# 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 surgeon 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 I edit, whilst specialist, is available via Medline on the internet. An article was written after the first inquest by Professor Arnold — a world expert. I have read the reports of Dr Fulton & Attmacqlwin 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. I do not disagree with hypotonic fluids being given to children provided losses are replaced. My calculations show that Raychel was given 3.5 ml per kilo between 2 a.m. and 4 a.m the following morning. It is my opinion that

the 4 ml I refer to in my report at Para 3 page 4, I accept that the paediatric SHO was called at 4.15 a.m. not 6.30 a.m. I accept that the note was written by Dr. Dake at 8.30 a.m. referring to a 4.30 a.m. event. Coffee ground vomiting indicates bleeding. I am satisfied that the vomiting was prolonged. The grossly abnormal electrolyte results indicate prolonged vomiting. The vomiting & ADH jointly 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 is opened. I agree we may not understand the minutiae of hyponatraemia. It is something taught to medical students.

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

Mr. Forker: As far as the pre-operative serum sodium level in Rachel's case there was no cause for concern. The level was normal. Most regard below 128 mmol contribute hyponatraemia. If it fell in the area between 128 & 135 you would wonder why. Rachel was vomiting from 8a.m. and this should have been considered about

TAKEN before me this 5th day of February 2003,

HM CORONER

Coroner for the District of Greater Belfast

012-029-151a

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lunchtime. I think there should be a routine assessment of electrolyte balance in a 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 to cover the 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 aspect. 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

responsibility may not be the same in every hospital. The fact that Rayshel became listless on the 8th after being bright and alert should have been a cause for reflection. Coffee grounds are like coffee grounds — dark brown and granulous. Bile is yellow. The Royal antiemetic was given at 6 p.m. and was sick again at 9 p.m was a further cause for concern. On page 23 of the medical it is a note of petechial haemorrhages.

TAKEN before me this 5th day of February 2003,

RE-CORONER

Coroner for the District of Greater Belfast

012-029-152a