

NAME OF CHILD: Adam Strain

Name: Jacqueline Cartmill

Title: Dr

Present position and institution:

Consultant Obstetrician and Gynaecologist, Altnagelvin Hospital, Glenshane Road, Co. Londonderry (commenced 1st October 2008)

Previous position(s) and institution(s):

[Since your Witness Statement of 9th October 2005]

1. Specialist Registrar Obstetrics and Gynaecology, Royal Jubilee Maternity Service, Belfast, March 2006 - July 2006

2. Postgraduate Fellow in Maternal Fetal Medicine, Nepean Hospital, Penrith, New South Wales, Australia, July 2006 - September 2007

Membership of Advisory Panels and Committees:

[Identify by date and title all of those since your Witness Statement of 9th October 2005]

1. Chair of Regional Perinatal Collaboration Advisory Committee, Northern Ireland

2. Member of Blood Transfusion Committee, Altnagelvin Hospital

3. Member of Venous Thrombo-embolism Committee, Altnagelvin Hospital

4. Lead Clinician for Obstetric Risk Management, Altnagelvin Hospital

5. Lead Clinician for Labour Ward, Altnagelvin Hospital

6. Lead Clinician for "High Risk Pregnancy", Altnagelvin Hospital

7. Lead Clinician for Perinatal Ultrasound, Altnagelvin Hospital

Other Statements, Depositions and Reports:

[Identify by date and title all those since your Witness Statement of 9th October 2005]

OFFICIAL USE:

List of previous statements, depositions and reports :

| Ref: | Date: | |
|---------|----------|----------------------------------|
| 003/1 | 09.10.05 | Witness Statement to the Inquiry |
| 093-008 | 02.05.06 | PSNI 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 such a number then please provide a copy of the document.

I QUERIES ARISING OUT OF YOUR INQUIRY WITNESS STATEMENT

With reference to your Inquiry Witness Statement dated 9th October 2005, please provide clarification and/or further information in respect of the following:

(1) Response to position and institution: *"Senior House Officer in Paediatrics, Royal Belfast Hospital for Sick Children"*

(a) Describe your work commitments to the Royal Belfast Hospital for Sick Children (RBHSC) from the start of your employment there and particularly over the period 26th November to 28th November 1995.

Participation in Senior House Officer rota, Royal Belfast Hospital for Sick Children.
Ward duties such as "clerking-in" patients, taking blood
Attendance at out-patient clinics
Participation in SHO on-call rota

(b) State the times at which you were on duty between 26th and 28th November 1995 and in particular:

- whether you were on duty and present in the hospital at all times or
- whether you were on call during that period

I have not kept a written record of my rostered duties/residency in the hospital during this time period. It is my recollection that according to the on-call rota in operation at this time, the SHO on duty changed over at 10pm.

I note that my entry in the casenotes (ref 058-035-144) indicates that I took blood from Adam at 9.30pm.

Adam was subsequently formally clerked-in" by Dr O'Neill at 11.30pm (ref 058-035-131 and 058-035-132). This would be in keeping with the staff changeover at 10pm and would indicate that I was no longer on duty when Adam was "clerked-in".

(c) State what contact you had with Adam between his admission on 26th November 1995 and the withdrawal of ventilatory support from him on 28th November 1995, including where that contact took place, its nature and purpose

According to my entry in the casenotes (ref 058-035-144) I took blood from Adam and prescribed IV

fluids at 9.30pm on the 26th November 1995 in the ward.

There is no documentation that I had any further contact with Adam after this episode.

(d) Describe what you considered to be your role in relation to and responsibilities towards Adam from learning on 26th November 1995 of a potential donor kidney for him until 28th November 1995 when ventilatory support for him was withdrawn, and in particular:

- from Adam's admission to RBHSC until his arrival in theatre

My role as a senior house officer in paediatrics would have been to take pre-operative bloods in preparation for possible renal transplant and then providing I was still on duty in the hospital, to formally "clerk-in" the patient once the decision to proceed with renal transplant had been made.

I note Adam was clerked-in by Dr O'Neill at 11.30pm on the 26th November (ref 058-035-131 and 058-035-132)

- while Adam was in theatre until his admission to PICU

I had no involvement with Adam whilst in theatre until his admission to PICU

- from admission to PICU until his death

I had no involvement with Adam from his admission to PICU until his death

(e) Describe your experience, by 26th November 1995, of assessing the electrolyte results of a child who was being prepared for a renal transplant

I commenced employment in August 2005, therefore by 26th November 1995 I had been working as an SHO in paediatrics for almost 4 months.

I do not recall the number of paediatric renal transplant cases I may have been involved with during my 6 months as a paediatric SHO.

