IN THE MATTER OF:
THE INQUIRY INTO HYPONATRAEMIA-RELATED DEATHS (Adam Strain)

CLOSING SUBMISSIONS ON BEHALF OF MR BROWN

Scope of Submissions

1. These submissions, made on behalf of Mr Stephen Brown, are not restricted to the potential areas of criticism contained within the 3 Salmon letters (dated 23.3.12, 8.6.12, and 19.7.12[1]). By necessity, they also deal with selected additional issues that Mr Brown was questioned on in depth during 3 days of oral evidence. Because there remains evidence to be heard in Adam's case, the submissions are preliminary only. Mr Brown may seek to supplement and/or amend this document in due course.

Background

2. Mr Brown practised as a consultant paediatric surgeon in the NHS for 24 years. At the time of Adam Strain's sad death he had been a consultant for 17 years. During the course of Mr Brown's long career Adam Strain's was the only renal transplantation he was involved in, whether adult or paediatric. Mr Brown retired in 2002.

General Points in Relation to Evidence

Degree of Recall

3. The Chairman has expressed surprise about Mr Brown's poor recall of the transplant procedure and subsequent events. He has invited submissions on this.

4. The starting point when considering memory is that any account of an experience will be incomplete. As time passes, memory for details declines further, both with regard to the extent and quality of the memory. During the course of oral evidence witnesses have been asked to remember what they did and did not do 17 years ago, what they said 17 years ago and what they thought 17 years ago. All witnesses, to a greater or lesser degree, have struggled with this.

[1] Hereafter referred to as the 1st, 2nd and 3rd Salmon letter

5. Mr Brown candidly described his memories for 2 other deaths (unrelated to Adam Strain):
"I've had two patients die in the operating theatre, both of whom had serious injuries and both died. I can remember the children and the parents vividly. I cannot remember a single thing about the operation. It was not the point. You know, in other words, if you asked me about blood loss... during the operation or this or that, or what stitches I used, I would not remember that. So we remember some things, but we don't necessarily remember all the details" (1.5.12, p144, ln11).

6. The death of those 2 patients in the operating theatre was clearly out of the ordinary. But the simple fact that something is out of the ordinary does not prevent the vagaries of memory continuing to operate[2]. Indeed throughout the course of this Inquiry, Mr Brown's statement that *"we remember some things, but we don't necessarily remember all the details"* has proved itself again and again. Different witnesses have remembered and forgotten different pieces of information. Witnesses have remembered the same event in different ways. The Chairman has seen that the passage of time affects the memory of individuals differently. It is unfair to simply apply unproven normative standards of what an individual 'should' or 'should not' remember 17 years after the event. Whilst Adams' death was undoubtedly discussed in the RBHSC, it does not follow that any given witness should now remember the details of 27.11.95. If a similar tragedy happened today, it would not be possible to predict the level of recall any individual would have 17 years from now.

7. There are additional factors that should be taken into account when thinking about Mr Brown's memory for events. First, Mr Brown retired from clinical practice 10 years ago. He is the only clinical witness the Inquiry has heard evidence from who is not actively practising or teaching medicine. His memory cannot be refreshed by being in the RBHSC operating theatres or the hospital environment.

8. Secondly, Mr Brown's experience of the post-surgical events and the subsequent 'investigation' was different from most other witnesses. When Mr Brown left the operating theatre on 27.11.95 he believed that the transplant procedure had been

[2] A fact the Chairman has seen already from the oral evidence in the Claire Roberts' case (15.10.12 - 19.10.12)

successful (in so far as this could be ascertained, see evidence at 1.5.12, p117, ln9). Similarly Mr Brown was not present during attempts to recover Adam in PICU. Mr Brown did not experience the overwhelming fear and panic that clinicians such as Dr Taylor, Dr O'Connor or Prof. Savage would have.

9. In the following weeks and months, the 'investigation' into Adam Strain's death involved Mr Brown to a very limited degree. The consequence is that there were few occasions on which Mr Brown was asked to describe or document his role in the surgery. In fact that the chronology was as follows:
   a) 20.12.95: Mr Brown prepared a brief report for HM Coroner (059-060-146).
   b) 17.4.96: meeting to which it appears Mr Brown was invited (059-043-098). There is no list of attendees and Mr Brown cannot recall if he was there (20.6.12, p176, ln20)[3]. There is no note of what was discussed at this meeting. We do not know whether the focus was heavily on fluid management or whether the surgical aspects of Adam's treatment were considered in any detail.

10. The purpose of Mr Brown's report to the Coroner was to outline his historic involvement with Adam Strain and to set out his input in the transplant surgery. The former was relevant to the Coroner's understanding of Adam's condition and why he was having a renal transplant. Mr Brown, in the context of the Coroner investigating a death, highlighted the absence of serious problems from a surgical perspective. Whilst his report was brief, it is not at all uncommon for clinicians' reports to the Coroner to contain this level of detail. More importantly, there is no suggestion that the Coroner was unhappy with the quality or quantity of information provided by Mr Brown and no supplementary statement was requested. As the Chairman put it himself, *"If the Coroner wants supplementary statements he can ask for them. That's the process"* (22.6.12, p93, ln3). The Coroner did not call Mr Brown to give evidence at the inquest.

11. Thereafter, it was 9 more years before the Inquiry team asked Mr Brown to revisit his involvement in the procedure (in 2005, see WS007/1).

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[3] In fact no witness has actually recalled that Mr Brown being at this meeting. When Mr Keane was asked about the attendees he did not list Mr Brown (7.9.12, p65-66, ln22)

12. It is deeply unfortunate and unsatisfactory that 17 years have passed before an exacting inquiry into the circumstances of Adam Strain's death has been held. As recognised by the Chairman, if the Trust had undertaken a proper investigation, then Mr Brown (and others) would not be in the position of having to independently recall events 17 years ago. Witnesses such as Mr Brown should not be penalised for now having poor memories.

13. Mr Brown recognises that the Inquiry faces the challenge of making findings of fact in this case. Nevertheless, it is clearly preferable for a witness to give evidence according to his memory than to simply speculate on the facts. Mr Brown has done his best to assist the Inquiry in the factual areas he can. He has avoided speculating. This is in contrast to some other witnesses who have allowed themselves to speculate, with the risk that unreliable evidence is presented to the Inquiry and Adam Strain's mother.

Pre-Operative Issues

Mr Brown's Involvement in Adam's Surgery (Issues 1 & 2 in 1st Salmon Letter)

14. The ambiguity as to how Mr Brown came to act as surgical assistance in Adam's transplant was removed during the oral evidence. There is no basis for criticising Mr Brown in relation to these issues.

15. Mr Brown had been the on-call surgeon for the weekend of 25-26.11.95. He then had a scheduled surgical list on the morning of 27.11.95 (1.5.12, p24). Therefore, when a paediatric surgical assistant was needed, Mr Brown was the first 'port of call'. He thinks he agreed to act for 2 reasons. First, simply because a surgeon was needed and secondly, because *"it was easier for me to say "I'll do it myself" than try to find somebody else to do it on a Sunday evening"* (1.5.12, p31, ln22-p32, ln7).

16. Although Mr Brown had pre-existing knowledge of Adam, such knowledge was not a pre-requisite to acting as surgical assistant. Another surgeon could have taken his place. As far as Prof. Savage (who put the team together) was concerned, he did not think Mr Brown's previous knowledge of Adam was the reason for *"picking him"* (17.4.12, p163, ln14-24). Prof. Savage said:

"Well, I think that what I felt would have been good would be to have a senior paediatric surgeon working and assisting Mr Keane. I think that was very reasonable. The fact it was Mr Brown, I'm not quite sure how that came about, but obviously he was available. It does seem to me at this distance that having Mr Brown, who knew exactly what his internal anatomy was, was an added benefit" (17.4.12, p170, ln11-18).

17. Mr Brown was not acting as surgical assistant because Mr Keane was teaching him how to perform a paediatric renal transplantation. Mr Keane initially suggested this, but later corrected himself and accepted he was wrong (24.4.12, p80, ln16-20)[4]. Mr Brown gave unambiguous evidence that he was not being taught by Mr Keane (1.5.12, p43, ln5-11).

