

**QUESTIONS FOR PROFESSOR JOHN FORSYTHE & MR. KEITH RIGG**

**ARISING OUT OF CONSULTATION NOTE DATED 14<sup>TH</sup> JUNE 1996**

**RE: ADAM STRAIN**

Please find attached a note of a consultation of 14<sup>th</sup> June 1996 between Dr George Murnaghan, Dr Joe Gaston, Dr Robert Taylor and Dr Maurice Savage with the Trust's solicitor Mr George Brangam (Ref: 122-001-001), in which they discuss Adam's case and the upcoming Coroner's Inquest. The Inquiry Team believes that the note was typed by a Mrs Heather Neill, who was assisting Mr Brangam.

The Inquiry Team would welcome your views and comments generally on the content of this document, particularly any implications the information contained in the note may have on the evidence already given to the Inquiry during the course of the Oral Hearings.

The Inquiry would particularly welcome your comments on the following issues:

**Timings of the surgery**

- (1) Please set out, from the consultation document, and your knowledge of the medical notes, what you consider to be the approximate timings of the surgery, including the timing of:
  - (a) The veins being connected to the donor kidney
  - (b) The kidney being placed in situ
  - (c) Vascular anastomosis being completed
  - (d) The sewing up of the wound
  - (e) The reversal of the anaesthetic
- (2) What is the normal period of time from 'knife-to-skin' for:
  - (a) The veins being connected to the donor kidney
  - (b) The kidney being placed in situ
  - (c) Vascular anastomosis being completed
  - (d) The sewing up of the wound (including how long this would take)
- (3) Please provide, from your knowledge of Adam's case to date, your understanding of, and comments on, each of the following statements:
  - (a) *"Dr Taylor pointed out it was very possible that this kidney could have been in place within an hour."* (Ref: 122-001-002)

- (b) *"In this case the kidney was in at around 9.30am. The vein was in and the arteries were being finished. At this stage Dr Taylor did a blood gas assessment and based on the results of this then started to give the blood. Once the blood was being put through the clamps were released and further blood was given at a later stage."* (Ref: 122-001-003)
- (i) What may be meant by:
- *"the kidney was **in** at around 9.30am"?*
  - *"The vein was **in**"?*
- (emphasis added)
- (ii) What would be the time period between the vein being "in" and the "arteries [...] being finished"?
- (iii) What would have been the implications for Adam's fluid management when the "kidney was in" and the "arteries were being finished"?
- (c) *"this procedure was planned to last 1-1 ½ hours."* (Ref: 122-001-003)

#### **Condition of the donor kidney**

- (4) Please provide, from your knowledge of Adam's case to date, your understanding of, and comments on, each of the following statements:
- (a) *"A query was also raised about whether the new kidney had been properly perfused. The kidney was not performing well and it was felt that more fluids were required. It was pointed out that one can get a situation where the new kidney just simply does not work and in fact perhaps 5-10% of transplanted kidneys will not work."* (Ref: 122-001-005)
- (b) *"During the surgery when this kidney was failing to operate a needle was put into the artery and no blood came out and clearly the kidney was not working when the operation site was closed however, the performance of the kidney was no longer relevant at this stage."* (Ref: 122-001-005)
- (i) What was the purpose of putting a needle into the artery?
- (ii) Is this commonly done in transplant surgeries?
- (iii) What is the significance of no blood coming out?
- (iv) What might "the performance of the kidney was no longer relevant at this stage" have meant?
- (v) Is this procedure consistent with the evidence that you have seen and heard to date and if not in which way is it inconsistent?
- (vi) How significant a procedure is it in terms of describing what was happening?

- (vii) Should it have been recorded in Adam's notes and records and if so where?

### **Blood loss**

- (5) Please provide, from your knowledge of Adam's case to date, your understanding of, and comments on, each of the following statements:
- (a) *"To replace blood one must provide 2½ times the volume of blood lost"* (Ref: 122-001-001)
  - (b) *"The first packed cell was given after the blood gas readings had been checked. It is generally the situation that they prefer not to give blood if this is avoidable particularly with children as it may contain viruses."* (Ref: 122-001-002)
  - (c) *"The low haematocrit level could be explained either by blood loss or over transfusion of water. If this was explained by an over transfusion of water one would have expected the haemoglobin level to be very high at the end of the procedure whereas in fact it was normal at the end of the procedure suggesting that the haematocrit low level had been due to blood loss."* (Ref: 122-001-003)
  - (d) *"The blood loss was measured as approximately 1,200 mls. Only 500 mls of packed cells were given but these actually are equivalent to double the amount of fluid."* (Ref: 122-001-003)
  - (e) *"It was also pointed out that some of what was thought to be blood loss could in fact have been a mixture of urine and blood. However, the haemoglobin at the end of the procedure was fine showing that the sums to compensate for this had been correct."* (Ref: 122-001-004)
  - (f) *"There had also been a query raised that there was a delay in providing blood replacement. The doctors considered the following to be of guidance:- If one has lost 10% of blood volume then you could provide a drip of platelets and fluid. If 15-20% of blood volume was lost then one could give blood."* (Ref: 122-001-005)
  - (g) *"However it was felt not to be as clear cut as to when one would start to replace the lost blood volume and it was commented that some people would bleed down to 30% prior to surgery. They said that the anaesthetist monitoring the situation would look at all factors and may not rush straight in to replace blood depending on the situation."* (Ref: 122-001-005)

### **CVP**

- (6) Please provide, from your knowledge of Adam's case to date, your understanding of, and comments on, each of the following statements:
- (a) *"The CVP readings although showing as 17 were felt to really provide a base of 12 because of the gradient between the jugular and the heart which was assessed at around 5 cms. For this procedure one would push up the CVP as high as one would dare ie around 5 cms. Therefore one would allow it to go up to 22 when starting with the base of 17."* (Ref: 122-001-003)

- (b) *“Dr Taylor pointed out that his practice would tend to be to have the CVP on a pole and to keep the transducer well away from the dialysis tube.”* (Ref: 122-001-005)
- (c) *“Dr Taylor would have the transducers, arterial and CVP clipped onto the drip stand rather than attached to the table. In either situation when the table surface, that the patient is lying on, is tilted the CVP would have to be recalibrated and indeed in this particular case the table was moved and Dr Taylor recalibrated the settings.”* (Ref: 122-001-007)

### **Urinary catheter**

- (7) Please provide, from your knowledge of Adam’s case to date, your understanding of, and comments on, each of the following statements:
  - (a) *“It was pointed out that one would not routinely catheterise patients going to theatre simply to measure their urinary output.”* (Ref: 122-001-002)
  - (b) *“It was pointed out that it was of vital importance that one was not able to measure the urine output during the procedure as the bladder was open. Normally one would be able to measure urinary output during operation every 5 mins except for a short period when the bladder was open. However during this procedure the bladder was opened immediately and was opened for some 2 hours so it was not possible to measure the urinary output and this child was known to have high urine output.”* (Ref: 122-001-004)
    - (i) Please explain what *“the bladder was open”* means and why *“it was not possible to measure the urinary output”*.

### **Additional Comments**

- (8) Please provide any further points and comments that you wish to make, together with any documents