Witness Statement Ref. No. 034/2

NAME OF CHILD: RAYCHEL FERGUSON

Name: Naresh Kumar Bhalla

Title: Mr.

Present position and institution:
Associate Specialist (Surgery),
Macclesfield District General Hospital, Macclesfield, Cheshire, UK

Previous position and institution:
[As at the time of the child's death]
Specialist Registrar General Surgery, Altnagelvin Area Hospital, Londonderry

Membership of Advisory Panels and Committees:
[Identify by date and title all of those since 30th September 2009]
1. Fellow of RCSI, Ireland. 2. Fellow of RCS&P, Glasgow. 3. Member of MDU. 4. Member of Manchester Medical Society. 5. Life member of Indian Medical Association. 6. Life member of Association of Surgeons, India.

Previous Statements, Depositions and Reports:
[Identify by date and title all those made in relation to the child's death since 30th September 2009]
Inquiry Witness Statement dated 30/09/2005 reference number:034/1.

OFFICIAL USE:
List of previous statements, depositions and reports attached:

Ref:	Date:	
034/1	30.09.2005	Inquiry Witness Statement

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

I. QUERIES IN RELATION TO YOUR MEDICAL QUALIFICATIONS, EXPERIENCE, TRAINING AND RESPONSIBILITIES

(1) Please provide the following information:

(a) Describe your career history before you were appointed to Altnagelvin Hospital.

I passed M.B.,B.S. in May 1975 from Institute of Medical Sciences (IMS), Varanasi, India. After this I did one year's of rotating internship including one month training in Paediatrics. During three years of Junior Residency in Surgery at IMS from 01/08/1976 to 31/07/1979, I worked in Paediatrics Surgery for two months and in Plastic Surgery(managing children also, requiring Plastic Surgery) for seven and half months. From then onwards, before coming to United Kingdom in December 1999, I worked in various reputed Hospitals in India, Saudi Arabia and Republic of Ireland in Surgery department and took care of all aspects of Surgical patients including neonates and children. Notably I worked with Prof. Laji Joseph (Prof. of Surgery) and DR K R Srimurty (Paedriatic Surgeon) 17/01/1984 to 27/10/1987 at St. Martha's Hospital, Bangalore, India. From 01/12/1999 to 02/08/2000 I worked in NHS at Dungannon and Downpatrick.

(b) Describe your work commitments to the Altnagelvin Hospital from the date of your appointment to the 9th June 2001, stating the locations in which you worked and the periods of time in each department/location.

I worked as per the rotation posting in Surgery Department from 02/08/2000 onwards taking care of Surgical patients including children. I was carrying out Outpatients, Ward rounds, teaching of juniors, emergency on call, minor and moderate operations independently and assisting major operations.

(c) Describe your duties as Specialist Registrar General Surgery at Altnagelvin Hospital on the 9th June 2001.

I was on call on that day. As Specialist Registrar I took over duty from Registrar on call a day before including any serious Surgical patients in the Hospital, any new admissions and any patients requiring any Surgical intervention.

(d) How much experience did you have of working with patients on a paediatric ward by the 9th June 2001?

As mentioned above, since my passing M.B.,B.S. in May 1975, I have been taking care of neonates and children in different hospitals admitted in Surgery.

(e) How much experience did you have of working with post-operative patients (children) by the 9th June 2001?

Same as above.

(2) At the time of your appointment to Altnagelvin Hospital were you provided with training or induction and if so,

(a) Describe the training or induction which you received.

I received half day induction training.

(b) State the date or the approximate date when you received any training or induction.

Induction was provided soon after I joined on 02/08/2000.

(c) Identify the person(s) who delivered this training or induction.

I do not remember the person/persons who provided training.

(d) Indicate if you received any documentation at this training or induction.

I do not remember if I received any documentation on induction.

(3) Provide full details of any advice, training or instruction which was provided to you at Altnagelvin Hospital in order to inform you of the appropriate approach to any of the following matters:

- Hyponatraemia

None.

- Post-Operative Fluid Management

None.

- Record keeping regarding fluid management

None.