18. There are 2 further points to address:
    a) The 'personal' issue, i.e., whether Adam's mother's views about Mr Brown should have meant he was not involved in the surgery. Any finding the Chairman makes on this cannot include criticism of Mr Brown's actions.
    b) The 'competency' issue, i.e., whether Mr Brown was sufficiently experienced and competent to act as a surgical assistant in a paediatric transplant. All the evidence is that he was appropriately qualified and experienced for this role.

19. As to the 'personal' issue, the concern notified to Mr Brown in the 1st Salmon letter was *"the extent to which his role and presence was and should have been discussed with Adam's mother"*. The evidence has shown this issue is more properly directed to others. There has been no evidence that Mr Brown was aware (or should have been aware) of Ms Strain's views. Mr Brown has stated he would not have acted as surgical assistant if he had known her objections (1.5.12, p9, ln1-11).

20. It is appreciated that the Chairman may wish to deal with this issue in his report (in relation to other witnesses). If so, then he is urged to exercise care in the language used. Ms Strain's personal view is that Adam had achieved a negative outcome after his early urological surgery. How these procedures were performed, and their success, is not within the scope of this Inquiry. In particular no expert evidence on

[4] Mr Keane's witness statements at WS006/2, p2 and 4 and WS006/3, p2 are simply wrong on this point

these early procedures has been received[5]. Any suggestion that Mr Brown's early surgery was substandard or sub-optimal would be baseless and outside the proper scope of this Inquiry.

21. In terms of competency, Mr Brown was an entirely appropriate surgical assistant. Mr Rigg's evidence was:
"I think the important thing is that Mr Keane would have wanted a surgical assistant who was experienced at being a surgical assistant...I think there is often an advantage in having an assistant who is familiar in dealing with young children if you are operating on a young child. So if I was in that situation, I think I would have chosen Mr Brown as probably the most appropriate assistant, because he was familiar with operating in children, even though he had no previous experience of transplantation... (4.5.12, p41, ln3-19).

Mr Brown's Pre-Operative Role

22. Mr Brown was asked lengthy questions about his pre-operative role, for example, whether he was or should have been involved in taking consent from Adam's mother[6]; whether he was involved in pre-surgical discussions about Adam's fluid balance[7]; whether as a surgical assistant he *"would be expected"* to read Adam's medical notes[8]; whether he was involved in the inspection and preparation of the kidney[9]; whether he had any discussions about the cold ischaemic time of the kidney[10]. Mr Brown was not involved in any of these. His pre-operative role was extremely limited, and appropriately so. Mr Rigg put it in simple terms:
"I think in 1995...we would have agreed the time that we were starting and what time I wanted him [i.e. the surgical assistant] *to be in theatre. That probably would have been the only discussion we* [i.e. the surgeon and surgical assistant] *had beforehand. When he came to theatre I would ask: have you seen this operation before? And if not, that means you'd probably explain what you were going to do, but it wouldn't be any greater detail than that"* (4.5.12, p41, ln24 - p42, ln6).

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[5] These submissions are made primarily because of questions put to Prof. Savage at 17.4.12, p164, ln6 - p166, ln22
[6] See 1.5.12, p17, ln9. Mr Brown could not have taken consent as he was not capable of doing the transplant procedure
[7] See 1.5.12, p58, ln12
[8] See 1.5.12, p20, ln15
[9] See 1.5.12, p17, ln12 and p56, ln10-14
[10] See 1.5.12, p50, ln6-10. He had no such discussions and *"wouldn't have even understood it"*

23. Furthermore, in connection with Mr Brown sharing his knowledge of Adam's previous procedures, Mr Rigg described Mr Brown's involvement as *"an added bonus...if somebody has actually done those operations on the patient, then that's very helpful...but I don't think it would need to have been a very detailed discussion. Just an understanding that here was a surgeon who was assisting you, who had already operated on the patient and who knew the history themselves as well"* (4.5.12, p42, ln14 – p43, ln9).

24. Mr Brown was *"certain"* there would have been a discussion between him and Mr Keane about Adam's previous procedures and internal anatomy before the procedure (1.5.12, p41, ln17-19). For the avoidance of doubt Mr Rigg said he would not have expected such discussions to have been recorded (4.5.12, p46, ln9-19).

25. Accordingly,

    a) There is no basis for criticising Mr Brown on his *"use and sharing of his knowledge of previous surgeries on Adam"* (see 1st Salmon letter). Both expert and witness evidence shows this would be unjustified.

    b) There is no basis for criticising Mr Brown's pre-operative role in Adam's surgery. His very limited role was **entirely** in accordance with his position as a surgical assistant.

26. Mr Keane's oral evidence was anything but clear on certain points. One such point was how he characterised his 'arrangement' with RBHSC for performing paediatric transplant surgery. At times Mr Keane seemed to suggest there was an 'arrangement' that he would leave **before** Adam's surgery had been completed, at a point when Adam was stable. However, he also agreed with the Chairman that he would have stayed with Adam longer than he did, but for receiving a call from the City Hospital (24.4.12, p87, ln17-22).

27. If there was an arrangement that Mr Brown should complete any part of the transplant surgery in Mr Keane's absence (which seems highly unlikely), this was not communicated to Mr Brown, either by Mr Keane or anyone else. There has been no other evidence of such an arrangement existing within the paediatric renal service. Mr Keane is mistaken about this. It is, of course, correct that after a

transplant, a child's post-operative care would be continued by clinicians in the RBHSC but this is a different situation.

Intra-Operative Issues

28. The following areas are considered:

a) The general role of a surgical assistant during surgery (paras 29-30);

b) Surgical techniques, including choice of vessels for grafting (paras 31-33);

c) Decision not to insert a urethral catheter (paras 34-39);

d) Monitoring of Adam's CVP (paras 40-48);

e) Blood loss (paras 49-53);

f) Perfusion of the donor kidney (pars 54-58);

g) Wound closure (paras 59-70).

Role of a Surgical Assistant

29. Although Mr Brown was, in 1995, a very experienced general paediatric surgeon, his role as a surgical assistant was, according to Mr Rigg:

"...to provide help to the surgeon, and usually what that means in practice, it will be holding the retractors..., it will be to cut the sutures and, really, it's to do what the lead surgeon is asking you to do to help the exposure, to make the operation run more smoothly" (4.5.12, p47, ln16-22). The Chairman also asked Mr Rigg:

"Q In essence, it is the surgeon who is overwhelmingly responsible rather than the assistant?

A: Yes, entirely" (4.5.12, p49, ln9-10).

Wound closure is dealt with below.

30. Mr Brown described a surgical assistant as being a *"second pair of hands"* (093-011-031) and *"very much a subservient member of the team but* [the] *job is to provide the best possible conditions for the surgeon to work in"* (1.5.12, p18, ln6-8). Mr Brown was not there to make decisions about how the transplant was to be performed (1.5.12, p18, ln9-11). Of course, he had a responsibility to raise concerns and ask questions where these were of a general nature and within the realm of understanding of a surgeon who had not seen a paediatric renal transplantation before (1.5.12, p18, ln14-17).

Surgical Technique

31. Mr Brown had no role in selecting which of Adam's vessels to graft the donor kidney to or deciding how the donor kidney was positioned[11]. As Prof. Forsythe confirmed, this is not surprising:

"...Mr Brown did not have experience in paediatric kidney transplantation and, in those circumstances, I would speculate that he probably did not have much to do other than be an assistant..."(4.5.12, p183, ln10-14).

32. Furthermore Mr Keane made it clear he did not regard Mr Brown as important in decision-making (see, for example, 24.4.12, p88, ln21 - p89, ln2 and p89, ln17-21). Mr Keane also explained that responsibility for the proper positioning of the kidney, including ensuring that no vessels were kinked, lay with him (see 26.4.12, p120, ln13-p121, ln2).

