### THE INQUIRY INTO HYPONATRAEMIA RELATED DEATHS

## **CHAIRMAN: MR JUSTICE O'HARA**

#### SUMMARY TO CLOSING SUBMISSIONS

### **Preface**

We are asked to put on record again the appreciation of the Roberts family to the Inquiry, its counsel and solicitor and, of course, the Chairman, for the thorough investigation which was conducted into the death of Claire.

### **Background**

Claire Roberts was admitted to the Royal Victoria Hospital for Sick Children on 21 October 1996 at approximately 8pm. Within 32 hours she was dead. Claire's death was totally preventable. There were numerous opportunities throughout the time Claire was in hospital to arrest her deterioration and ultimate death. Claire died due to many individual failures on the part of her doctors and the nursing staff. She died because of systemic failure on the part of the medical staff and the individuals who were tasked with running the hospital. Not only did Claire's parents have to endure the death of their beloved daughter, but ultimately when they sought explanations as to why their daughter had died, they were provided with explanations which ultimately did not stand up to any form of scrutiny. As Mr and Mrs Roberts continued to seek answers, they were fobbed off, discouraged and provided with misinformation. Claire's death and the explanation given to Claire's parents afterwards is a shocking indictment of the clinicians providing treatment to Claire and the way her parents were treated afterwards. They say that they were the victims of a cover up. What other explanation could they take from the evidence that has been heard by this Inquiry?

## Failures and Shortcomings

There were numerous failures and shortcomings, some were more serious than others. The Inquiry's experts pointed out some failures and omissions up to and including the transfer to Allen Ward. However, these failures are more viewed in "hindsight" or counsels of perfection than anything else.

The failures Mr and Mrs Roberts would like to draw to the Inquiry's attention and which they consider to be pertinent are as follows:

 There was no Consultant available to examine Claire, either at admission or before, during or after the ward round. She was admitted under the care of Dr Steen yet Claire was not seen, examined or assessed by Dr Steen on Tuesday 22 October 1996 (see email: 139-131-001 dated 8<sup>th</sup> February 2005 from Dr Steen to Mr Walby that states, "I did not actually see or examine her"). Dr Steen is ultimately responsible for the standard and quality of care afforded to patients admitted under her care and therefore failed in her duties towards Claire.

- 2. Dr Sands was inexperienced and should not have been left without Consultant cover.
- Dr Sands failed to communicate either at all, or effectively, with Mr and Mrs Roberts. 3. In particular, Dr Sands failed abjectly to get across to Mr and Mrs Roberts that Claire was suffering from a serious "neurological condition". Dr Sands testified that he was of the view that Claire was the "sickest child in the ward". This impression, or should we say opinion, was never communicated to Mr and Mrs Roberts nor did Dr Sands' actions during the course of 22 October 1996 support such a view. It is accepted that Dr Sands considered himself to be "out of his depth" and thus sought advice from Dr Webb. At this point Dr Sands' misinterpretation of the previous night's blood test and failure to order a repeat one is passed onto Dr Webb. Having sought this advice, however, it would appear that Dr Sands to a large extent left it to Dr Webb to provide treatment. Dr Sands left it to Dr Webb to examine Claire, to diagnose her condition and provide a treatment plan. He, the lead paediatrician in Claire's team in the absence of Dr Steen, was away from the ward for much of the afternoon owing to a Dr Sands returned at 17.15 or thereabouts, administered teaching commitment. sodium valporate to Claire and then left the hospital. Before going off duty there were no details of any handover to his colleagues documented despite believing that Claire was "the sickest child in Allen Ward". This was a fundamental breach of care as the succeeding team do not appear to have been put on notice of the gravity of his concern regarding Claire, nor could they learn of it by reference to her notes. At no time did Dr Sands point out to Dr Steen how ill he thought Claire was nor would it appear he pointed this out to anyone else on the ward, because if a 'phone call took place between Dr Sands and Dr Steen that afternoon, or if Dr Steen contacted the ward that afternoon, she was not advised as to Claire's condition. In summary, therefore, if Dr Sands believed Claire to be the "sickest child on Allen Ward", it is something he kept very much to himself and seems to have left the treatment to Dr Webb. At no point did Dr Sands seek a blood test or review Claire's fluid management throughout that day.