And address the following:-

(a) Who provided this advice, training or instruction to you?

Not applicable

(b) When was it provided?

Not applicable

(c) What form did it take?

Not applicable

(d) What information were you given?

Not applicable

(e) In particular what information were you given in relation to the allocation of responsibility for prescribing intravenous fluids for post-operative children?

Not applicable

II. QUERIES ARISING OUT OF YOUR INITIAL STATEMENT TO THE INQUIRY (WS-034/1)

(4) *"I was on night call on 9th June 2001. Around 5am I got phone call from Ward VI as Raychel Ferguson was very sick; had developed rash and had a seizure. I immediately rushed to ward to see her."* (Ref: WS-034/1 page 2)

(a) Identify the person who contacted you at 05.00.

One of the Staff nurse from Paedriatics ward.

(b) Where were you when you were contacted?

I was in On call duty room.

(c) Fully explain what you were told about Raychel's conditon during this telephone conversation?

From what I recollect, I was told that Raychel who had undergone Appendicectomy 2 days ago was very sick.

(d) What were the arrangements for *"night call"* in 2001?

As per the Hospital duty rota.

(e) What were your responsibilities when on *"night call"*?

- To attend any Surgical patients coming to A&E.
- To operate independently any Surgical patient requiring minor OR moderate procedure.

- To attend any patient referred to Surgical department from other departments, GPs.
- To attend and take care of any problems requiring Surgical input occurring in any patient in Hospital.
- To involve and inform Consultant on call if any patient needed major operation or Surgical management.

(f) In what kinds of circumstances would you expect the Consultant Surgeon to be contacted to be told about the condition of a patient admitted under his care?

On call, I was to inform Consultant Surgeon about any patient requiring his input for Surgical management.

(g) Was a Consultant Surgeon informed of Raychel's condition and requested to come to see her?

No.

(h) If a Consultant Surgeon wasn't notified of Raychel's condition, please explain this omission?

I did not inform Consultant Surgeon as my initial assessment of Raychel strongly suggested metabolic/septic central cause of her deterioration which was confirmed by laboratory results and CT scan of brain. By the time I was called, Paedriaticians and Anesthetists were already involved and they are more experienced in management of such problems.

(i) At what time did you reach Ward 6 to see Raychel?

I do not remember the exact time, but I remember that I rushed to see her as soon as I was informed.

(5) *"From my colleague's and patient's case notes I found following 6 points:*

(1) *Raychel had undergone emergency appendicectomy around 11:30pm on 7th June 2001.*

(2) *During operation appendix was found to be mildly congested, contained fecolith and there was reactionary clear fluid in the peritoneum.*

(3) *She had been prescribed postop flagyl.*

(4) *She did not have history of any significant medical disease in the past nor she had any known allergies to any medicine.*

(5) *She had received 1680 mls of Soln 18 from 8am on 8th June 2001 to 4am on 9th June 2001 and had vomited 5-6 times post-operatively.*

(6) *She had been fairly stable till 3am when suddenly she vomitted, had seizure and became very sick."* (Ref: WS-034/1 page 2/3)

(a) At any time before you received the telephone call at 05.00 on the 9th June 2001, were you aware that Raychel had been admitted as a surgical patient and that she had undergone an appendicectomy?

No.

If so, please address the following:

(i) Who made you aware that she had been admitted as a surgical patient and that she had undergone an appendicectomy?

(ii) When were you given this information?

(iii) Were you given any other information about Raychel?

(b) In June 2001 were you aware of the conclusions reached by the National Confidential Enquiry into Perioperative Deaths (NCEPOD) (in its 1989 report "Who Operates Where") concerning the requirement for consultant supervision of trainees undertaking any anaesthetic or surgical operation on a child?

Yes.

(c) Whether or not you were then aware of this NCEPOD report, how do you consider the conclusions reached in the report concerning the requirement for consultant supervision ought to have applied to the management of Raychel's treatment and surgery?

Consultant Surgeon should have been informed and involved before Surgery.

(d) Were the conclusions reached by the NCEPOD concerning the requirement for consultant supervision a child actually applied in Raychel's case? If so, explain how the requirement for consultant supervision of trainess was put into effect in her case?