33. If there is to be criticism of the surgical technique used, this could not be directed at Mr Brown.

Decision Not to Insert a Catheter

34. The 1st Salmon letter states an area of potential criticism for Mr Brown is *"his involvement in relation to the catheter issue..."*. After the oral hearings it is submitted any such criticism is without an evidential basis.

35. Mr Brown had no role in deciding whether to place a urinary catheter at the start of the transplant. The evidence shows this was a decision to be taken by the transplant surgeon and/or anaesthetist.

36. Mr Keane has said it was his decision not to catheterise Adam. This was to allow Adam's bladder to distend naturally (WS 006/3, p13). His view was that *"Adam's ureter* [sic[12]] *was so small that it could not safely accommodate a catheter sufficient for the purpose at hand"* (24.4.12, p145, ln7-9). In fact, Mr Keane also said that if a urinary catheter was to be inserted he would have done this rather than Mr Brown:

"Q: ...Is there any reason why you didn't allow Mr Brown to insert a urinary catheter?

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[11] 1.5.12, p103, ln8-17

[12] It is believed this should read urethra

A: *Well, because I thought I would be better to do it myself. I'm a specialist urologist"* (24.4.12, p146, ln15-19. See also 24.4.12, p147, ln19-21).

37. Mr Brown does not recall discussions between him and Mr Keane about placing a urinary catheter. In any event, Mr Brown's view was that this was a decision for Mr Keane to take:

"Q: *Is that* [i.e. the placing of a catheter] *entirely a matter that Mr Keane dealt with himself?*

A: *Yes, I think so, and I would – as I said before, the surgical assistant's response to the request to jump is "how high?" If he had said to me "Put in a catheter", I would have put in a catheter"* (1.5.12, p52, ln17-22. See also 1.5.12, p66, ln5-11).

38. Mr Brown cannot be criticised for not, on his own volition, inserting a urethral catheter (or even asking Mr Keane to do so). His evidence was:

"Q: *In your experience, Mr Brown, is it routine for children to have their bladder catheterised at the start of surgery?*

A: *I have no experience of transplant surgery and, therefore, I can't answer that directly.*

Q: *In general terms?*

A: *No. Not – urological surgery would often result in a catheter being placed at the end of the operation, but very seldom at the beginning"* (1.5.12, p53, ln1-9).

39. Furthermore, it is clear that such decision making was significantly outside the surgical assistant's role that was outlined by Mr Rigg.

Central Venous Pressure

40. Whilst Mr Brown does not have a **specific** recollection about CVP discussions, it is submitted his evidence is nevertheless useful in the resolution of certain factual issues. The submissions that can be legitimately made by Mr Brown are twofold. First, it is unlikely that there were frequent or repeated discussions between Mr Keane and Dr Taylor about Adam's CVP. Second, that during the surgery Mr Brown was not aware of a CVP level that was a cause for concern. These are briefly addressed in turn.

41. **First**, it is unlikely there were frequent or repeated discussions between Mr Keane and Dr Taylor on Adam's CVP. The Chairman asked Mr Brown:

"Q: Would it not be particularly striking to you during such an operation if there were repeated exchanges between Mr Keane and Dr Taylor about the CVP reading, because that would be quite different from your normal experience?

A: I think if there were, what you've referred to as exchanges, you're implying some sort of fairly detailed conversation, I'm sure I'd remember that" (1.5.12, p79, ln19 - p80, ln1).

42. Mr Keane has given inconsistent accounts about the way in which he sought to 'monitor' Adam's CVP[13]. It may be that the Chairman finds that communication between Mr Keane and Dr Taylor was inadequate and specifically, that there was insufficient discussion about Adam's CVP. However such a finding should not entail criticism of Mr Brown. To make this submission does not seek to underplay Mr Brown's role or responsibilities in Adam's surgery. But, unless the task of monitoring Adam's CVP had been specifically delegated to Mr Brown by Mr Keane (which it was not), then this was overwhelmingly within the transplant surgeon's sphere of expertise and responsibility.

43. **Secondly**, during the surgery Mr Brown was not aware of a CVP level that was a cause for concern. Mr Brown was asked:

Chairman: So let's suppose that at about 8.45, or sometime between 8.45 and 9 o'clock, Mr Keane said, "What's the CVP?" And Dr Taylor said "It's 20", Mr Keane had ploughed on regardless. Is it conceivable that you would have said - or is it really that you wouldn't have intervened in some way?

A: I certainly would have intervened. I would have certainly wanted clarification of that as to, one, is that the right figure? And, two, are you happy to go on with that figure? So, yes, in that context, yes" (1.5.12, p87, ln11-20). Mr Brown also said:

"...I think I would have recalled if I'd been made aware of the fact that a CVP reading of 30 was being used" (1.5.12, p85, ln4-6).

44. Whilst inconsistent in parts, Mr Keane has been constant in saying he was not aware there was a problem with the CVP catheter, or that the CVP reading was 17 at the

[13] Mr Keane's customary practice as set out in his witness statements is different from that described in oral evidence

start of surgery, or that Adam's CVP was as high as 30 (see WS006/3, p14). For example, when Mr Keane was asked whether he had concerns about Adam's CVP he said:

"During that operation, at no time did I hear any information which would have caused me any alarm...

...at no point in that procedure was there any indication from the nephrologist present or the anaesthetic team present that there was something wrong at the top end of that – "(24.4.12, p164, ln24-25 and p165, ln23-25)[14]. On 10.9.12 Mr Keane repeated his ignorance of a starting CVP of 17 and said he would have contacted Prof. Savage if he had known this (10.9.12, p29, ln16 - p30, ln15). There is logic in this evidence as Prof. Savage was still in the hospital at this time.

45. Indeed, save for the conversation between Dr Taylor and Dr O'Connor (addressed below), there is **no positive evidence** that Dr Taylor shared Adam's abnormal CVP readings. Dr Taylor's own evidence was that he cannot remember if he told Mr Keane (see 20.4.12, p114, ln13 - p115, ln1)[15]. He has not said he told Mr Brown. He also said he did not communicate that the central venous catheter had been misplaced (19.4.12, p91, ln10-16).

46. Furthermore, the Chairman is reminded that:

a) Dr Taylor was either mentally adjusting the actual CVP measurements to account for the high starting point or was disregarding the measurements entirely (Dr Taylor's evidence on this has fluctuated). The Chairman may conclude the likely end point of either exercise is that if Dr Taylor did communicate numerical values, these were adjusted numerical values. Dr Taylor had also suspended the alarm on the CVP monitor (6.9.12, pp136-139).

b) The evidence suggests Dr Taylor was selectively passing on information based on his own assessment of its accuracy. He said he didn't communicate the 09.32 serum sodium result (123mmol/L), *"Well, I think because I didn't rely on the sodium, I wouldn't have taken it myself as an important measure, so I wouldn't have passed it on"* (20.4.12, p114, ln10-12)[16].

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[14] See also 24.4.12, p168, ln11-13

[15] It appears that Dr Taylor has never asserted he communicated the high CVP values to the surgeons

[16] Mr Brown was not aware of this serum sodium result (see 1.5.12, p94, ln12-15)

47. Dr O'Connor recalls an exchange with Dr Taylor after she saw a CVP reading of 30. This involved some discussion on the reliability of the CVP measurement. There is no evidence this involved Mr Brown (or Mr Keane).

48. Dr O'Connor placed this exchange at around the time of working on the vascular anastomosis, a time at which the surgeons would have been *"intently focused"* (25.4.12,p90, ln17-21 and also p93, ln11-24). Without having been in the shoes of a surgeon working intently on a delicate and demanding anastomosis in a small operative field, it would be too simplistic and unfair to conclude that Mr Keane and Mr Brown must have overheard the exchange. Everyone will have experienced being in an environment with conversation going on close by, but being too engrossed in a task to listen to or register the contents of that conversation.

Blood Loss

49. Mr Brown's view was that there was significant blood loss during Adam's operation, significant meaning sufficient to require a blood transfusion (1.5.12, p70, ln18-25). However, there is no reliable or compelling evidence of a sudden, problematic or major episode of blood loss, which Mr Brown explained *"is more significant to the surgeon than just a gradual seeping of blood"* (1.5.12, p72, ln1-3).

