



Altnagelvin Hospitals Health & Social Services Trust

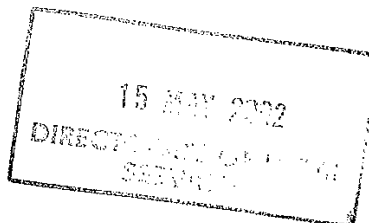
RISK MANAGEMENT TRUST HEADQUARTERS

3 May 2002

Mrs Donna Scott
Solicitor
Central Services Agency
25 Adelaide Street
BELFAST
BT2 8FH

Dear Mrs Scott

Re: Rachel Ferguson (deceased)



I refer to the above matter.

I enclose for your attention a statement from Dr Raymond Fulton, (I have not forwarded this to the Coroner yet). I also enclose the updated Critical Incident Action Plan.

Please return the Original Altnagelvin Hospital Notes to me as soon as possible as they are required for Clinical coding purposes.

In addition is it possible for you to ask the Coroner to receive a copy of any recommendations made by Dr Summer after he investigated the death five years ago. Perhaps we cannot request this.

I am still endeavouring to obtain clarification on the issues identified by Counsel.

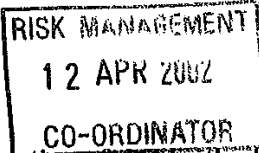
Many Thanks.

Yours Sincerely

274

Therese Brown (Mrs)
Risk Management Co-ordinator

Enc.



Statement about investigation of the death of Rachel Ferguson on 9 June 2001

I was Medical Director of Altnagelvin Trust at the time of Rachel Ferguson's death on 09 06 01. I was responsible for investigating the circumstances of her death within the hospital and to make suggestions for any action to prevent recurrence. The following is the sequence of action I undertook.

- 12 06 01 I set up a Critical Incident Enquiry involving all relevant clinical staff to establish the clinical facts. As a result of this 6 Action Points were agreed and circulated to all present on 13 06 01 (Enclosure 1).
- 14 06 01 Following Action Point 1 Dr Nesbitt, Clinical Director, Anaesthetics, wrote to me saying he had found that solution 18 was currently used in several hospitals in Northern Ireland. He said he had reviewed the literature which had convinced him that Solution 18 should not be used in surgical paediatric patients. He stated that henceforth Solution 18 would not be used in these circumstances in Altnagelvin (Enclosure 2).
- 18 06 01 At a regular meeting of Medical Directors at Castle Buildings I described the circumstances of this death. There were several anaesthetists present some of whom said they had heard of similar situations though it was not clear if there had been fatalities. I suggested that these should be regional guidelines.
- 22 07 01 I rang the Chief Medical Officer, Dr Campbell, and informed her of the death. I suggested she should publicize the dangers of hyponatraemia when using low saline solutions in surgical children. I said there was a need for regional guidelines. Dr Campbell suggested that CREST (the regional Guideline group) might do this.
- Mid June 2001 I rang the Director of Public Health at Western Health Board (Dr McConnell) and described the death. He said he would discuss the circumstances at his next meeting with the Chief Medical Officer and the Directors of Public Health of the three other Health Boards. I sent him reprints from British Medical Journal on hyponatraemia.
- 05 07 01 Dr McConnell wrote to confirm that he had discussed the case with the CMO and DPHs. Each DPH had agreed to alert the paediatricians in their respective Board areas to the hazards of hyponatraemia (Enclosure 3).
- 26 07 01 Mrs Burnside, Chief Executive, Altnagelvin, contacted the CMO to advocate a regional review (Enclosure 4). I remember seeing a reply from CMO agreeing to set up a regional Enquiry Group and that Dr Nesbitt would be a member.

275

- 14 01 02 I arranged for the CMO to view a presentation by Dr Nesbitt on hyponatraemia while she was visiting Altnagelvin to present accreditation to the Hospital HDSU.
- 09 04 02 I chaired a meeting of relevant clinical staff to revise the Action Plan of 12 06 01 in view of the publication of guidelines on hyponatraemia. A new Action Plan is being agreed between surgeons, anaesthetists, paediatricians (to follow).

