by: DR. JOHN BURTON Inspection:- 8th Dec 2004
(Post-graduate Law Researcher)

Research Access permitted to Inquest Documents on

ADAM STRAIN DoD - 28/4/95.

Audio Tape Notes @ (0272) 21

St Michael's Hospital
Southwell St. BRISTOL: BS2 8

ADAMS MEDICOLEGAL REPORT. from Professor P.J. BERRY 23.3.

* not called to give evidence at Inquest

Background :- para 4 " The surgery was complex but a satisfactory transplant was carried out with an acceptably matched kidney from a 16 year old donor."

Continuation Sheet 1

Microscopic Slides

Transplant Kidney

my emphasis KB → " THE KIDNEY SHOWS ALMOST COMPLETE INFARCTION "

...

Comment:

"From my examination of the histological sections I can confirm that this child had severe renal disease supporting the clinical decision to undertake renal Transplantation. I note the clinical history of reflux and recurrent urinary tract infection. Whilst the histological appearance is entirely consistent with cystic renal dysplasia, the medullary cysts, intense interstitial fibrosis, and the history of polyuria raise the possibility of medullary cystic disease. (This is not relevant to the child's death but may be important in counselling and can be resolved from the Clinical history)

my emphasis KB → THE TRANSPLANT KIDNEY WAS INFARCTED (DEAD). THE EXTENT OF THE CHANGE SUGGESTED THAT THIS OCCURRED AT or BEFORE THE TIME OF TRANSPLANTATION. THIS COULD BE RESOLVED BY ENQUIRIES ABOUT THE FATE AND FUNCTION OF THE DONOR'S OTHER KIDNEY AFTER TRANSPLANTATION."

Continuation sheet (2) Research ~~Access~~ to inquiry docs

ADAM STRAIN

Inspected :- 8/12/2004

Correspondence

Dated 25.03.1996

To Mr J. Lockey

From Prof. F.J. Berry, Dept of Paediatric Pathology.

"May thanks for asking me to provide an opinion in this sad case. As you will see, I am unable to throw light on the cause of his child's death. I suspect that the answer lies in the precise details of his clinical management and the examination of his brain (Transplant Kidney) THAT I DOUBT THIS KIDNEY WOULD EVER HAVE FUNCTIONED, AND TO CONFIRM THAT HE DID INDEED HAVE SEVERE DISEASE of his own kidneys supporting the decision to carry out the transplant operation.

My emphasis

I would be pleased to comment further in the light of the final post-mortem report and neuropathology, but anticipate that you may well not ask me to do so.

ADAM STRAIN
Inspected : 8/12/2004

Correspondence:

Date : 13.12.1995 Grosvernor Road BT12

To: Dr Alison Armour, State Pathologist Dept: Inst. of Forensic Mec

From Coroner. J.L. Leckey.

Quote. Drs Gaston & Lyons felt that it would be most important to obtain a paediatric anaesthetic opinion and they pointed out that Dr John Alexander has little if any experience in this very Specialist field. . ALSO THEY MADE THE POI THAT THEIR CONSIDERED VIEW IS THAT DEATH ~~HAD~~ NOTHIN TO DO WITH ANAETHETICS. I GET THE IMPRESSION FR SOMETHING DR. DENIS O'HARA SAID IN PASSING THAT XC FINDINGS OF GROSS CEREBRAL OEDEMA COULD BE EXPLAINABLE BY THE TIME THE CHILD WAS ON THE VENTILATO

CRYPTIC? JS

? problem arising during induction (Dr O'Hara in conversation with JLL Coroner)
? equipment failure. ∴ independent examination of equipment - ordered → ou

Continuation Sheet (4) Research Records re Inquest Juvs. re ADAM STRAIN inspected 8/12/04.