50. This is supported by Mr Rigg. He pointed out that Adam's blood pressure and pulse *"remained relatively constant throughout the operation which would infer that there wasn't any sudden periods* [sic] *of blood loss, but it was a gradual loss throughout"* (4.5.12, p161, ln22 - p162, ln2). Mr Rigg also stated that with any *"re-operative surgery"*, there are more adhesions and *"therefore, there is always the possibility for more blood loss. But I think it's been a constant, perhaps an ooze, rather than sudden bursts of bleeding"* (4.5.12, p162, ln3-8).

51. That a blood loss swab was weighed as 67mls is not a basis to find there was a major episode of bleeding. The Chairman is specifically referred to Mr Rigg's evidence on this (4.5.12, p163, ln19- p164, ln10)[17]. In essence he said a heavier swab could reflect a larger size swab being used or simply that a swab had accumulated more blood

[17] Mr Rigg's views referred to above are not contradicted by any other expert witness

because it was used for a longer period of time (perhaps inside the wound). It does not necessarily mean there has been a lot of blood at once. Mr Brown had given the Chairman a very similar explanation (1.5.12, p72, ln22-24). Furthermore, Mr Koffman considered dilution of Adam's blood by excess fluid to be the most likely cause of the fall in haemoglobin (16.5.12, p128, ln15-20).

52. In light of this evidence, the Chairman is respectfully invited to revisit the view he articulated at 1.5.12, p73, ln12-15. This view was expressed before hearing Mr Rigg's evidence. It was based on Nurse Mathewson's evidence, who, as the transcript shows, was simply doing her best to assist the Inquiry. Indeed, the Chairman is respectfully asked to review exactly how Nurse Mathewson's evidence was elicited (at 30.4.12, p141, from ln22). She was asked to comment on what the figure 67 might indicate to her (based on a chart completed by someone else). Her response was *"It looks like there's a bit of a bleed there"* (30.4.12, p142, ln5). It is submitted this is not a sufficient evidential basis to reject the evidence set out above.

53. Accordingly, Adam's *"significant"* blood loss does not imply a problem with the surgery. Indeed Mr Rigg thought it was *"within the spectrum of what you might expect after re-operative"* and said he had *"no anxiety that it was recognised and dealt with appropriately"* (4.5.12, p162, ln14-18). This encompasses the real issue for the Chairman, in particular, whether Adam's blood loss was unusual given the surgery (and not whether it was significant). On this the Chairman is also referred to the evidence of Dr Haynes at 3.5.12, p45, ln11-21 (in essence that the blood loss was not out of the ordinary).

Perfusion of the Donor Kidney[18]

54. Submissions on perfusion of the kidney overlap with submissions on the 14.6.96 Consultation Note: please also paragraph 75 below.

55. The following general submissions are made, with several points expanded below:

[18] This section deals with perfusion and not function, which the clinical witnesses have stressed is different, meaning whether kidney produces urine

a) Whether the kidney was adequately perfused or not did not contribute to Adam's death (see Prof. Forsythe at 4.5.12, p62, ln15-24 ; Prof. Gross at 201-004-142 and 9.5.12, p111-113 and p145; and Mr Koffman at 094-007-038).

b) Mr Keane and Mr Brown are likely to have had the best and most consistent view of the donor kidney. Other witnesses were not constantly in the operative field[19].

c) Mr Brown's best recollection is that the kidney was adequately perfused at all times. His evidence was most clearly elicited by the Chairman:

"Q: When you say properly perfused does that mean the perfusion was acceptable even if at different points it was perfusing better than at other points?

A: I think that's fair, yes..." (7.9.12, p12, ln8-11. See also the subsequent evidence to p14, ln10).

d) Descriptions from other witnesses are inconsistent. They vary in terms of whether the kidney looked well perfused, becoming less so, or, less well perfused, but improving with time[20].

e) Dr O'Connor recorded *"blueish"* in Adam's notes in PICU but does not recall seeing a blueish kidney and thinks she over-heard this remark (6.9.12, p167, ln3-5). She cannot say who the speaker was, nor at what point after the clamps were released she thinks she heard this.

f) The Chairman is reminded that all the relevant experts say it is not unusual for a kidney to initially be pink and then less pink as time progresses. Indeed Mr Koffman writes *"it is quite common for the kidney...initially to perfuse well and then become rather blue and floppy"* (094-007-036).

g) Mr Keane also stated he would have checked the pulsatile flow (WS006/3, p9, and 26.4.12, p112, ln5-18). Whilst Mr Brown did not see any urine produced by the donor kidney, the expert evidence is that delayed production of urine is not unusual.

h) The post mortem finding that the donor kidney was infarcted does not lead to the conclusion that inadequate perfusion was observed in theatre.

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[19] Prof. Gross commented on this, stating that the operative field is not *"open so that everybody could see from a distance. Only the people very close to it have a good look. There is bleeding around the kidneys, covered by blood. There are other things around"* (9.5.12, p108, ln5-10)

[20] Compare, for example, Nurse Popplestone's (30.4.12, p80, ln18-21 and p81, ln2-4) and Mr Keane's accounts (eg in 093-010-029)

56. It is submitted that differences between the factual witnesses on perfusion should not be over-analysed. This is for 3 reasons:

a) It is not unusual for the colour of a re-perfused donor kidney to vary as time passes and this does not mean perfusion is inadequate. Prof. Gross (201-004-124 and 9.5.12, p107), Mr Rigg (4.5.12, p185) and Mr Koffman (094-007-039) have all explained this. Prof. Gross also said that *"parts of the kidney pink up well, other parts remain greyish"*, (9.5.12, p108, ln21-22). The expert evidence indicates that colour variations do not necessarily signify there was a *"problem"*, as was suggested on 7.9.12 (p10, ln17- p11, ln12).

b) Furthermore, the appearance of a kidney is not necessarily a predictor of its success. Prof. Gross said, *"We do know that oftentimes kidneys look sort of a bit unusual when they're put in and the clamps are removed and they do well a week or two later and start to function fine"* (9.5.12, p109, ln1-5).

c) Prof. Gross explained his experience that different people will remember and describe the appearance of the same kidney in different ways. The descriptions given can be misleading (see 9.5.12, p107-110)[21]. In fact, the witnesses' descriptions of the kidney were set out in the brief to Prof. Gross. His expert view was that *"All the people are saying more or less the same thing, there are no important discrepancies"* (210-002-049).

57. Nurse Popplestone's evidence was not that she observed discoloration of the kidney. Rather she explained that she heard discussion about the colour of the kidney but the surgeons decided they were happy with it and proceeded with the operation (30.4.12, p80, ln18 – p81, ln4). Mr Brown entirely agreed that there would have been a discussion about the kidney's perfusion after the clamps came off (7.9.12, p5, ln19-21). He recalled such a discussion in general terms (1.5.12, p104, ln15-18). Such discussions are likely to have been revisited in the time it took to anastomose the ureter to the bladder. However, the Inquiry has not heard evidence from any witness that the end point of any discussion was that the kidney was not perfused to an adequate degree[22].

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[21] The Chairman may think the fact there are at least 4 descriptions in different terms is in fact a manifestation of Prof. Gross' point

[22] Or, to take this a step further, that this was irrelevant because it was known Adam was or was likely to be brain stem dead

58. It is submitted that the evidence does not support a finding that kidney perfusion was known to be inadequate at the point of wound closure. Further, it is submitted no criticism of Mr Brown is justified on the evidence. His view, as a general paediatric surgeon with no renal transplant experience, was that perfusion was adequate at all times.