It was not put into effect in Raychel's case.

(e) In June 2001 did Altnagelvin Hospital have any policy, practice or guidance (written or unwritten) concerning the circumstances in which junior surgeons (such as SHOs) were expected to confer with their senior colleagues before undertaking any anaesthetic or surgical procedure?

As far as I know, there was no written guidance but the understanding was that the Consultant Surgeon should be involved in all patients who needed further/ senior surgical management care.

If so, please address the following:

(i) What did that policy, practice or guidance say on this matter?

As above.

(ii) How was this policy, practice or guidance brought to the attention of junior surgeons?

It was given as guidance on induction.

(iii) How was this policy, practice or guidance applied in Raychel's case?

It was not applied in Raychel's case.

(f) Were you or any of your senior surgical colleagues advised by Mr. Makar, before Raychel was brought to theatre, that an appendicectomy was to be performed?

I do not know.

If so,

(i) Who was advised and by whom were they advised?

(ii) When were they advised?

(iii) What was discussed?

(6) If the plan to perform an appendicectomy was not discussed by Mr. Makar with senior members of the surgical team, should it have been discussed?

No as middle grade surgeons were considered to be well enough trained to carry out appropriate management themselves.

If so, please address the following:

(a) Was any omission to discuss the plan to perform an appendicectomy the subject of any inquiry or discussion after Raychel's death?

(b) If so, identify the persons who inquired into or discussed this matter.

(c) Describe any steps that were taken on foot of any inquiry or discussion.

(7) In June 2001 describe the circumstances, if any, in which it would have been permissible for a senior house officer to conduct an appendicectomy without first referring the matter for consideration to a more senior colleague?

As far as my understanding goes, all patients of appendicitis were to be managed by middle grades unless any problems were encountered which could not be managed by the middle grades.

(8) In June 2001 were you aware of the conclusions reached by NCEPOD (in its 1997 report, "Who Operates When?") concerning the conduct of out of hours surgery?

Yes.

(9) Whether or not you were then aware of this NCEPOD report, how do you consider the conclusions reached in the report concerning out of hours surgery ought to have applied to the management of Raychel's treatment and surgery?

Consultant Surgeon should have been informed before operation.

(10) In 2001 did Altnagelvin Hospital have a 24 hour emergency operating room as referred to in the NCEPOD report? If so, how what arrangements were in place for the staffing of this theatre?

I do not know.

(11) In June 2001 did Altnagelvin Hospital have any policy, practice or guidance (written or unwritten) with regard to the conduct of surgery on children late at night by junior surgeons?

As far as I am aware; no.

If so, please address the following:

(a) What did that policy, practice or guidance say on this matter?

(b) How was this policy, practice or guidance brought to the attention of junior surgeons or those surgeons starting at Altnagelvin for the first time?

(c) How was this policy, practice or guidance applied in Raychel's case?

(12) In June 2001 did Altnagelvin Hospital have in place any protocol or guidance (written or unwritten) concerning post-operative management of children?

As far as I am aware; no.

If so, please address the following:

(a) How was this protocol or guidance brought to your attention?

(b) How was this protocol brought to the attention of junior surgeons?

(c) What were the main aspects of this protocol or guidance?

(d) Identify those clinicians in the surgical team who were responsible for Raychel's post-operative management?

(e) What were the responsibilities of those clinicians in the surgical team with regard to Raychel's post-operative management?

(f) How were those responsibilities allocated within the surgical team?

(g) How were those responsibilities expected to be carried out?

(h) What were the arrangements for ward rounds in respect of children who had undergone surgery?

(i) Explain why a senior member of the surgical team did not attend Raychel during the ward round on the morning of the 8th June 2001?

(j) Explain why Raychel was not seen by a member of the surgical team any more senior than a senior house officer from the time of her admission at or about 21.00 hours on the 7th June 2001, until you saw her after 05.00 hours on the 9th June 2001?

(k) Should Raychel have received different treatment than she did receive from the surgical team given her overall condition and in circumstances where,

- She was a post operative patient
- She was receiving intravenous Solution 18;
- She had vomited (according to your account) 5-6 times post-operatively.

