them, I believe I expressed my concerns regarding Claire. I would only have given limited detail, pending consultant assessment.

I may have talked further with Claire's parents later on 22nd October 1996. However I have no recollection of this

The information would have been given to Claire's mother and perhaps also to her father in Allen ward, at the time of the ward round. It seems likely that this was between 11am and 12 MD.

- (d) Identify where the information you communicated/received was recorded or noted.

Information given has not been recorded on the ward round note.

- (e) State whether you recorded Claire's parents'/family's understanding of this information and their concerns. If so, identify the documents containing that record. If you did not record this, explain why not.

I did not record Claire's parents understanding of information given. A senior house officer was making notes at that time. I believe that I would have considered it partly my role at that time to give my impression of events to Claire's parents and my concerns. However I would have anticipated Dr Webb assessing Claire and giving a specialist opinion to Claire's family.

- (f) State if you discussed Claire's condition at any time with her parents. If so, state when, who was present, and what was discussed, where this is noted, and if it was not noted, explain why it was not noted.

I recall discussing Claire's condition with at least her mother on 22nd October 1996 on the ward round. This was likely between 11am and 12 MD. Dr Stevenson was likely present at that time. I do not recall which other staff members were present. Any discussion would have been provisional, pending a consultant assessment. This discussion has not been recorded in the notes. The role of writing in the notes was carried out by Dr Stevenson at that time. It is likely that I did not view the patient's notes at that stage, although I did on returning to Allen ward, having spoken to Dr Webb. I would likely not have been aware at the time of the ward round what specifically had been written in the notes.

- (g) State whether you informed Claire's parents/family of the diagnosis, its implications and the treatment needed. If so, state when you provided this information, to whom and where this communication is recorded. If you did not provide this information, explain why not. If any such communication is not recorded, explain why not.

My discussion with Claire's parents on 22nd October 1996 on the ward round would have been limited and provisional, pending assessment by a consultant. I believe I would have given the team's impression of the possible diagnosis and initial treatments. I believe I would also have explained why I felt a specialist opinion was needed. I do not recall if I spoke to Claire's parents again, having seen Dr Webb. My communication with Claire's parents at the time of the ward round is not recorded. However at the time of the ward round the notes were being written by a colleague.

- (44) Describe in detail the education and training you received in fluid management (in particular hyponatraemia) and record keeping through the following, providing dates and names of the institutions/bodies:

- (a) Undergraduate level

I believe I would have received education regarding fluid management at undergraduate level, mainly during the 4th year anaesthetic module.

- (b) Postgraduate level

- (c) Hospital induction programmes

I do not recall when or if specific training in fluid management or hyponatraemia was given at postgraduate level, nor a hospital induction programme. I believe a handbook 'Paediatric Medical Guidelines' dated May 1997 was issued to junior doctors in RBHSC in August 1997.

(d) Continuous professional development

As part of continuing professional development I have received training by completion of an online training module in recognition and management of hyponatraemia. This is a recent introduction (2010) and requires annual renewal. Each ward in RBHSC also has information posters relating to fluid management and in particular hyponatraemia. Education in this regard forms part of the induction for junior doctors. I believe all medical and nursing staff now have a much greater awareness of hyponatraemia and currently recommended fluid management.

(45) Prior to 21st October 1996, describe in detail your experience of dealing with children with hyponatraemia, including the:

(a) Estimated total number of such cases, together with the dates and where they took place

I do not recall being involved in the care of a child with symptomatic hyponatraemia during that time. However I believe a mild reduction in serum sodium in biochemistry samples was a very frequent finding in children admitted to RBHSC.

(b) Number of the children who were aged less than 10 years old

I do not recall this information.

(c) Nature of your involvement

I do not recall this information

(d) Outcome for the children

I do not recall this information.

(46) Since 21st October 1996, describe in detail your experience of dealing with children with hyponatraemia, including the:

(a) Estimated total number of such cases, together with the dates and where they took place

I do not recall this information. However, any patients with symptomatic hyponatraemia, are likely to be very few in number. I continue to see patients with biochemistry results indicating hyponatraemia (that is serum sodium below the reference range), at least on a weekly basis. These cases are likely to have had mild to moderate reduction in serum sodium level. I believe that few, if any of these patients have been symptomatic because of hyponatraemia.

(b) Number of the children who were aged less than 10 years old

A degree of hyponatraemia on a biochemistry sample is a frequent finding in infants and children under 10. Some of these patients presenting with low sodium results would be on diuretic therapy.

(c) Nature of your involvement

For patient's mentioned in (b), as consultant responsible and on call, (when covering other consultant's patients) I, and colleagues tend to check electrolytes frequently, restrict fluids as required and supplement sodium much more readily than in previous years.

(d) Outcome for the children

I believe patients of the kind mentioned above have generally done well. However, I cannot recall specific cases.

(47) Identify any 'Protocols' and/or 'Guidelines' which governed Claire's care and treatment.

I am not aware of any protocols and/or guidelines which governed Claire's care and treatment in 1996.

(48) Provide any further points and comments that you wish to make, together with any documents, in relation to:

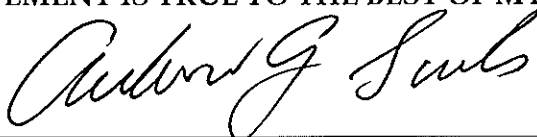
- (a) The care and treatment of Claire from her admission on 21st October 1996 to her death on 23rd October 1996**
- (b) Record keeping**
- (c) Communications with Claire's family about her care and treatment**
- (d) Lessons learned from Claire's death and how that has affected your practice**
- (e) Current 'protocols' and procedures**
- (f) Any other relevant matter**

The fluid management of children in RBHSC, and I believe in other hospitals has changed markedly since 1996. The current DHSS protocol for hyponatraemia provides an important guideline for all staff (Parenteral Fluid Therapy for Children and Young Persons - DHSSPS Sep2007, amended Feb2010).

Finally, I can only imagine how difficult the years since Claire's death have been for her family and again wish to express my sincere sympathy.

THIS STATEMENT IS TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF

Signed:



Dated:

23.12.11