Witnesses for Inquest on 18 June 1996

on ADAM STRAIN (4) [redacted]

DoD: 28.11.1995 @ RVH : BHSC

① Constable S. R. TESTER - c/o R.V.C Grosvenor Road

② Debra STRAIN - [redacted]

③ Dr. ALISON ARMOUR (S.R) - Depr. STATE Pathology. Inst. F.M. BT

④ Dr EDWARD SUMNER - Consultant Paed. Anaesthetist Great Ormond Street Hospital. WC1 N 3JH

⑤ Dr JOHN ALEXANDER - [redacted]

⑥ MR. P. F. KEANE - Consultant UROLOGIST SURGEON. B.City

⑦ Dr MAURICE SAVAGE - Consultant Paed. NEUROLOGIST, BHSC

⑧ Dr R. H. ('Bob') TAYLOR - Consultant PAED. ANAESTHETIST) BHSC

Correspondence with

(a) Dr George Murnaghan, Unit Administrator, RVH

(b) Mrs Susan Young " " BCH

(c) Francis Hanna & Co SOLICITOR for STRAIN family.

⊗ (d) Professor. P.J. BERRY, Directorate of Pathology. Consultant Paed. Pathologist. St Michael's Hospital, SOUTHWELL St. BRISTOL BS2 8E

(c) Report Dr John Alexander Consultant (Attached) ARIEFF BMJ 14. 'The operation was difficult and prolonged'

C3 (d) Dr Edward Sumner. 22. January 1996. Great Ormond St London.

(e) Dr Jane Debra STRAIN's statement 17/01/96.

DEPOSITIONS by

① Dr. R. H. TAYLOR. given 21. June 1996 21. June. 1996

② Constable (R.U.C) Stephen Richard TESTER 18 June 1996.

③ DEBRA STRAIN - Adams mother. 18. June 1996

④ Dr ALISON ARMOUR - (SR) State Pathologist 18 June 1996

⑤ Dr EDWARD SUMNER. Paed Anaesth. Gt Ormond 18 June 1996

⑥ Dr JOHN ALEXANDER Anaesth. B.CH. 18 June 1996

⑦ (X) Mr. P.F. KEANE UROLOGIST (Sx) BCH. 18 June 1996 (X)

⑧ Dr MAURICE SAVAGE Renal Physician BHSC 21 June 1996.

... " para (2) ...

Since Adams death these would be measured more frequently (ELECTROLYTES) I HAVE DISCOVERED THAT

! IN THE UK THERE HAVE BEEN (9) OTHER DEATHS from AN APPARENTLY SIMILAR CAUSE THOUGH THESE HAVE NOT BEEN PUBLISHED)

para (4).

" With the benefit of hindsight the sodium became too low"

MR BRANGHAN

para (3) " The INFORMATION ABOUT The (9) OTHER DEATHS WAS TOLD TO ME VERBALLY LATER. - IT WAS NOT PUBLISHED.

(9)

FRENCH ⇒ Editor DR TED SUMNER. + ARIEFF Comments Ed.
CASE REPORT. "Severe hyponatraemia after plastic surgery in a girl
1996 with cleft palate, medial facial hypoplasia and
Growth retardation."
by ① ALexandra GOMOLA. - Dpt. Anaesthesia & IC.
Dept. Paed Endoc, Sylvie CABROL - Hôpital d'enfant Armand TROUSSEAU
Corresp ⇒ ② Professor Isabelle MURAT - Hôpital d'enfant Armand TROUSSEAU
26 avenue. du Dr Arnold Netter
75571 Paris: Cedex 12: France
Tel. [redacted]
Fax

"In conclusion, inappropriate secretion of ADH may occur
in EVERY SURGICAL PATIENT"
ref. SOROKER D, EZRI T, LURIE S, FELD S, SAVIR I,
'Symptomatic hyponatraemia due to inappropriate ADH.
following minor surgery" CAN J. ANAESTH.
1991; 238: 225-226

COMPUTERISED PRINT-OUT attached to Deposition of DR BdO TAYLOR
27. Nov. 1995.

