Mr Brangham,

Regarding Thiopentone and steroids for brain protection;

1. Dr Sumner states that the induction of anaesthesia was appropriate. Since this involved the use of thiopentone then it could not be detrimental.

2. The only alternatives to thiopentone are *propofol* or *ketamine*. The effects of these drugs on brain function are more controversial than thiopentone.

3. The medical literature on barbiturates and steroids on brain function is divided. There are no definitive articles on human brain involving outcome. Many articles involve the head injured patient, those undergoing heart surgery or animals. The relevance of such articles to Adam's case is debatable. On a 'Medline' search of the literature for the 3 most recent years there are 3 articles which show thiopentone to be protective or not harmful to brain function. Only 1 article involving the energy function of the sheep brain indirectly suggests possible harm. There were no articles suggesting that steroids are harmful but 2 suggest a beneficial role.

4. It remains current clinical practice in many paediatric cardiac and neurological centres to use both thiopentone and steroids to protect the brain. In fact it is current practice at the RGH.

Therefore while Dr Sumner may be technically correct in arguing that these drugs have a dubious role in cerebral protection his comments do not give a balance of current literature nor practice. Furthermore as I have stated I did not administer these drugs specifically for brain protection as I had no advance knowledge nor speculation that brain damage would occur.

Yours,

Robert Taylor

Re; Isotonic fluids.

Textbook "Intravenous Technique and Therapy" by A.A. Gilbertson 1984 William Heinemann Medical Books Ltd, London

pages7&8 "Thus, one-fifth normal saline in four-fifths normal dextrose (0.18% sodium chloride + 4% dextrose) is an isotonic solution solution containing 30 mmol Na+/litre, and 2ff00 ml will meet the normal daily requirements of sodium and water"