

## CORONERS ACT (Northern Ireland), 1959

*Deposition of Witness* taken on TUESDAY the 18TH day of JUNE 1996,  
at inquest touching the death of ADAM STRAIN, before me MR J L LECKEY  
Coroner for the District of GREATER BELFAST  
as follows to wit:-

*The Deposition of* DR ALISON ARMOUR

of INSTITUTE OF STATE PATHOLOGY

(Address)

who being sworn upon her oath, saith

On the instructions of HM Coroner for Greater Belfast Mr J L Leckey LLM, I  
Alison Armour, MB, BCh, MRCPATH, DMJ (Path) registered medical practitioner  
and pathologist approved by the Northern Ireland Office made a postmortem  
examination on a body identified to me as that of Adam Strain. I now produce a

copy of my report marked C2. This was massive cerebral  
oedema and I have never come across anything  
of a similar degree. The cause of it in this  
case is extremely rare and never encountered  
by me previously. On a worldwide basis  
it would be equally rare.

Mr. Brangham: It was a complex case because of  
Adam's underlying condition, his previous surgery  
and the technical difficulty of the operation. He  
experienced substantial blood loss during the  
operation & that <sup>made</sup> ~~caused~~ his haemodynamics  
very difficult to manage. Adam was not a healthy  
child - he was a sick little boy.

139 mmol/l is within the normal range.  
So far as no significant oedema of any other  
organ my understanding is that fluid is  
absorbed into the brain in preference to any  
other organ. I distinguish between hyponatraemia &  
dilutional hyponatraemia. The latter is due to  
fluid given. Children are more susceptible to

TAKEN before me this 18th day of JUNE 1996

*Mr. Leckey*  
Coroner for the District of Greater Belfast

CORONERS ACT (Northern Ireland), 1959

No.

Deposition of Witness taken on the \_\_\_\_\_  
of \_\_\_\_\_ 19 \_\_\_\_\_, at inquest touching the death  
of \_\_\_\_\_, before me

Coroner for the District of \_\_\_\_\_

as follows to wit:—

The Deposition of DR ALAN ARMOUR

of \_\_\_\_\_

who being sworn upon her oath, saith

(Address \_\_\_\_\_)

cerebral oedema and than adults and  
so far as dilutional hyponatraemia found  
are more susceptible than males. The paper I  
referred to refers to healthy children but it is  
still a good reference to this condition. There  
was impaired cerebral perfusion as there was a  
suture on the left side and a catheter tip on  
the right. 1200 mlr blood loss during the  
operation. I do not know what problems this  
would have caused for the anaesthetist.  
Miss Higgins: A critical point was the  
fluids used by the anaesthetist to replace  
blood loss. At the autopsy I had 10 slides  
notes relating to Adams and the clinicians'  
statements. The suture impaired the blood flow  
to the brain and the catheter tip on the right  
may have had a role to play. The suture had  
been there for some time. Dr Taylor advised me  
at the autopsy of the calculation he made  
to replace blood loss. Haematocrit = packed cell  
volume. In this case the reading <sup>could</sup> indicated he  
was bleeding as in a dilutional stroke.



## TRANSCRIPTION OF DEPOSITION OF DR ALISON ARMOUR

This was massive cerebral oedema and I have never come across anything of a similar degree. The cause of it in this case is extremely rare and never encountered by me previously. On a worldwide basis it would be equally rare.

Mr Brangham: It was a complex case because of Adam's underlying condition, his previous surgery and the technical difficulty of the operation. He experienced substantial blood loss during the operation and that made his haemodynamics very difficult to manage. Adam was not a healthy child - he was a sick little boy. 139 mmol/l is within the normal range. So far as no significant oedema of any other organ my understanding is that fluid is absorbed into the brain in preference to any other organ. I distinguish between hyponatraemia and dilutional hyponatraemia. The latter is due to fluids given. Children are more susceptible to cerebral oedema than adults and so far as dilutional hyponatraemia females are more susceptible than males. The paper I referred to refers to healthy children but it is still a good reference to this condition. There was impaired cerebral perfusion as there was a suture on the left side and a catheter tip on the right. 1200 mls blood loss during the operation. I do not know what problems this would have caused for the anaesthetist.

Miss Higgins: A critical point was the fluids used by the anaesthetist to replace blood loss. At the autopsy I had 10 sets of notes relating to Adam and the clinicians' statements. The suture impaired the blood flow to the brain and the catheter tip on the right may have had a role to play. The suture had been there for some time. Dr Taylor advised me at the autopsy of the calculation he made to replace blood loss. Haematocrit = packed cell volume. In this case the reading could indicate he was bleeding or in a dilutional state.