And if so,

(i) What should that treatment have included?

(ii) Who should have arranged for it to be provided?

(iii) Who should have provided it?

III. QUERIES IN RELATION TO THE WORKING ARRANGEMENTS OF THE SURGICAL TEAM AT ALTNAGELVIN HOSPITAL IN JUNE 2001

(13) In 2001 were preregistration junior house officers (such as Dr. Devlin and Dr. Curran) placed in the role of being first in line for responding to nursing concerns in relation to surgical patients? If so, please address the following matters:

(a) Who was responsible for implementing this arrangement?

I do not know.

(b) Who approved this arrangement?

I do not know.

(c) What support was available for preregistration junior house officers in this role?

As far as I recall, they were supposed to be supervised by SHO on call all the time.

(14) If preregistration junior house officers were not placed in the role of being first in line for responding to nursing concerns about surgical patients, please describe the key features of the arrangements that were in place for dealing with nursing concerns in relation to surgical patients and please explain how this was managed?

As far as I recall, Nurses were to inform SHO of team/on call to deal with management of all patients.

(15) In 2001 were arrangements in place to permit junior members of the surgical team (such as JHOs and SHOs) to communicate with and seek advice from more senior members of the surgical team such as the Consultant or the Specialist Registrar?

As far as I know there was an understanding that they have to get senior help when ever it was required.

If so,

(a) How did those arrangements operate?

They were to contact Senior collegue by bleep/switch board or in person and get guidance/help for further management.

(b) How were junior members of the surgical team told about those arrangements?

It was a given understanding told during induction.

(c) What were they told?

I think they were told to contact seniors when ever they felt need for it.

(16) In 2001 were there any circumstances in which junior members of the surgical team (such as JHOs and SHOs) were expected or required to communicate with and seek advice from more senior colleagues in the surgical team?

Any circumstance where they felt senior help was required.

If so,

(a) In what circumstances were they expected or required to communicate with and seek advice from more senior colleagues?

When ever they felt that they could not handle any problem.

(b) What arrangements were in place to facilitate the provision of advice to junior members of the surgical team?

Senior collegues were on call and could be contacted by bleep/phone/in person.

(c) How were junior members of the surgical team told about those arrangements?

During induction.

(d) What were they told?

As far as I know, they were told to contact seniors when ever they needed any guidance/help.

(17) In 2001 were there any circumstances in which junior members of the surgical team (such as JHOs and SHOs) were expected or required to report the condition of a patient to more senior colleagues in the surgical team?

They were to report any circumstances which they were unable to cope to senior collegues.

If so,

(a) In what circumstances were they expected or required to report the condition of a patient to a more senior colleague?

Same as above.

(b) What arrangements were in place to facilitate junior members of the surgical team in their efforts to report the condition of patients to more senior members of the surgical team?

On call bleep OR through the switch board.

(c) How were junior members of the surgical team told about those arrangements?

During induction.

(d) What were they told?

They were told to contact senior collegues when ever they can not manage any problem.

(18) In 2001, what arrangements were in place for the supervision of the work of junior surgeons?

Junior surgeons were supervised and trained during rounds, in theatre and during lectures/meetings.

If so,

(a) Describe the main features of the supervision arrangements.

Consultants assigned were to train the juniors.

(b) Who carried out the role of supervisor?

Assigned Consultant.

(c) How was this role performed?

Consultant taught junior surgeons during rounds, meetings and theatre.

(19) Was there provision for a 'hand-over' between surgeons or surgical teams at the end of a period of duty?

When ever there was a change of shift, the middle grade on call would not only hand over the bleep to the next person on call but also mention about any new admission, any new patient waiting or expected, any problematical patients and any patient in Hospital requiring any surgical management.

If so, please address the following matters:

(a) Who was expected to participated in such a 'hand-over'?

Middle grades.

(b) What was the purpose of a 'hand over'?

To inform the next person on call about all surgical problems in order to have good care of patients.

(c) Should Raychel's case have been discussed as part of such a 'hand-over'?