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- 4. If Dr Sands thought that Claire was the "sickest child on Allen Ward", why did he not order or ensure that blood tests were ordered, even on the misunderstanding that the results in the notes were of a test that morning? If Dr Sands held this view, did he not communicate it to Dr Webb?
- 5. Dr Webb failed to carefully and accurately read Claire's notes. Had he done so he would have appreciated that the last blood test taken was the previous evening and should therefore have insisted on an urgent blood sample being taken. Why did he not, during the course of the day, order any blood tests, especially if Dr Sands had told him of his concerns? How could it be that, despite numerous reviews after

Claire's death, a review by Professor Young in 2004 and a full hearing at the Coroner's Court that no witness seemed to recognise the fundamental mistake in relation to the blood tests.

- 6. If Dr Sands believed Claire was suffering from "encephalitis or encephalopathy" (something of which he knew little or nothing) why did he not inform the senior nurse on the ward of this and ensure that a careful eye was kept on Claire? Why did he not ensure that he made urgent contact with Dr Steen urgently? Why did he not leave a message with the nursing staff to ensure that Dr Steen was contacted and fully advised?
- 7. Why did Dr Sands not go through Claire's notes with Dr Webb? Had they done so, one ought to have noticed when the blood tests were actually taken. Why did Dr Sands allow Dr Webb to proceed on the fundamentally erroneous notion that the blood tests had been taken that morning and that they were normal?
- 8. Before leaving the ward, why did Dr Sands not review the notes? Had he done so he would have noticed that Dr Webb failed to order any blood tests. Given the gravity of concern he had for Claire, why did he not order new tests? Once again, we highlight the fundamental fault in the review process in not recognising the errors in the notes, not only relating to the blood tests, but also the additions to the notes, the failure to sign some of the notes and the timing errors.

# Mis-information to the parents on 22 October 1996

- 1. Why were Claire's mother and father not told about how serious the medical staff perceived her condition to be? If Dr Sands' opinion was such, why did he speak to the parents only briefly at the ward round and not again?
- 2. Why was Claire's condition allowed to deteriorate during the morning? If Claire was perceived to be the "sickest child on Allen Ward" and / or was suffering from "encephalitis or encephalopathy" why were the parents not informed and more importantly, why were they allowed to go home if Claire was very ill?
- 3. Why were the parents told Claire had had "a good night" when she did not; that she had "slept well" when she had not? Are these empty platitudes perfunctorily told to all parents arriving in the morning time regardless of the level of attention afforded to the patient?
- 4. Why was consultant intervention not instigated much earlier? The explanation for this may be that no one at the time actually appreciated how ill Claire actually was notwithstanding the fact that Dr Sands has repeatedly said that she was the "sickest child on the ward". Dr Webb believed that he was treating Claire properly and that

her mortality risk was a "less than 1% chance" and he expected that she would fully recover. Why did Dr Webb fail to realise how ill Claire really was?

# Claire's management - review of the use of No 18 IV Fluids

There was no effective review of Claire's fluid management. No balance chart was provided; no urine output was measured and there was a very poor record kept of her fluid input. Claire had been vomiting since 15.30 on the Monday, six occasions of vomiting were recorded throughout Monday night and on Tuesday morning was drowsy. Some of the medical staff who gave evidence at the Inquiry considered Claire to be a child who was at risk of electrolyte imbalance. She was a child who was worsening overnight and getting progressively worse during the day. Why, in those circumstances, was no review ever considered of Claire's fluid management?

This surely begs the question as to the respective doctors' degree of knowledge of hyponatraemia, No.18 IV solution and the need to keep an accurate fluid balance record. It also impacts enormously on the failure to investigate, properly report and disseminate the death of Adam Strain. This is where the "lesson learnt" after the death of Adam Strain may have had a critical impact on the way Claire's condition was managed. The dangers associated with low sodium levels, and the rate at which it falls, in paediatrics was settled science even in the mid 1990s. It cannot be regarded as novel. Had the Royal conducted a full and effective learning process from Adam's death the dangers associated with low sodium would have returned to the forefront of the clinicians' minds and would have been prevalent in their treatment plans. Bearing in mind that Adam's inquest was held in June 1996 and Claire was admitted in October 1996, the consequence of the Royal's inaction in this regard could scarcely be more striking.

Further, if "encephalitis or encephalopathy" becomes the "working diagnosis" would that not in itself require review of Claire's fluid regime? None was ever done. If the words "encephalitis or encephalopathy" were entered onto Claire's records when Dr Sands said they were, then why was there no measures taken to account for the differential diagnosis.

