Witness Statement Ref. No. 232/2

NAME OF CHILD: Adam Strain

Name: W A McCallion

Title: Mr

Present position and institution:

Consultant Paediatric Surgeon, Royal Belfast Hospital for Sick Children, Belfast Hospitals Trust

Previous position and institution:
[As at the time of the child's death]
Senior House Officer in lieu of Registrar in Paediatric Surgery, Royal Belfast Hospital for Sick Children from 1st February 1992 to 31st July 1992

Membership of Advisory Panels and Committees:
[Identify by date and title all of those between January 1995-December 2004]

Education Sub-committee, Royal Belfast Hospital for Sick Children 2002-2004

Department of Health Advisory Committee on Hyponatraemia 2003

Department of Health Advisory Committee on Provision of General Paediatric Surgery in Northern Ireland 2009-2010

Previous Statements, Depositions and Reports:
[Identify by date and title all those made in relation to the child's death]

Witness statement 232/1 dated 5th January 2012

OFFICIAL USE:
List of previous statement, depositions and reports attached:

Ref:	Date:	

Other points you wish to make including additions to any previous Statements, Depositions and or Reports
[Please attach additional sheets if more space is required]

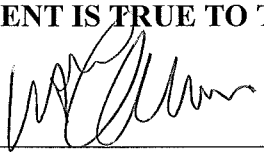
Adam underwent insertion of a double-lumen central venous catheter by Mr Boston, Consultant Paediatric Surgeon, on 08.12.91 whereby the central venous catheter was inserted via an external jugular vein. In the typed operation note 050-008-032, Mr Boston refers to a RIGHT sided neck incision but LEFT sided incision on the chest wall. Ordinarily the laterality of the neck and chest wall incisions would be the same. However a chest x-ray performed at the time of this central venous catheter insertion clearly shows that the catheter had been inserted through RIGHT sided neck and chest wall wounds. The RIGHT / LEFT issue in Mr Boston's operation note 050-008-032 is therefore a typographical error. This, therefore, does not explain Dr Armour's finding of a suture at the junction of the LEFT internal jugular and LEFT subclavian veins.

Regarding insertion of the Broviac Line via the LEFT common facial vein on 29.05.92, a chest x-ray taken immediately after the insertion shows a "hair-pin" bend in the catheter high in the neck. This represents the site of insertion into the LEFT common facial vein which is sited high in the neck just below the angle of the jaw. On the same x-ray, the catheter is seen to pass along the LEFT internal jugular vein and crucially beyond the junction of the LEFT internal jugular vein and LEFT subclavian vein into the brachiocephalic vein towards the heart. The LEFT internal jugular vein CANNOT have been ligated at its junction with the LEFT subclavian vein at this stage because this would have obstructed the passage of the catheter beyond the LEFT internal jugular vein. A further chest x-ray dated 05.05.93 shows a central venous catheter in situ in the LEFT side of the neck (presumably the Broviac line inserted on 29.05.92). This catheter is seen to traverse the LEFT internal jugular vein and beyond into the brachiocephalic vein. Therefore on 05.05.93, the LEFT internal jugular vein remained patent at the junction with LEFT subclavian vein.

With regards to placement of a suture at the junction of LEFT internal jugular vein and LEFT subclavian vein, this junction is sited behind the clavicle and is inaccessible from the neck. Any attempt to expose this area surgically would be hazardous and would require the clavicle or the sternum to be divided to allow safe access. This is a major surgical procedure and certainly did not occur on 29.05.92. The Broviac line inserted on 29.05.92 was removed under general anaesthetic on 09.05.95. It has been suggested that ligation of the LEFT internal jugular vein at the junction with LEFT subclavian vein occurred during this Broviac line removal on 09.05.95. Whilst I was not present at this operation, this was a short surgical procedure as evidenced by the short anaesthetic time of 30 minutes (057-077-141 to 146). The Broviac line would have been removed by traction and a simple skin suture placed at the chest wall wound (in and around the level of the LEFT nipple). As indicated above, for the junction of the LEFT internal jugular and LEFT subclavian veins to be ligated would have been a very major undertaking, prompted presumably by potentially life-threatening haemorrhage. I am not aware of any evidence that this was the case.

The Broviac line inserted via the LEFT common facial vein on 29.05.92 appears to have remained in situ for almost three years. This is exceptional longevity for a single central venous catheter. It is possible that the presence of the catheter in contact with the wall of the LEFT internal jugular vein for this length of time caused thrombosis (and hence obstruction) of this vein.

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

Signed: 

Dated: 25/03/2012