No.

(d) Do you know whether Raychel's case discussed during the 'hand-over'?

No because at that time there was no apparent surgical problem.

(20) Clarify whether there were any arrangements in place in 2001 to allow members of the surgical team in Altnaglevin to obtain paediatric medical advice or assistance for the care of a surgical patient?

Yes any surgical patient requiring any Paedriatician's input will be referred to them.

If so, please address the following matters:

(a) Were these arrangements formal or informal?

Informal.

(b) Describe the main features of those arrangements?

Surgical middle grade will bleep the Paedriatician on call and request his/her input.

(c) Was paediatric medical advice and assistance available upon request to surgical junior house officers and surgical senior house officers caring for surgical patients on Ward 6?

Yes.

If so, please address the following:

(i) How was a JHO or a SHO expected to make a request for paediatric medical advice or assistance?

Yes if there was any need.

(ii) To whom was a request to be directed?

To middle grade on call.

(iii) On what matters could paediatric medical advice or assistance be requested by a JHO or SHO?

Any matter where concerned doctor was not happy with managing the care on his own.

(iv) How was a JHO or SHO advised of the arrangements by which they could make a request for medical advice or assistance?

Yes.

(v) Do you know whether any consideration was given by any member of the surgical team to seeking the input of a paediatrician at any time before Raychel's seizure (when Dr. Johnston was asked by nurses to attend)?

I do not know but the Paediatricians were already present when I arrived to see Raychel, I presume they had been requested to come and see Raychel.

(d) In general, were any arrangements in place to promote good communications between the paediatric medical team and the surgical team with regard to the care of surgical patients? If so, please describe those arrangements?

The arrangement was to contact each other when ever a need was felt.

IV. QUERIES ON THE ISSUE OF FLUID MANAGEMENT

Please provide clarification and/or further information in respect of the following:

(21) In June 2001 who in Altnagelvin Hospital was responsible for organizing the structure and allocation of responsibilities for post-operative fluid management for paediatric cases?

SHOs on team looking after the patient were responsible.

(22) Prior to 9th June 2001:

(a) State your knowledge and awareness of the cases of Lucy Crawford, Claire Roberts, or Adam Strain, and the issues arising from those cases.

None.

(b) State the source(s) of your knowledge and awareness and when you acquired it.

NA

(c) Describe how that knowledge and awareness affected your care and treatment of Raychel.

NA

(23) Since 9th June 2001:

(a) State your knowledge and awareness of the cases of Lucy Crawford, Claire Roberts or Adam Strain, and the issues arising from these cases.

There was mismanagement of fluid and electrolyte balance in all of these cases.

(b) State the source(s) of your knowledge and awareness and when you acquired it.

I came to know about this around September 2005 from some of my friends.

(c) Describe how that knowledge and awareness has affected your work.

Made me aware of the problems caused by fluid mismanagement and resulting in deaths in them. I have always been cautious of fluid and electrolytes balance. Since June 2001, I have become still more cautious and keep a close watch on this and also make sure that Junior collegues are not only aware of importance of fluid and electrolytes balance but check serum electrolytes every day and in cases of derangement of electrolytes twice a day in order to prevent any problems arising due to imbalance.

(24) Prior to Raychel's death were you aware of the literature which highlighted the dangers posed by the administration of hypotonic fluids to children during the immediate post operative period? eg. Arieff AI, Ayus JC. British Medical Journal 1992: 304; 1218-1222. Hyponatraemia and death or permanent brain damage in healthy children, or Halberthal M, Halperin ML, Bohn D. British Medical Journal 2001: 322; 780-782. Lesson of the week: acute hyponatraemia in children admitted to hospital: retrospective analysis of factors contributing to its development and resolution.

No I was not aware of this.

(25) Describe in detail the education and training you have received in fluid management (in particular hyponatraemia) and record keeping, to include any particular training relating to fluid

management in children, and provide dates and names of the relevant institutions/bodies, by reference to the following:

I had lectures on fluid management and management of fluid imbalance at undergraduate and postgraduate levels.

(a) Undergraduate level.