Wound Closure (Issue 4 in 1st Salmon letter)

59. It is recognised there is a limit to the submissions that can properly be made by Mr Brown on this issue because he does not remember wound closure. However, the following key points can be made:

a) Closure of the first muscle layer is the most difficult and may impact kidney viability. After this layer is closed the kidney can no longer be observed. Closure of the other layers is a simple process.

b) Mr Keane's evidence is that he was, at a minimum, present in theatre for closure of the first muscle layer[23].

c) Mr Brown has given convincing evidence that he was aware of the potential problems of closing a wound over a donor kidney.

d) If, however, the Chairman considers that Mr Keane did leave the theatre before closure of the first layer, and that this was inappropriate delegation to Mr Brown, then no or limited criticism should be directed at Mr Brown.

e) Mr Keane's first account of leaving theatre before completion of wound closure came in 2006 (093-010-030). Therefore, **it was not until 2006 that Mr Brown was asked to recollect and comment on this.** It is submitted that the significant passage of time up to these hearings should not be 'held against' Mr Brown.

60. With respect to sub-paragraph 59b), it is submitted that the best assessment of Mr Keane's (often confusing) evidence is that he was present in the theatre for closure of the first layer and probably did this himself. In April 2012 he said:
"...That statement is "sew the wound". As a matter of courtesy, I don't know whether I did this, but as a matter of professional courtesy to Mr Brown because of a surgical issue, the first

[23] Throughout the oral hearings, Mr Keane's evidence was frequently referred to inaccurately. For example, it was put to witnesses that Mr Brown closed the wound, thus failing to account for the uncertainty about what Mr Keane did or at least supervised. The Chairman is respectfully asked to bear this in mind when reviewing the transcripts

layer of closure of three is more technically difficult. In other words it's easier if Mr Brown – if I just wait for him to close the first layer. And then he continues the procedure as I'm now gone. So I haven't surgically, if you wish, committed myself..." (26.4.12, p123, ln22 – p124, ln5). He then went on to say he couldn't remember what he had left Mr Brown to do (26.4.12, p124, ln18-21).

61. In September 2012 his evidence was less muddled. When asked again about this issue he said:

"All I can say is that when I finished the transplant procedure, the kidney was alright and we closed. I may have closed and left or I may have come back in. I don't have recall of it. I would suggest that what I did, or my best understanding of what I did, was that we looked, we were happy and we closed the first layer and I left then, and I would have come back in to say, "Is everything stable?...

...

My evidence was that I was asked about this 10 years after the event. I didn't recall it, but to the best of my knowledge, I didn't close the wound completely.

Q: But did you close part of it?

A: As a professional courtesy to another surgeon, I'm almost certain I would have stayed or closed the first layer so that it would be easy for him to do..."

He continued that he normally closed the first layer and his *"best guess"* was that in Adam's case he did this (see full evidence at 10.9.12, p16-18). Thus he was present in theatre until the kidney (and its perfusion) could no longer be visualised. Prof. Forsythe and Mr Rigg have no criticism of this practice.

62. In relation to sub-paragraph 59c), Mr Rigg described a risk of causing the artery to kink during closure of the first layer, by exerting pressure on the kidney (4.5.12, p138, ln14-21). In such situations the skin layer could just be closed and the child returned to theatre a few days later for closure of the muscle layer (4.5.12, p139, ln7-14).

63. If, **contrary to the above evidence,** the Chairman finds that Mr Keane did completely leave Mr Brown to close the first layer, then Mr Brown has clearly stated he knew the risks of the task that were highlighted by Mr Rigg. He was aware of the vital importance of carefully closing the first layer, describing it as the *"critical one"* (1.5.12,

p122, ln4-14 and p126, ln13-16). He was conscious that space was tight because an adult sized kidney was being used (1.5.12, p128, ln4-6). As an experienced surgeon he was also aware of, and had himself utilised, the method described by Mr Rigg should any difficulties arise (1.5.12, p122, ln15 - p123, ln6 and p167, ln15 - p168, ln14). Indeed Mr Koffman was not concerned about Mr Brown's ability to close the first layer, stating *"As long as you know how to close a wound, it doesn't matter whether it is a transplant wound or any other wound"* (refer to full extract of evidence at 16.5.12, p139, ln1 – p141, ln4).

64. If the Chairman finds that Mr Brown undertook any part of the wound closure, there is no basis for criticising the fact Mr Brown did not document this in the surgical note (see evidence of Prof. Forsythe, 4.5.12, p160, ln2-4).

65. With regards to sub-paragraph 59d), it is accepted that there was a burden on Mr Brown to speak up if he thought the task was beyond his skill set. However, the primary responsibility must be on Mr Keane to assess the suitability of delegating closure of the first layer[24]. Such an assessment would include Mr Keane determining if he has placed the kidney properly in the first place, ensuring Mr Brown is capable, and, if necessary, providing proper instructions. Mr Keane initially described wound closure as a routine surgical issue (24.4.12, p95, ln11), but went on to suggest that Mr Brown would not have sufficient knowledge or experience to recognise and redress a possible compression problem (26.4.12, p126, ln16 – p127, ln5). If the Chairman accepts this latter evidence, it inevitably follows that Mr Keane knew he was inappropriately delegating to Mr Brown.

66. In relation to sub-paragraph 59e), neither Mr Keane's nor Mr Brown's report for the Coroner referred to Mr Keane leaving. The Chairman has sought an explanation for this. There are 2 likely explanations. First, for a surgeon wound closure is a minor element of surgery. This is reinforced by the expert view that it would **not** be usual for an assistant who simply closes the wound to make a separate note of this (4.5.12, p160, ln2-4). Second, it appears that Mr Keane's departure was at a late stage, with Mr Brown being left to close the outer skin layers only. Therefore this was a task of

[24] As explained by Mr Rigg, 4.5.12, p49, ln18-22

no real consequence to Adam's death. By this stage in his career Mr Brown had closed 1000's of wounds (1.5.12, p167, ln15-24).

67. A further point is this: the PSNI asked Mr Brown about Mr Keane leaving the theatre. Mr Brown, reasonably, conceded that might be correct but he had no recollection. During oral evidence it was put to Mr Brown:
"It is just the way the police have recorded your evidence would suggest that you were quite willing to tell the police one thing until the contrary was suggested. I wonder if your memory is given to that sort of suggestibility" (7.9.12, p44, ln5-9).

This is an entirely unfair and unjustified proposition. Mr Brown was being asked in 2006 about something he did not remember. It would have been unreasonable if he had rejected the possibility that Mr Keane had left the theatre. To do so would have rightly attracted criticism and prompted the question, "well, how can you say Mr Keane did not leave the theatre if you do not remember the wound closure?" Mr Brown was doing nothing more than behaving in a perfectly reasonable manner, acknowledging the limitations of his own recollections and the possibility others may have remembered things he did not.

Communication with Adam's Mother at the End of Surgery (Issue 5 in 1st Salmon Letter)

68. Mr Brown had delegated his routine theatre list to his juniors on the morning of 27.11.95. He completed this list after Adam's surgery, not knowing that Adam had failed to waken. However, assuming Mr Brown was the only surgeon at the end of the procedure, he has fully accepted in oral evidence he should have gone to speak to Adam's mother (1.5.12, p136, ln11 - p137, ln1 and 30.6.12, p155, ln12-15). Of course, if he had done this, he would have left the theatre intending to inform her that the surgery had been uneventful.

69. The Chairman asked Mr Brown if it possible that he did not speak to Adam's mother was because *"he knew things were going wrong"*. Mr Brown's answer was *"no, quite the contrary"* (1.5.12, p141, ln22-25). He later explained:
"...the time when you need to speak to parents is the time when things are going wrong. That is - you know, that's a simple lesson that we all learn at an early stage, that avoiding speaking to a parent when something's going wrong doesn't help anybody" (1.5.12, p168, ln18 - p169, ln2). He added that he would *"definitely not"* have involved himself in

the remainder of his surgical list if he had been aware things had gone wrong in Adam's case (1.5.12, p169, ln3-7).

70. Whilst Mr Brown agrees he should have spoken to Adam's mother, the Chairman is also reminded of the evidence of Mr Rigg. He said that the operating surgeon could not assume the assistant would undertake this task, unless specifically asked to (4.5.12, p196, ln11-17). Any criticism of Mr Brown should be tempered by this expert view.

Function/ Failure of the Kidney

71. There are a number of potential factors that could cause or contribute to the post-mortem changes seen in the donor kidney[25]. Isolating the causative factor or factors is not possible on the evidence. Accordingly, the Chairman is urged to exercise particular care if addressing this issue in his final Report.