## **Diagnostic Testing**

The approach taken to Claire's treatment may accurately be characterised as a "wait and see" one. This is supported by the very fact that Dr Webb, in his draft deposition to HM Corner, had-included-an expression of regret that he had not referred-Claire to-PICU on Tuesday prior to her crash (a helpful expression which was removed at the suggestion of the Mr Walby, the litigation manager). It is also exemplified by the diagnosis of non-fitting status and treatment of this without confirmation by EEG/CT scan. This compounded matters and masked Claire's underlying condition. This diagnosis and treatment probably provided staff with a false sense

of security. Had Claire not been so heavily sedated, Glasgow Coma Scores could have been more accurately recorded.

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Furthermore, if Dr Sands and/or Dr Steen genuinely believed that Claire died from status epilepticus or, alternatively, that this condition had a major impact on Claire, then having regard to their very limited experience of this condition, would one not expect a thorough review of Claire's case and a full post mortem? Why was this not done?

## Failure to communicate with parents

Failure to communicate between various members of staff in all of the hospitals that have been under scrutiny in this Inquiry and failure to communicate between staff and parents has been a common theme. In Claire's case it would seem that no one within the Royal Belfast Hospital for Sick Children communicated any serious concerns they had about Claire's condition to Mr and Mrs Roberts. There is no excuse whatsoever for this. If Dr Sands genuinely believed how seriously ill Claire was then he should have informed the parents and made sure the parents understood how ill Claire was. It is Mr and Mrs Roberts' firm belief that not only Dr Sands, but none of the hospital staff who were on duty appreciated how ill Claire was. There was a total misunderstanding of the seriousness of Claire's condition. Taking Dr Sands' evidence that he thought Claire was the sickest child in Allen Ward, there was a lamentable lack of communication between the clinicians and to the parents. This led to the parents leaving the ward at approximately 21.30, content that Claire was in the safest place and having no concerns for her wellbeing. There was a further breakdown in communication with the failure to contact Mr and Mrs Roberts until 03.45 on the 23rd October when Dr Bartholome phoned to tell them that Claire was having breathing difficulties.

This failure to communicate with the parents works both ways. Not only did the doctors and nurses not advise the parents of Claire's condition, they did not listen to their views about Claire's history and neither did they properly listen and act upon matters such as the seizure that Claire suffered around 15.25 on the 22<sup>nd</sup> October. Mr and Mrs Roberts firmly believe that the seizure of 15.25 was a direct consequence of the gross overdose of Midazolam, administered at an inappropriate rate, combined with the cerebral oedema caused by hyponatraemia. This probably led to a failure to review or investigate the Glasgow coma scale. It is accepted that such a scale has its limitations but it is nonetheless "a sign" that things are not improving and professional intervention is required. This was not done in Claire's case - why? The Inquiry has never been supplied with an explanation as to why nothing was done on the part of the nursing staff or medical staff. The parents are convinced that the various overdoses of drugs that were administered to Claire had a substantial effect on her and probably masked other serious symptoms. She got a 50% overdose of Phenytoin and at least a 300% overdose of Midazolam. There is also some evidence to suggest that she may have had an even greater overdose of Midazolam in that 120mg is recorded, but unsigned, which is more than 30 times that which is prescribed. Dr Aronson has commented upon this area of the Inquiry and no matter what interpretation the Inquiry takes from the notes and the evidence of Dr Aronson, there can be little doubt that Claire was totally failed in relation to the prescription of drugs and that the overdoses she received were a factor in causing her death.

# Overdose of Drugs: Medical Records - Accuracy or Otherwise

During the course of 22 October 1996, Claire's condition was not properly diagnosed, she was mistreated despite the numerous opportunities available for intervention and help. (See the transcript of Dr Scott-Jupp, page 171 L13-20 / T12/11/12.)

The mistakes in relation to the various overdoses of medication, the mode of administration of that medication and the fluid mismanagement were well established during the course of the evidence given to the Inquiry. The Inquiry will be acutely aware of the various explanations offered by the clinicians on these issues. It is astounding that none of these faults, omissions and mistakes were picked up during the various reviews carried out in 1996 and 1997, the review carried out by Professor Young in 2004 and the review of all of the evidence that took place at the Inquest in 2006. Through the present Chief Executive of Belfast Health & Social Care Trust, Mr Colm Donaghy, the Trust has fully apologised for all of those errors and omissions and has conceded liability and admitted that there were failures in Claire's treatment. Where the blame should fall, by reason of those various mistakes is a matter for this Inquiry to determine, but Mr and Mrs Roberts believe that these failings, errors and omissions are not things that can be ignored at this stage. There must be accountability and culpability.