Throughout this process I was struck by the wish of all concerned to learn from this death which is unique in their experience. I received full co-operation from all clinical staff who are extremely distressed by Rachel's death.

I feel our response was rapid and directed towards specific action to prevent recurrence. The documentation attached details the action.



Dr R Fulton



11/04/02

Encs

(1)

AGREED ACTION FOLLOWING CRITICAL INCIDENT MEETING 12/06/01

- 1 Review evidence for use of routine post-operative low electrolyte IV infusion and suggest changes if evidence indicates. No change in current use of Solution 18 until review.

Action Dr Nesbitt

- 2 Arrange daily U&E on all post-operative children receiving IV infusion on Ward 6.

Action Sister Miller

- 3 Inform surgical junior staff to assess these results promptly.

Action Mr Gilliland

- 4 All urinary output should be measured and recorded while IV infusion ~~progress~~ in progress.

Action Sister Miller

- 5 A chart for IV fluid infusion rates to be displayed on Ward 6 to guide junior medical staff.

Action Dr McCord

- 6 Review fluid balance documentation used on Ward 6.

Action A Witherow

R A FULTON
Medical Director

13/06/01

2

Dr G A Nesbitt
Clinical Director
Anaesthetic Department
Altnagelvin Hospital

Date: 14th June 2001

14 JUN 2001

Dr Raymond Fulton
Medical Director

Re: Fluid management in Children

Dear Dr Fulton, *Raymond.*

I have contacted several hospitals including The Royal Hospital for Sick Children and made enquiries about peri-operative fluid management.

The Children's Hospital Anaesthetists have recently changed their practise and have moved away from No.18 solution (fifth normal NACL in 4% Dextrose) to Hartman's solution. This change occurred 6 months ago and followed several deaths involving No.18 solution.

Craigavon Hospital and the Ulster Hospital both use Hartman's intra-operatively and No.18 post-operatively as is our practise. The Anaesthetists in Craigavon have been trying to change the fluid regime to Hartman's postoperatively but have met resistance in the Paediatric wards where, as in Altnagelvin, they have followed a medical paediatric protocol.

278

In view of recent events, and papers on the subject, and the fact that the Children's Hospital no longer uses No.18 solution, I have decided to recommend that we do the same. I have spoken to Sister Miller in the Paediatric ward and also to Dr McCord who both are in agreement. Dr McCord has agreed to add this to the protocol he is developing for calculating the amount of fluid to be prescribed. He has further agreed that, pending discussion with his colleagues, fluid management in postoperative children should be under the supervision of paediatricians.

To summarise: Altnagelvin Hospital has followed what is a widespread and accepted policy of using No.18 solution for postoperative fluids. There is evidence to show that this policy is potentially unsafe in certain children who have undergone a surgical procedure. The Children's Hospital has ceased to use it and Craigavon is trying to effect a change in this direction. As from today we will no longer be routinely using this fluid in the management of surgical cases.

Yours sincerely,

G A Nesbitt
G A Nesbitt Clinical Director

cc Theresa Brown

Risk Management Coordinator



WMcC/HP

5 July 2001

Dr R Fulton
Medical Director
Altnagelvin Health & Social Services Trust
Glenshane Road
Altnagelvin
Londonderry

Dear Raymond

As we agreed, I raised this issue for discussion at the recent CMO/DPH meeting. Dr Campbell indicated that her CMO update was already at the printers and therefore it would be difficult to include anything within it. Knowing this, it was suggested that I would write to each of my Director of Public Health colleagues who would then take responsibility for drawing the issue to the attention of any relevant paediatric settings within their respective Boards.

I enclose a copy of the letter which I have sent to them and I have also taken the liberty of copying to them the articles which you helpfully sent to me. I hope you do not mind my suggestion within the letter that anyone who wanted more detailed discussion might contact you for further information.

Best wishes.