72. The simple fact a donor kidney fails does not mean it is appropriate to criticise the surgical care. The expert evidence shows that once the wound is closed it is something of a 'waiting game' to see if the kidney will function. Mr Koffman explained that before the advent of post-surgical scanning:
"...you finish the operation. You have no way of knowing...whether the kidney is healthy or not. If it's producing large amounts of urine, then it's obviously okay, but if it's not, you would expect this kidney [Adam's donor kidney] *not to function immediately anyway for the reasons we've said. So you have no real way of knowing whether it has a blood supply or not unless you scan it"* (16.5.12, p136, ln8 – p137, ln15). He also reported that failure of a transplant due to venous or arterial thrombosis is a relatively common cause of organ failure and concluded there was no evidence the operation was performed in a negligent way (094-007-034).

[25] The expert-identified factors included: damage to the tubules caused by the long ischaemic time, perfusion problems caused by Mr Keane selecting smaller vessels for the graft, anastomosis problems, kinking of the vessels during wound closure, and the other processes going on in Adam's body

73. With regards to kinking of the vessels, the evidence shows this is a recognised complication of wound closure. There is no evidence that such kinking (if it in fact occurred) is indicative of substandard or sub-optimal care[26].

74. Both Profs. Forsythe and Risdon have recognised that the other complicated processes going on in Adam's body during the surgery could have caused or contributed to the kidney's post-mortem condition (Prof. Forsythe at 4.5.12, p145, ln8-11 and Prof. Risdon at 3.5.12, p38, ln7-15 and p39, ln12-20). So, whilst the non-functioning of the donor kidney did not directly contribute to Adam's death, his dilutional hyponatraemia and cerebral oedema may have contributed to non-functioning of the donor kidney.

The 14.6.96 Consultation Note (the "Consultation Note", 3rd Salmon Letter)

How to Approach the Consultation Note

75. In the Claire Roberts' case the Chairman made the following comment in relation to medical notes made in 1996: *"we're 16 years on, we are parsing notes in a way, written at a different time, for a very, very important reasons. But I think we should all be very careful about the extent to which we try to analyse or interpret notes which were written when the people who wrote them cannot remember them. We will do our best, but I'm anxious that we deal with the major issues rather than trying to over-analyse what was written 16 years ago...I am making a general point...We can try too hard to work out what these notes mean"* (16.5.12, p210, ln3-21). The Chairman is urged to bear this in mind when analysing the Consultation Note, particularly when no witness says a needle was put into the artery, no witness says Adam's terminal event was recognised before reversal of the anaesthesia, and the note taker cannot assist with the meaning of the note.

76. In a case where all witnesses have struggled with memory, it might be tempting to heavily rely on the Consultation Note. However, if the Chairman is to accept that:

    a) The kidney was *"in at around 9.30am"*, and the arterial and venous anastomoses were completed shortly thereafter;

    b) *"During this procedure the bladder was opened immediately..."*;

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[26] Indeed Mr Koffman's evidence suggested otherwise. Talking about the scanning technology now used, he said: *"...because a surgeon can see a healthy kidney, put it in a good position, stitch the abdominal wound up and then the scan 10 minutes later, after the operation's finished, will show no blood flow in the kidney. That's presumably because of a change in position"* (16.5.12, p135, ln23 – p136, ln2)

c) The kidney was not working and it was felt that more fluids were required;

d) A needle was put into the artery (which artery is not specified) when the kidney was failing to work; or

e) The surgeons knew that the performance of the kidney was not relevant because Adam's condition was recognised as critical;

this would be contrary to virtually all of the other evidence, including the contemporaneous medical records.

77. To find that the Note accurately records what was said at the consultation does not determine the truth of those words. To assess the likelihood that a statement is true requires a determination of who the statement-maker was. If a controversial comment is attributed to Dr Taylor then extreme care should be exercised in relation to that evidence. Dr Taylor himself has said in this Inquiry:

"Sorry, it has left me personally very disturbed...The other thought that, in some way, I was responsible for the condition and the death of Adam was another blow. I have found over the years, with the questions I've been asked and the statements I have made, that it is difficult to cope with my thought processes, going over such a devastating event. I think that has permitted me to say things that are clearly irrational, wrong, disturbed, confused, and I offer that as an explanation for making such really outrageous statements." (emphasis added, 19.4.12, p57, ln20 - p58, ln5).

78. It is submitted that 3 issues should be considered by the Chairman:

a) Whether the Consultation Note is an accurate and complete record of discussions at the consultation;

b) If the Note is accurate, whether the discussions amounted to an accurate account of the surgery. This necessitates determining who made each controversial statement; and

c) The meaning of the Note within the context of a legal consultation.

<u>Is the Consultation Note an Accurate and Complete Record of the Consultation?</u>

79. It is accepted that the Chairman is likely to find that the Note is a broadly accurate record of some of the consultation on 14.6.96. But to ascribe it any greater status would be wrong. Various witnesses have identified aspects of the note that are medically incorrect or inexact (eg Prof. Savage, 10.9.12, p67-70 and 72-75 and Mr

Brown, 7.9.12, p27). A stand-out example is that the Note records Prof. Savage saying there was correct logic in Dr Taylor's fluid calculations (122-001-004). This is very unlikely to be an accurate record of his words.

80. There is no doubt that Mrs Neill is an educated woman who, in 1996, had many years of relevant work experience. But any non-medic working in the area of medical law knows how difficult it is to follow, and accurately and comprehensively record, a consultation that traverses complex medical issues. There is no evidence Mrs Neill was familiar with the specific medicine being discussed on 14.6.96. It is perfectly reasonable and perfectly understandable if Mrs Neill has made a mistake in her notes or has misunderstood elements of the discussion. Mrs Neill herself sensibly acknowledged *"It's possible that I may have misunderstood"* (6.9.12, p11, ln5).

81. Furthermore, there must be some concern about how this typed note was in fact constructed:
    a) It is not a verbatim note (and therefore cannot be complete) (6.9.12, p9, ln2 and p13, ln15).
    b) In the main, words have not been attributed to any particular speaker.
    c) It is not chronological, but rather organised thematically (6.9.12, p8, ln8 and p12, ln1). In preparing the typed note from her handwritten notes, Mrs Neill tried to *"bring together issues because during a consultation, you can wander from one point to another"* (6.9.12, p8, ln8-12). The upshot is that Mrs Neill has re-constructed the Note in a way that does not follow the actual progress of the consultation. It is suggested that this misleading assimilation of discussions can probably be seen in the 'important' paragraph on 122-001-005.

Accuracy of What Was Discussed

82. Each of the statements above at paragraph 76 relates to conduct inside the operating theatre. Accordingly only Drs Taylor, O'Connor, Mr Keane, Mr Brown, or a nurse could have been the source for such information.

83. With the exception of Dr Taylor, **none** of these individuals was at the consultation on 14.6.96. The Chairman has correctly pointed out that the information could have been brought to that consultation from earlier discussions or meetings. But there is

no evidence this in fact happened. Neither Dr Gaston nor Dr Murnaghan has said this information was passed to them from Mr Keane, Dr O'Connor, Mr Brown or a nurse. Dr Gaston's recollection is that there was a difference of opinion between Dr Taylor and Mr Keane, but that Mr Keane felt the surgery *"had been more straightforward than had been suggested"* by Dr Taylor (19.6.12, p103, ln2-5). On the contrary, the evidence the Inquiry has received shows that **none of these individuals is likely to have made these statements.** Important evidence to support this submission is summarised below.

84. Timing: Mr Keane pointed out that there was *"no chance"* a surgeon would be able to reach the advanced stage of a kidney being *"in"* or close to being *"in"* at 9.30 in a patient like Adam (7.9.12, pp102-105). Professor Forsythe, Mr Rigg[27], Dr Haynes[28] and Professor Savage **all support Mr Keane on this.**

85. In fact, there are a number of timings that are clear from the medical notes. These assisted Dr O'Connor in giving particularly compelling evidence. She was adamant that the vascular anastomosis was not completed until 10.30am. She relied on:
    a) She recorded 10.30 in the medical records (058-035-134);
    b) The records show the anti-rejection drugs were given **from 10am.** Dr O'Connor said that *"often they're given half an hour beforehand. But they must be given before the clamps come off"* (emphasis added, 6.9.12, p162, see also p165, ln21-25).