(f) Prior to 27th November 1995:

- state your experience and involvement in preparing patients for paediatric renal transplants (specifically identifying those patients of less than 6 years), the dates of those renal transplants and the location where they took place
- state your experience in preparing paediatric patients (specifically identifying those patients of less than 6 years) for paediatric renal transplants who were polyuric

I do not recall the number of paediatric renal transplant cases I may have been involved with during my 6 months as a paediatric SHO.

(g) Since 27th November 1995:

- state your experience and involvement in preparing patients for paediatric renal transplants, the dates of those renal transplants and the location where they took place
- state your experience in preparing paediatric patients, who were polyuric, for paediatric renal transplants

I do not recall the number of paediatric renal transplant cases I may have been involved with during my 6 months as a paediatric SHO.

(2) Answer to Question 1 at p.2

"Adam attended the ward on 26th November 1995 for possible renal transplant. I took blood samples from Adam at 9.30pm for full blood picture (FBP), coagulation screen, urea and electrolytes (U+E), albumin, bone profile, cytomegalovirus (CMV) titre and blood group. I requested 4 units of white cell filtered, CMV negative packed cells to be cross-matched and was informed by laboratory staff that whole blood was not available at such short notice (058-035-144)"

(a) State the time Adam was admitted to the ward on 26th November 1995

I do not know what time Adam was admitted to the ward on 26th November 1995.

My entry in the case notes indicates that I took blood from Adam and prescribed iv fluids at 9.30pm on 26th November 1995, in anticipation of possible renal transplant.

Adam was formally "clerked-in" by Dr O'Neill at 11.30pm on 26th November 1995 (Ref 058-035-131 and 058-035-132)

(b) Identify the renal transplant protocol, if any, governing your actions in respect of Adam over the period 26th November to 27th November 1995

I do not recall a renal transplant protocol that may have governed my actions over the period 26th November to 27th November.

(c) Describe any discussions that you had with Dr Savage over the pre-operative fluid management plans for Adam, including what was discussed and when and where it was discussed

I do not recall and I have not documented any discussions with Dr Savage over the pre-operative fluid management plans for Adam.

I note the documentation from Dr Savage (ref 058-002-002) which appears to have my name at the top of the page ("JACKIE"). This would appear to indicate that I was acting under instruction from Dr Savage.

(d) Describe and explain the pre-operative fluid management plan for Adam and your role in implementing it, including:

- attempting to gain i.v. access to Adam after the tissing of the cannula at 1.30am on 27th November 1995
- attempting to obtain a further blood sample from Adam after the tissing of the cannula

I prescribed pre-operative fluids for Adam - 0.18% sodium chloride/4% dextrose to run at a rate of 75mls per hour (ref 057-010-014).

There is no signature on the fluid balance chart to indicate that the IV fluids I prescribed were erected.

As I recall I finished my SHO on-call shift at 10pm and therefore I was not the Doctor on duty who attended to Adam after tissing of the cannula at 1.30am on 27th November 1995.

According to the casenotes Dr O'Neill "clerked" Adam in at 11.30pm (ref 058-035-131 and 058-035-132) which would indicate that he had come on duty at 10pm and was the SHO on duty during the night.

(e) Explain your understanding (and the basis for it) of Adam's sodium blood chemistry result as recorded by Dr. Darragh O'Neill (SHO) at about 11pm on 26th November 1995 in his medical notes at the bottom of document 058-035-144

Dr O'Neill appears to have recorded that Adam's sodium blood chemistry result was 139. It is my understanding that this result was within the normal range.

(f) State whether you made any notes on or completed any of the transplant form (Ref: 057-007-008) and if so, state:

- which notes you made
- when these notes were made
- the source of information for those notes

I was not involved in making any notes or completing any of the transplant form.

(3) Answer to Question 2 at p.2

"As Adam was scheduled to have surgery the following morning, I prescribed maintenance intravenous fluids to run overnight. I prescribed 0.18% sodium chloride/4% dextrose to run at a rate of 75mls/hour. I note from reviewing the fluid balance prescription chart that there is no signature to indicate that the intravenous fluids prescribed were erected (057-010-014)"

(a) State the time at which you understood "Adam was scheduled to have [his] surgery", including:

- whether any changes were made to that time
- if, so what those changes were, when they were made, who by and for what reason

According to my entry in the notes Adam attended the ward for possible renal transplant.

According to my entry in the notes (ref 058-035-144) I took blood and prescribed intravenous fluids at 9.30pm on the 26th November 1995.

I do not recall the time that the decision to proceed with surgery was finally confirmed.

As Dr O'Neill formally admitted ("clerked-in") Adam at 11.30pm on the 26th November 1995 according to the entry in the notes (ref 058-035-131 and 058-035-132). This would appear to indicate that the final decision to proceed with surgery was made at a time between 9.30pm and 11.30pm.

(b) Explain the basis on which you:

- prescribed the type and volume of fluid and
- calculated the rate of administration of the maintenance fluids

I prescribed intravenous fluids taking into account Adam's age, weight and clinical situation.