Yours sincerely

Dr W W M McConnell
DIRECTOR OF PUBLIC HEALTH

Enc

279

WMcC/HP

5 July 2001

To:

Directors of Public Health

Dear

I am writing to you, as agreed at our recent meeting, with further details regarding the unfortunate death of a young girl at Altnagelvin Hospital. It appears that the use of hypotonic saline is still common practice in a number of paediatric units although there has been information around for a few years suggesting this does present risks to a very small number of children in the acute perioperative period. I have enclosed some articles which you might find of benefit in relation to this.

I know from discussions about this issue with Dr Raymond Fulton, Medical Director at Altnagelvin Hospital, that some paediatric settings within Northern Ireland have made appropriate changes but that in others, while the information may be known by anaesthetic staff, there has not necessarily been discussion regarding change between anaesthetists, surgeons and paediatricians.

I felt it might be helpful to draw this issue to your attention in order that each of us can check with those paediatric settings in our respective Boards to see whether modification in practice may be needed. I hope that the articles are helpful to you. If further more specific information is required I am sure that Dr Fulton would be happy to discuss this with anyone who contacted him.

Best wishes.

Yours sincerely

Dr W W M McConnell
DIRECTOR OF PUBLIC HEALTH

Enc

280

(4/5)

Sally Doherty

From: Sally Doherty
Sent: 26 July 2001 11:08
To: 'Henrietta.campbell' [REDACTED]
Subject: electrolyte balance in post operative children

I am writing further to Dr Fulton's conversation with you regarding the above, and am concerned to ensure that an overview of the research evidence is being undertaken. I believe that this is a regional, as opposed to local hospital issue, and would emphasise the need for a critical review of evidence.

I would be extremely grateful if you would ensure that the whole of the medical fraternity learned of the shared lesson.

I await to hear further from you.

Stella.

CRITICAL INCIDENT REVIEW MEETING 09/4/02

To review the Action Plan of the critical incident meeting of 12-6-2001 following the death of Rachel Ferguson.

- 1 Review evidence for use of routine post-operative low electrolyte IV infusion and suggest changes if evidence indicates. No change in current use of Solution 18 until review.
 - **An immediate review was undertaken and a decision was taken that from all Surgical patients (including orthopaedic) to receive I V Hartmans Solution and 6 hourly BM's.**
- 2 Arrange daily U&E on all post-operative children receiving IV infusion on Ward 6.
 - **This was immediately actioned by Sister Miller. The phlebotomists take the blood. It is not clear who is responsible for ordering the blood. Mrs Witherow and Mrs Brown will prepare ward guidelines**

Action T Brown A Witherow

- 3 Inform surgical junior staff to assess these results promptly.
 - **This was immediately actioned by Mr Gilliland. All staff are informed at induction. This information should be included in the Junior Doctors handbook. At the moment blood results come up on the computer. This does not show the normal range. Agreed that all bloods are to be reported to the Surgeons routinely. Anne Witherow to speak to Dr. M O'Kane to ascertain if the normal ranges can be put on the computer.**

Action A Witherow

4. All urinary output should be measured and recorded while IV infusion is in progress.
 - **The fluid balance sheet has been revised to allow recording of urinary output and vomit.**

5. A chart for IV fluid infusion rates to be displayed on Ward 6 to guide junior medical staff.
 - **The chart was prepared and displayed by Dr Mc Cord by July 2001.**
6. Review fluid balance documentation used on Ward 6.
 - **The fluid balance sheet has been revised to show exact timing of IV Fluids, and when they have been discontinued. It was noted that there is a Regional Group currently reviewing this form. We will await receipt of the revised form.**
7. Need to agree responsibility for the prescribing and management of fluids post operatively. Agreed that Dr. Nesbitt will discuss with Anaesthetists and agree a maximum time that postoperative fluids will be prescribed by anaesthetists.

(213)

Action Dr. Nesbitt

8. Departmental guidelines received April 2002 regarding fluid management in all children have been displayed on ward 6, theatres and A&E.



R A FULTON
11-4-2002