86. The Chairman will also remember that Dr O'Connor spoke to Adam's mother at around 10am. The anastomosis was not complete at this time. The handwritten entries on the medical records finish at 11am (058-003-005) and Adam was temporarily disconnected from the anaesthetic monitors at around 11.40 (for transfer to PICU). Dr Haynes' interpretation of the records (204-016-013) is after 11am Dr Taylor's attention was diverted away from completing the anaesthetic chart (and onto recognition of Adam's condition).

87. **The evidence to refute that the kidney was "in" at 9.30 is very strong.** Vascular

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[27] Forsythe and Rigg: 203-011-004 and 10.9.12, p135, ln23-24
[28] Dr Haynes: 204-016-002 – 204-016-004

anastomosis and clamp release did not occur until around 10.30. Accordingly, any fluids given around this time could not have been in response to issues about kidney perfusion or function.

88. In relation to the bladder, Mr Keane said it was neither opened intentionally nor inadvertently at the start of surgery (extract on 7.9.12, pp106-113). If the bladder had been opened inadvertently, *"you would just stitch it up if that happened. You'd just stitch it up again"* (7.9.12, p112, ln16). Mr Rigg confirmed that there was no reason to open the bladder deliberately at the start of the procedure (203-012-001).

89. In relation to the needle:

a) Mr Brown's evidence was that a needle was not put into the artery. He said *"it's not something anybody would do. It's an extremely unusual thing to do and if it was done I would certainly have remembered...I've been a surgeon for 35 years and I've never seen anybody do anything like that and I've never done it myself"* (please refer to full evidence on this at 7.9.12, pp18-21). Mr Brown was not invited to the 14.6.96 meeting and so cannot explain whether or in what circumstances a needle was mentioned. He was not in a position to contradict this statement, if it was in fact made.

b) Mr Keane also stated that he did not put a needle into an artery to check the blood flow (or for any purpose). He said, *"That's an absolutely idiotic way to check it"* (7.9.12, p122, ln11)....."*What you'd go sticking a needle into that for I don't know. You'd just clamp and take down the anastomosis*" (7.9.12, p124, ln14). Mr Keane also, correctly, pointed out that this Consultation Note is the only place in all of the documents that a needle in the artery is mentioned (7.9.12, p135, ln8).

c) Prof. Forsythe and Mr Rigg were asked to give their views on the purpose of putting a needle into the artery. But as pointed out by Mr Brown, this question presupposed that a needle had been inserted (7.9.12, p20, ln6-20). They confirmed this was a *"very uncommon practice"* (203-011-004). No other witness had ever seen this performed to check for blood flow.

90. In relation to "the kidney was not working when the operation site was closed however performance of the kidney was no longer relevant...":

a) Mr Brown told the Inquiry he **did not and would not close the wound over a kidney that was not properly perfused. At no point in surgery did he know Adam's condition was critical.** He said:

"...Are you asking me did I close a wound over a kidney that was not properly perfused? Is that the question you're asking me?

Chairman: Let's take it that that is a question. What would be your response to that?

A: No I did not...

Mr Stewart: And on what basis do you say...

A: Because I wouldn't.

Q: Not because you can remember, but because you say "That's not my practice"?

A: Because it's just unthinkable...." (7.9.12, p33-34, ln23).

Later the Chairman put a 'sinister' interpretation of part of the Consultation Note to Mr Brown:

"Chairman:...look, the kidney was failing to operate or wasn't working...but Adam's wound was closed up anyway because it didn't matter whether it worked or not because Adam was effectively dead.

A: That certainly is not true" (7.9.12, p35, ln13).

b) Neither Nurse Popplestone nor Mathewson remembers anything unusual about the surgery (11.9.12, p211, ln22-25 and p216, ln6-9). It is very unlikely that the clinicians would or could have silently communicated amongst themselves that a) the kidney was non-viable but b) this was unimportant because they already knew Adam had died on the table.

91. Save for a single poorly constructed sentence in this Consultation Note, there is **no other evidence** that clinicians knew or suspected Adam was brain-dead during surgery. Even Dr Taylor has consistently said that *"the first time I knew Adam was having a problem, was potentially brain-dead, was the fact that he didn't start breathing at the end of the skin closure when I tried to wake him up. That would have been at around 11 o'clock"* (6.9.12, p141, ln10).

92. It was put to Dr Taylor that it might be *"possible that people towards the end of the surgery feared that something quite serious had happened to his interests and really the least of their concerns at that stage was whether the kidney was perfusing or not?"* (6.9.12, p100, ln17). It is submitted this vague proposition has a number of insurmountable

difficulties:

a) It is unsupported by any evidence as to how the surgeons would have known something serious had happened. Dr Taylor did not articulate this and says he himself did not know until around 11am. Adam's vital signs were being monitored and were normal. Any cardiac arrest would have been evident on the monitors.

b) If Dr Taylor had revealed that Adam's pupils were fixed and dilated (which he did not) there is **no conceivable reason** the clinicians would complete the transplant and **carefully close 3 layers of the wound**. If there had been limited progress with the transplant then the kidney would have been removed. Otherwise Adam would have been transferred to PICU as quickly as possible. In either instance the surgeons would not have stood around discussing the kidney's perfusion.

c) The evidence of Dr O'Connor (who was in probably in theatre around 10.30am), Mr Brown, Mr Keane, the nurses and Dr Taylor himself entirely supports the factual finding that serious concerns about Adam's condition did not arise until Dr Taylor tried to waken Adam, at around 11am. Mr Brown had left theatre at this time.

93. The Chairman should reject the evidence of Ms Boyce. Her first account was given in 2006 and her memory is mistaken[29]. The Chairman's attention is drawn to the following:

a) Ms Boyce is convinced she spoke to Nurse Sharratt in the corridor. Nurse Sharratt gave very persuasive evidence that Ms Boyce is wrong about this. She also stated she did not know anything was wrong while Adam was in theatre (27.4.12, p154-156). Her recollection is supported by Dr O'Connor (Nurse Sharratt became aware of Adam's condition after Dr O'Connor did, see 6.9.12, p216).

b) Nurse Sharratt said she had no reason to be in the vicinity of theatre on the morning of 27.11.95. In fact she very much doubted if she would have left the dialysis room that morning (27.4.12, p146, ln1-12). Again this is supported by Dr O'Connor (6.9.12, p216, ln3-8).

c) Ms Boyce gave evidence that she would have been in the operating theatre

[29] At 27.4.12, p129, ln20, Ms Boyce said *"I accept the possibility that my memory is wrong..."*

for more than 30 minutes and it could have been 1.5hrs (27.4.12, p119, ln10-16). She also said she would have spoken to the nurses (27.4.12, p116, ln20). This is not supported by other evidence.

d) Finally, Dr O'Connor was in and out of theatre that morning. But she was not aware that Adam had fixed and dilated pupils until around midday (25.4.12, p104, ln15-18). It is extremely unlikely Ms Boyce was more informed that Dr O'Connor.