8¹⁵ AM It appears that @ about 8¹⁵ AM - HR began to ↓ drop (gradually
- BP began to ↑ (mm Hg)
[? onset of Cerebral oedema - possible ⇒ raised intracranial press

9¹⁰ AM Abrupt raise ϕ in Blood pressure (mmHg)
Continuing fall in ϕ HR (heart rate):
* 9³⁵-10⁰⁰ Significant rise in CVP (Central Venous Pressure @ neck) ? ACTION? taken @ 10⁰⁰ AM
11⁴⁵ AM OPERATION MONITORING CONTINUED UNTIL ~ 11⁴⁵ AM

Continuation Sheet (6) Research Access to Inquest Docs . on

ADAM STRAIN.

inspected 8/12/04

MEDICAL REPORT.

22. January 1996.

Dr Edward Sumner, Great Ormond Street.

REPORT of AUTOPSY (held 29. Nov 1995)

by. Dr. ALISON ARMOUR. MB BCh. MRC Path DMJ (Path)

reg. med pract. State Path. SR

I (a) CEREBRAL OEDEMA.

due to

(b) DILUTIONAL HYPONATRAEMIA AND IMPAIRED CEREBRAL PERFUSION DURING RENAL TRANSPLANT OPERATION FOR CHRONIC RENAL FAILURE (CONGENITAL OBSTRUCTIVE UROPATHY)

NB. finding — 'The onset of cerebral oedema was caused by the acute onset of hyponatraemia from the excess administration of fluids containing only very small amount of sodium and was exacerbated by blood loss and possibly the overnight dialysis and obstruction of venous drainage to the head'

(ii) DRAFT STATEMENT [C5] ? RVH. The Royal Hospital TRUST

date?

" In the light of the rare circumstances encountered in the Adam Strain case, and having regard to the information contained in the paper by ARIEFF et AL, (BMJ 1992) and additionally having regard To information which has recently come to notice that perhaps there may have been nine OTHER CASES in The United Kingdom involving hyponatraemia which led to death in patients undergoing RENAL TRANSPLANTS, The Royal Hospital Trust wish to make it known that:

— in future all patients undergoing major paediatric surgery who have a potential for electrolyte imbalance, will be carefully monitored according to their clinical need, and where necessary, intensive monitoring of their electrolyte values will be undertaken, Furthermore

PTO

continued from overleaf

Furthermore, the said known complications of hypnotherapy in some of these cases will continue to be discussed in each patient, and all anaesthetic staff will be made aware of these particular phenomena and advised to act appropriately.

The Trust will continue to use its best endeavours to ensure that operating theatres are afforded access to full laboratory facilities to achieve timely receipt of reports on full blood picture and electrolyte values thereby assisting rapid anaesthetic intervention where

END necessary."

[Signature difficult to read
?? Bert O'Flynn ??

Continuation sheet (7) Research Access to Inquest Docs. on ADAM STRAIN
inspected 8/12/2004

DEPOSITION by Mr. Patrick. F KEANE. 18th June 1996.
under OATH: Consultant Urologist c/o BCH Dept of Urology
@ Inquest

" I was asked to Transplant this 4 year old boy on Monday 27 Novemeber 1995. The operation started at 7.30 am and was technically very difficult because of previous surgery that this young boy had. However, despite the technical difficulties the kidney was successfully put into the child and perfused quite well initially and started to produce urine. At the end of the procedure it was obvious that the kidney was not perfusing as well as it had initially done, but this is by no means unusual in renal transplantation. The whole operation/procedure took about 3 hours. I was informed later on that day that the child had severe Cerebral edema and that he was probably Brain dead

[Letter to Mrs. S. Young, Complaints Officer, Afford. Tuse Block 11 December 1995 - Same as above plus " IN SUMMARY THEREFORE, THE OPERATION WAS DIFFICULT BUT A SUCCESSFUL RESULT WAS ACHIEVED AT THE END OF THE PROCEDURE "

(*) ADDITION to Transcript given orally at Inquest.

" Monitoring of urine during transplant procedure is never done.

MISS HIGGINS:

'The Operation would have started between 7.45 AM and 8.00 AM. I do not believe that surgery of that nature should be undertaken at 2/3 or 4 am if possible. In this case the kidney being transplanted had been removed from within a normal time period before surgery. The blood Loss of 1200 cc was not all blood but contained fluid as well. I was not aware of Ariff's paper. In the light of Adams experience the factors in that paper would be carefully considered in future