(c) State on whose instructions, at what time and upon what basis you wrote the prescription on the IV fluid prescription chart (Ref: 057-010-014)

I have not documented and I do not recall whether I acted under instruction when prescribing the intravenous fluids.

My entry in the notes indicates that I wrote the prescription at 9.30pm.

I note the documentation from Dr Savage (ref 058-002-002) which appears to have my name at the top of the page ("JACKIE"). This would appear to indicate that I was acting under instruction from Dr Savage.

(d) State who wrote "20.2kg" at the top of the IV fluid prescription chart (Ref: 057-010-014)

Unknown

(e) State the time you ordered that IV fluids were to start

No start time is recorded on the fluid balance chart (ref 057-010-014)

(f) Explain what happened about the administration of the fluids that you prescribed

Unknown

(g) State who was responsible for erecting the IV Fluids

Unknown

(h) Explain your understanding of Adam's serum sodium level when you prescribed maintenance intravenous fluids of 0.18% sodium chloride/ 4% dextrose to run at a rate of 75 mls per hour overnight

According to my entry in the notes (ref 058-035-144) I prescribed intravenous fluids at 9.30pm. There is no documentation of Adam's serum sodium level when I prescribed intravenous fluids.

My understanding of Adam's serum sodium level result documented in the notes by Dr O'Neill at 11.00pm (ref 058-034-144) is that it was within the normal range.

II ADDITIONAL INFORMATION

(4) 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:

Although I do not have documentation of education and training in fluid management and record keeping, this would have been included in my medical studies at both an undergraduate and postgraduate level:

(a) Undergraduate education

Queen's University, Belfast, 1989-1994, MB BCH BAO
Graduated with distinction in anatomy and distinction in medicine and surgery
Winner of Northern Ireland medicolegal society prize 1992
Winner of Cow and Gate Paediatric Prize 1994
Winner of Mater Hospital O'Connell Gold Medal 1994

(b) Postgraduate education and training

Diploma in Child Health 1996
MRCP part 1 1996
MRCOG 1999
MRCPI (Obstetrics and Gynaecology) 2000
FRANZCOG 2007
Diploma in Medical Education for the Healthcare Professions, 2010

(c) Hospital induction programmes

I have attended several hospital induction programmes during the course of my career

(d) Continuous professional development

I am currently registered with the RCOG CPD programme (1st 5 year cycle due to be completed in June 2011)

(5) Prior to 26th November 1995:

(a) State your knowledge of children with hyponatraemia

(b) State your experience of children with hyponatraemia, including the:

- estimated total number of such cases, together with the dates and where they took place
- number of the children who were aged less than 6 years old
- nature of your involvement
- outcome for the children

I have no written record and I cannot recall details of my experience of children with hyponatraemia

(6) Describe in detail your role, if any, in the care and treatment of Adam prior to 26th November 1995, including:

- your knowledge of his condition, medication and previous treatment
- the fluid management regime employed on each occasion and
- the lessons you learned from your prior treatment of Adam

I note an entry in the notes dated 18th October 1995 (ref: 058-035-129, 058-035-130, 058-039-184, 058-019-053, 058-019-054 and 058-016-046) which indicates that I had previously admitted ("clerked-in") Adam for an elective surgical procedure (insertion of gastrostomy button and left orchidopexy).

(7) Prior to 26th November 1995, describe in detail your experience of children with hyponatraemia, including the:

- estimated total number of such cases, together with the dates and where they took place
- number of the children who were aged less than 6 years old
- number of children who were polyuric
- nature of your involvement
- outcome for the children

I have no written record and I cannot recall details of my experience of children with hyponatraemia

(8) Describe in your detail your experience, since 27th November 1995, in the care and management of children with hyponatraemia

I have no written record and I cannot recall details of my experience of children with hyponatraemia

(9) Identify the medical Registrar on duty between 8pm on 26 November and 7am on 27 November 1995.

Unknown

(10) Identify precisely from Adam's medical notes and records the entries that you made or which were made on your direction and state below:

(a) when each of the identified entries was made

(b) the source of the information recorded in the entry

1. Elective admission for insertion gastrostomy button and left orchidopexy (ref:058-035-129, 058-035-130, 058-039-184, 058-019-053, 058-019-054 and 058-016-046), 18th October 1995
2. Admission for possible renal transplant (058-035-144), 9.30pm on 26th November 1995
3. Prescription of intravenous fluids (057-010-014), 26th November 1995

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

(a) The care and treatment of Adam from his admission for the renal transplant surgery on 26th November 1995 to his death on 28th November 1995

(b) Record keeping

(c) Communications with Adam's family about his care and treatment in respect of the renal transplant surgery

(d) Lessons learned from Adam's death and how that has affected your practice

(e) Current 'protocols' and procedures

(f) Any other relevant matter

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

Signed: *Jacqueline Cartmill*

Dated: *2018/11*