94. If the Chairman does consider the Note to be an accurate record of the consultation (even taking into account it's assimilation of discussions), then these controversial statements were not made by Dr O'Connor, Mr Brown, Mr Keane or the nurses. Accordingly, they could only have been made by:

a) Dr Taylor; or

b) Someone who was not present in the theatre, in which case they can only have been raised for discussion or purely speculative (see below from paragraph 103)

95. With respect to sub-paragraph 94a), it is an inescapable fact that in the months (and years) following Adam Strain's death Dr Taylor was giving and repeating outlandish and incorrect commentaries about the surgery (including to the PSNI, under caution). This was not just in relation to Adam's fluid management[30]. The fundamental submission is that if Dr Taylor **made or contributed** to the statements set out above at paragraph 76, then to find that these accurately describe the surgery **would be to rely on the evidence of a witness who was giving thoroughly unreliable evidence in 1996 and who has accepted as much in oral evidence at this Inquiry.** It would be wrong to conclude Dr Taylor's 1996 accounts are more accurate than his 2012 accounts, simply because they occurred closer in time (as appears to be the approach on 6.9.12, p53). **The key problem with Dr Taylor's evidence is not the quality of his memory, but the accuracy of his evidence in 1995 and 1996.**

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[30] For example, see Dr Taylor's statement to Coroner that Adam's catheter was placed *"without undue difficulty"* (011-014-096). This was incorrect. Dr Taylor also told the PSNI that Adam's functioned like *"a tap turned on"*, *"his kidneys are sieves"* etc. These analogies are virtually the same as the colander analogy in the Consultation Note. But, in oral evidence Dr Taylor said *"well, those statements are clearly wrong"* and added *"I think my thought processes at the time were clearly disturbed...it doesn't reflect my knowledge of renal failure at that time"* (19.4.12, pp55-56, ln13-3). Dr Taylor was therefore saying that his knowledge of renal failure in 1995 was different from how he was actually describing it to others at that time, and on 14.6.96

96. In relation to Consultation Note recording that the kidney was *"in"* at around 9.30am, it is likely Dr Taylor made this statement (he gave similar evidence to the Coroner, 122-044-048). But the contemporaneous medical records, as explained by Dr O'Connor on 6.9.12, show this is factually incorrect. Dr Taylor was saying *"things that are clearly irrational, wrong, disturbed, confused"*.

97. In relation to the bladder being opened at the start of surgery, again it is possible Dr Taylor said this in 1996. It was inaccurate both then and now[31]. Dr Taylor told the Inquiry in 2012 that *"I was only aware of Adam's bladder being opened at the end of the operation, not the start"* (6.9.12, p128, ln14) and *"I have never seen the bladder opened at the start of surgery for a transplant"* (6.9.12, p130, ln19). It is suggested this is represents another situation in which Dr Taylor, in 1995 and 1996, was saying *"things that are clearly irrational, wrong, disturbed and confused."*

98. The Consultation Note records *"the kidney was not performing well and it was felt that more fluids were required"* (122-001-005). In evidence Dr Taylor accepted it appeared he said this on 14.6.96 and had told the Coroner a fluid bolus was given at 09.32, apparently because the new kidney was not working. As set out above, there is significant evidence that this was inaccurate. Indeed Dr Taylor in 2012 has accepted this was wrong (*"it's not consistent with what happened at the time of surgery to my view, I don't think"* 6.9.12, p47, ln5).

99. In fairness to Dr Taylor, he has never said that a needle was put into the artery. He has never said that he or others concluded, during surgery, that Adam was brain stem dead and so the kidney's function or perfusion was irrelevant.

<u>The Meaning of the Note within the Context of a Legal Consultation</u>

100. It is extremely likely that the purpose of the 14.6.96 consultation was for Mr Brangam to obtain and fully understand Dr Taylor's instructions in advance of the inquest (see Dr Gaston, 11.9.12, p24, ln12).

101. Dr Gaston appears to recall some discussion about the kidney's perfusion.

[31] Dr Taylor confided in Dr Gaston shortly after the procedure, explaining the difficulties he felt he had encountered. That list of difficulties did not include Adam's bladder being opened (18.6.12, pp130-133 and 19.6.12, pp49-50)

He recalls this was halted by a comment such as, *"look we're wasting our time on this, we don't need to talk about this because this isn't why Adam died"* (11.9.12, p84, ln18 – p85, ln1). Prof. Savage had no memory of this, but offered the same kind of explanation for the relevant section of the Consultation Note (10.9.12, p77, ln19-22).

102. This is a realistic explanation in a context of a consultation just a few days before a demanding inquest. Mr Brangam in particular would have wanted to focus discussions on the main fluid management issues and how he should deal with the evidence of Drs Sumner and Armour. As Dr Taylor put it *"the state of the kidney was not of the main importance leading into the Coroner's inquest"* (6.9.12, p104, ln5-7). It is submitted the Chairman should accept this as the most likely explanation.

103. Prof. Savage has also provided a likely explanation for the note that *"...a needle was put into the artery..."*. He wondered, *"did someone query, could a needle not have been put into the kidney, to check there was blood into the artery?"* (10.9.12, p62). On this explanation, someone who was **not** present in theatre has initiated a discussion and speculation but *"in being transcribed, that has come to be a fact, whereas perhaps it was a question"* (10.9.12, p62).

104. It would be a very large step indeed to conclude that a needle was put into the artery. **No witness even remembers anyone saying this had been done. The only possible evidence on which to base such a finding of fact is the Consultation Note**, where the statement cannot even be attributed to a speaker, never mind a clinician who was in theatre. Using a needle in this way would have been extremely unusual. It is submitted that if an attendee on 14.6.96 had said a needle had been put into the artery, this would have been a striking revelation and would have been remembered by someone, including Prof. Savage[32].

105. It is accepted that aspects of the Consultation Note are prima facie concerning. But ultimately, the Chairman will need to decide if he accepts the contemporaneous medical records and oral testimony of the witnesses or this Note.

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[32] Prof. Savage indicated it was unthinkable that he wouldn't have responded to such a revelation with *"my God, are you serious"* or *"I've never heard that before"* (10.9.12, p76, ln21-25)

Governance (2nd Salmon Letter)

106. In relation to the 2nd Salmon letter, Mr Brown played no role in paediatric management within the Royal Trust at the time of Adam's death and ensuing related developments (point 1 of that letter).

107. Clinical governance was a fledgling concept in the RBHSC in 1995/6. It had no protocols, policies or guidance governing how a death such as Adam's should be investigated, or by whom. Nevertheless it is clear that Dr Murnaghan was considered the person who would or should direct and lead an internal investigation.

108. From Mr Brown's perspective, he knew the Coroner was holding an inquest and that Dr Murnaghan had been informed of the death. Working alongside Dr Murnaghan were Drs Gaston, Dr Crean (acting as de facto clinical director of paediatric anaesthetics), Mulholland and Gibson. In spite of this it is clear the RBHSC's internal investigation was entirely inadequate. But, before criticising Mr Brown for any inaction, the Chairman is asked to carefully consider whether in 1996 it was unreasonable for Mr Brown (and others) to conclude that apparently competent senior clinicians/managers were investigating Adam's death and Dr Taylor's actions, as well as identifying lessons to be learned. Indeed the Chairman will remember that Prof. Savage himself thought Drs Gaston and Murnaghan were following up the internal investigation, and said *"perhaps I put too much faith in that system"* (22.6.12, p26, ln25- p27, ln2). The evidence sadly shows that the recommendations prepared for the Coroner were much too narrowly drafted. Nor were they communicated throughout the RBHSC. The Chairman will not have failed to note that in the 1st week of Claire Roberts' evidence, only Dr Bartholome had heard of Adam's death (and she believed she had treated Adam in the nephrology ward).

109. Those apparently competent clinicians leading the investigation thought Mr Brown had little to contribute. He was invited to only 1 meeting (17.4.96) and was not on the list of invitees for Dr Murnaghan's planned seminar/ symposium (25.6.12, p206, ln6-12). It is clear that Mr Brown, unlike many others, was not privy to Dr Taylor repeatedly defending his fluid management. Mr Brown thought that Dr

Taylor had accepted the Coroner's verdict (20.6.12, p181, ln11-24). So did everyone else, except perhaps Dr Murnaghan (although his evidence at 25.6.12, p220-225 is ambiguous).

Conclusion

110. Mr Brown appreciates the difference between negligence litigation and a public inquiry. He appreciates the public review and learning functions of this Inquiry. He appreciates the importance of the Inquiry for Adam's mother and that it was essential to explore the 14.6.96 Consultation Note. But to find that Mr Brown knew the kidney was non-vital, knew that Adam was brain-stem dead, but simply carried on with the surgery, closed the wound and went on to complete a list of minor procedures, would be entirely extraordinary.

LEANNE WOODS

23RD OCTOBER 2012