



**Business Services
Organisation**

Directorate of Legal Services

— PRACTITIONERS IN LAW TO THE
HEALTH & SOCIAL CARE SECTOR —

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Your Ref:
AD-0154-10

Our Ref:
NSC B04/1

Date:
3 November 2010

Ms Anne Dillon
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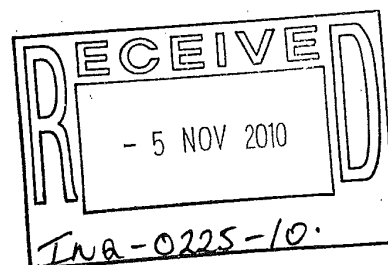
Dear Madam

RE: INVESTIGATION INTO THE DEATH OF ADAM STRAIN

I refer to the above and to your letter of 20th July 2010.

In answer to the questions posed:

1. The normal procedure for ensuring that laboratory test reports are inserted in the patient's files is according to the following procedure:
 - a.) Results received daily onto the ward by post from laboratories.
 - b.) Results are sorted by the ward clerk to group patient results together and attached to a clip at the nurses' station for signing by medical staff.
 - c.) Once the results are signed by the medical staff they are then filed into the patient's medical records at the back of the chart.
 - d.) Results are signed and filed on a daily basis (except at weekends when there is no ward clerk cover).
2. The date of knowledge of the staff of the Belfast Trust involved in Adam Strain's care (both medical and administrative) that the paper reports of two of the three blood tests which were performed on the evening of 26th November 1995 were missing is 6th July 2010 when the Trust received the Inquiry's request for a copy of the electrolyte report of 26th November 1995.
3. There was no effort made to locate the two result paper reports prior to 2000 (see answer to 2).



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4. The Inquiry is in possession of the Trust's files on the Inquest with Index RGH 14 and Medical Negligence action with Index RGH 15 and there is no reference to the paper records of the blood results contained in either of them.
 5. The blood gas analyser was routinely checked on a daily basis or more frequently if the machine required a calibration by a technician on duty in RBHSC. There were three Medical Technical Officers employed at the time however the log book confirming the person responsible on the day has not been retained.
 6. The anaesthetist who used the results from the blood gas analyser machine which analysed Adam Strain's blood sample on 27th November 1995 was Dr. R. Taylor. He knew from common knowledge that the analyser only produced accurate readings for blood gases and that the sodium reading would be inaccurate because of the anticoagulant heparin present in the blood gas syringe. He does not recollect when he became aware of this but he knew it at the time of Adam Strain's transplant.
 7. The blood gas analyser itself produces accurate readings of the content of samples. All clinicians using the analyser would be aware that when the specimen submitted for analysis contained additional material such as heparin added to the blood gas syringe the results for electrolytes would be inaccurate. The Trust holds no documentary material relating to use of the Instrumentation Laboratory analyser (not now in use) or whether they advised in relation to heparin (a) or the margin of error from the presence of heparin (b).
 8. The Trust has no record that the RBHSC was told or how clinicians would become aware of this knowledge but there is a general awareness among clinicians that different specimens are transported in different containers for analysis and that results are interpreted with regard to this. In this situation as the clinician adds the heparin to the blood gas syringe they will be aware that they are adding electrolyte content. This however does not affect the blood gas results.
 9. The location in RBHSC of the blood gas analyser used during Adam Strain's treatment was in the corridor between the PICU staff room and PICU (position marked on the RBHSC plan already submitted).
 10. The doctors who used the blood gas analyser were trained by the MTO's during their induction to PICU/Theatres. There are no records of those trained and authorized to use the machine.
 11. The length of time to obtain an electrolyte result from theatres was variable and depended on several factors involving portering, time of day, weekend and holidays

and the laboratory workload. In 1995 it was usually obtained within 1-2 hours on a weekday 9-5.

12. In 1995 out-of-hours blood tests in Clinical Biochemistry were available and done by an 'on call' MLSO. At that time not all MLSOs are thought to have stayed on-site for the whole evening; some may have gone home to have their evening meal or to have supper to await further calls by telephone.

In 1995 the paediatric Clinical Biochemistry lab was still open 9am-5pm in RBHSC but after 5pm the requests would have been analysed in the main RVH laboratory in the Kelvin Building.

All out-of-hours requests were made by arrangement (telephone), all results were phoned back to source. A hard copy result would not have been printed until the next day. Ward-based look up systems were not available in 1995. The turn-around time for urgent samples at the paediatric laboratory (RBHSC) should have been no more than 40 minutes for routine tests (such as U&E). If the sample had to be portered to the main laboratory then turn-around time would depend on when a porter was available but should certainly have been less than 90 minutes and probably less than 60 minutes

Yours faithfully

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