CORONERS ACT (NORTHERN IRELAND) 1959

Deposition of Witness taken on TUESDAY the 5th day of FEBRUARY 2003, at inquest touching the death of RAYCHEL FERGUSON, before me MR J L LECKEY Coroner for the District of GREATER BELFAST as follows to wit:-

The Deposition of DR EDWARD SUMNER MA, BM, BCh, FRCA, CONSULTANT PAEDIATRIC ANAESTHETIST of [redacted] who being sworn upon his oath, saith

My name is Edward Sumner and I am a consultant in Paediatric Anaesthesia with an interest in Intensive Care. On the instructions of H.M. Coroner for Greater Belfast, Mr J L Leckey, I prepared a report based the medical and nursing records of the late Raychel Ferguson.

I now produce a copy of my report marked C 1

TAKEN before me this 5th day of FEBRUARY 2003

Coroner for the District of Greater Belfast

CORONERS ACT (Northern Ireland), 1959

Deposition of Witness taken on the day

of 20 , at inquest touching the death of

, before me

Coroner for the District of

as follows to wit:—

The Deposition of DR. EDWARD SUMNER

of

(Address)

who being sworn upon h oath, saith

Signs such a surgeries have a high mortality ~ 50%. Survival may be accompanied with brain damage. The condition is capable of being treated successfully if a correct early diagnosis is made. I am very impressed by the establishment of the working party and the guidance issued.

Mr. McAlinden: The journal article, whether specialist, is available via Medline on the internet. An article was written after the fluid inquest by Professor Arieff — a world expert. I have read the report of Dr Fulkerson & Altmacpherson and I note the contents. The trust referred the problem to the Chief Medical Officer and that led to the new guidelines. Fluid management is a cinderella area but the potential for hyponatraemia and how to manage it should be widely known & do not diagnosis with hypotonic fluids being given to children provided losses are replaced. My calculations show that Rachel was given 3.5 ml per kilo between 2 a.m and 4 a.m the following morning. This was less than

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the 4 ml I refer to in my report at para 3 page 4, I accept that the product I sent was called at 4.15 a.m. not 6.30 a.m. I accept that the note was written by Dr. Duke at 8.30 a.m. referring to a 4.30 a.m. event. Coffee ground vomiting & shoulder bleeding. I am satisfied that the vomiting was prolonged. The grossly abnormal electrolyte results indicate prolonged vomiting. The vomiting & ADH clearly caused the electrolyte results. The use of a nasogastric tube is a routine procedure in many post-operative cases. It is not unusual. I would have placed it either pre-operatively or intra-operatively when the child is asleep. I use a naso-gastric tube in any child whose abdomen I operate. I agree we may not understand the mindset of hyponatraemia. It is something taught to medical students.

Mr. Brangam: Raychel's case differs from 1996 as Raychel is post-operative. The same mechanism occurred in both cases. With Raychel there was no cerebral perfusion.

Mr. Forke: At first of the pre-operated sodium level in Raychel's case was no cause for concern. The level is normal. Most regard below 128 mmol/l as indicating hyponatraemia. If it fell in the area between 128 & 135 you would wonder why. Raychel was vomiting from 8a.m. and this should have been considered abnormal

TAKEN before me this 5th day of February 2003.

M. L. Lackey

Coroner for the District of Greater Belfast

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CORONERS ACT (Northern Ireland), 1959

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as follows to wit:—

The Deposition of DR. EDWARD SUMNER

of (Address)

who being sworn upon h[illegible] oath, saith

lunchtime, I think there should be a
review assessment of electrolyte balance in
child who has had their abdomen opened.
Orally taken fluids should be monitored.
Output is important in order to
determine fluid balance. In Rachel's case
there is no record of urine output. I think
this was strange. An assessment of volume of
urine and vomit would have been important.
If Rachel had been given saline IV she
be vomiting she would have survived —
in addition to the maintenance solution I
think the maintenance solution was a little too
high. When Rachel fitted at 3.10 p.m.
on the 9th the situation was grave —
almost certainly brain damage. As a medical
student in the 1960s I was taught about
hyponatraemia and post-operative
management. The need to monitor is not new
technology. In hyponatraemia there is water
retention and a dilutional effect. The
history of vomiting should have alerted a
doctor to a potential problem. I would
have expected paediatricians to have charted
on Rachel throughout the day. My normal

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responsibilities may not be the same in every
hospital. The fact that Raychel became
listless on the 8th after being bright
and alert should have been a cause for
flagging. Coffee grounds are like coffee
grounds — dark brown and granular.
Bile is yellow. The antiemetic was given
at 6 p.m. and Raychel was sick again at 9 p.m.
is a further cause for concern. On page
3 of the medical notes there is a note of
petechial haemorrhages.

[signature]

TAKEN before me this 5th day of February 2003,

[signature] Coroner for the District of Greater Belfast

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