(b) Postgraduate level.

(c) Hospital induction programmes.

(d) Continuous professional development.

(e)

(26) In June 2001 were you aware of the factors that could cause an electrolyte imbalance in a paediatric patient following surgery? If so, please identify those factors.

I knew there were various factors including vomiting, diarrhoea, abnormal loss from lungs, skin, during operations, medical and surgical conditions causing loss, retention and imbalance of electrolytes; and improper/inadequate fluid replacements of fluid and electrolytes.

(27) In 2001, what did you regard as the appropriate way to manage a child who was experiencing prolonged vomiting after surgery, and who was in receipt of hypotonic intravenous fluids? Please set out all the steps that a doctor should have taken in those circumstances.

Once Doctor knew about the patient, he/she should have noted full details of the fluids administered so far, about the amount and nature of vomiting which occurred, about the amount of urine passed so far, examined the child to assess if the child was dehydrated or not, asked for serum urea and electrolytes and administered fluid to correct hyponatraemia.

(28) In 2001, what did you understand were the possible dangers for a child who was experiencing prolonged vomiting after surgery and who was in receipt of hypotonic intravenous fluids?

Child will develop hyponatraemia and all sequential complications due to that.

(29) Prior to 9th June 2001, describe in detail your experience of dealing with children with hyponatraemia, including the:

I have been dealing with many children of minor degree of hyponatraemia in various Hospitals in different countries, but always took appropriate steps to prevent severe hyponatraemia.

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

Many cases with minor hyponatraemia and hence I can not set out the dates of these cases and where each one took place.

(b) Nature of your involvement.

I made sure that the hyponatraemia had been corrected properly and when the need arose, I sought the advise of Paediatricians.

(c) Outcome for the children.

Good, no adverse outcomes.

(30) Since 9th June 2001, 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.

Many cases with minor degree of hyponatraemia, and hence I cannot set out the dates of these cases and where each one took place.

(b) Nature of your involvement.

To make sure that minor degree of hyponatraemia is corrected.

(c) Outcome for the children.

Good, no adverse outcomes.

V GENERAL

Please address the following:

(31) After Raychel's death were you asked to take part in any process designed to learn lessons from the care and treatment which she received and your role in it, to include any issue about her fluid management? If so,

No

(a) Describe the process which you participated in.

(b) Who conducted it?

(c) When was it conducted?

(d) What contribution did you make to it?

(e) Were you advised of the conclusions that were reached, and if so, what were they?

(f) Were you advised of any issues relating to your role in Raychel's care and treatment?

(g) Describe any changes to fluid management practice that you were made aware of at Altnagelvin Hospital following Raychel's death.

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

(a) The care and treatment of Raychel in Altnagelvin Hospital between the 7th-9th June 2001.

Rachel was not given appropriate fluids.

(b) Record keeping.

None

(c) Communications with Raychel's family about her condition, diagnosis, and care and treatment.

As far as I am aware, Raychel's family were informed about her condition and complications arising in her.

(d) Working arrangements within the surgical team and support for junior doctors.

Arrangements were good.

(e) Lessons learned from Raychel's death and how that affected your practice at Altnagelvin or elsewhere.

Always make careful check of fluids being given to all patients.

After few years of persuasion with Consultants and Chief Executive, our Hospital has started having NCEPOD(National Confidential Inquiry into Patient Outcome and Death) list every day in morning on all working days. By doing this almost all cases admitted during evening hours and requiring Emergency operations are operated next morning thus avoiding operations done by Juniors (Anesthetists and Surgeons) without supervision and hence improving outcome.

(f) Current Protocols and procedures.

Any junior collegues joining the Surgical department in Macclesfield District General Hospital are being taught by me (separately from Hospital induction) about fluid management in adults and children along with management of common and serious surgical problems.

Always making a point to ask junior collegues the amount and type of fluids written for each patient during ward round, after getting the results from laboratory OR any other time when it is important to make sure that correct amount and type of fluid is being given to patient.

(g) Any other relevant matter.

Important that the collegues including nurses should follow the Protocols and Procedures for correct fluid and electrolytes management.

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