## **Conclusions**

The clinicians failed to diagnose Claire accurately and failed to implement the appropriate treatment. They failed to carry out the correct tests. They mis-diagnosed, mistreated and overdosed Claire with drugs, which exacerbated her condition – a simple blood test would probably have saved Claire's life. The simplicity in taking a blood sample and the ease and speed with which it can be analysed makes it all the more difficult to understand why this was not done. The Inquiry has revealed a catalogue of errors during the course of 22 October 1996 - failure to diagnosis, wrong diagnoses, neglect, failure to carry out tests, interpret clinical signs, overdose the patient with drugs, treat, call, communicate, compile notes, add to notes, misinterpret notes and alert medical staff. Mr and Mrs Roberts believe that in the aftermath of Claire's death the medical staff realised that errors had been made and thereafter attempted a "cover up".

In 1996 and 1997 Dr Steen told Mr and Mrs Roberts that everything that could have been done was done for Claire. In 2004 she again reiterated that her condition was not underestimated and treated accordingly. This was patently incorrect.

- 1. The case should have been referred to the Coroner. Even on the most basic analysis of the facts and looking at the evidence that has now been given to the Inquiry it is difficult to understand why Claire's death was not referred to the Coroner. Dr Webb expected Claire to make a full recovery and he was the last Consultant to see Claire before she was admitted to the PICU. Thereafter, when he was discussing the case with Dr Steen, reviewing the case and analysing the medical notes and records, it must have been obvious to both of them that Claire's death was sudden and unexpected. That alone should have prompted referral to the Coroner and signalled that a full post mortem was necessary.
- 2. Dr Steen decided that a post mortem limited only to examination of the brain was required.
- 3. Dr Steen formulated the cause of death for the purposes of the post mortem.
- 4. Claire's death was not reported by Dr Steen to her Clinical Director or to the Medical Director. Her death only became the subject of a SAI in 2006.
- 5. The autopsy request form, complied by Dr Steen, was inaccurate and misleading. It was from this that the Pathologists took information which was positioned to lead them in a certain way towards a viral cause of death. The Inquiry experts have discounted a viral cause for Claire's death.
- 6. No internal investigation was carried out in relation to Claire's death. In fact, none of the medical staff on the ward that day, including Dr Sands, was ever spoken to. Even in pre-governance days this admission is stunning.
- 7. It is highly questionable whether a mortality meeting in relation to Claire took place but even if it did, it would have been meaningless.
- 8. Mr and Mrs Roberts were given erroneous information by Dr Steen following on from the post mortem. In particular, Dr Steen did not mention anything about low sodium (a similar explanation was given by Dr Steen to Dr McMillan, Claire's GP by letter dated 6 March 1997 090-002-002).

The only conclusion that one can reasonably reach is that Dr Steen wanted Claire's unexpected/unexplained death to be "brushed under the carpet" and this would have been the case but for the documentary by the UTV Insight programme broadcast in 2004 "When Hospitals Kill". This "cover up" continued and Mr and Mrs Roberts believe that this is exemplified by:

(i) The meeting at the hospital that occurred on the 7 December 2004. At that meeting, Dr Steen maintained her position as to the cause of Claire's death. Claire's death was caused by a virus. Claire's parents were not told:

- (a) About the failure to obtain a blood sample. (This is contrary to the evidence Dr Steen gave to the Inquiry T17/10/12, page 125 L8 17). This begs the question if the doctors knew at that meeting (which Dr Steen told the Inquiry they did) why were the parents not told this? More importantly, why was the Coroner not told this? It would seem that there was acceptance, by the doctors, at the meeting in December 2004 that there had been mismanagement of fluids. Why were the parents not told and again, why was the Coroner not told during the Inquest in 2006?
- (b) During the course of the December 2004 meeting, and subsequently at the Inquest, none of the doctors accepted that anything had gone wrong during Claire's treatment. This is contrary to Dr Steen's evidence given at the Inquiry T18/12/12, page 99 L4 L14).
- the Royal Victoria Hospital on 7 December 2004 was to provide an explanation as to how their daughter had died and to alleviate any concerns that the parents may have had. They were led to believe that Professor Young was independent. Clearly (and on a review of the file 139 and 140) he was not. Mr and Mrs Roberts believe that this meeting was carefully choreographed and that Professor Young was part of this; the purpose of the meeting was not to provide the parents with a full explanation but to defend the hospital's position, even emails passing between the doctors and Mr Walby are headed "Claire Roberts (deceased) v The Royal Group of Hospitals". At this stage the family were not contemplating issuing proceedings and, in fact, it was nine years before the family issued proceedings. They would not have sued the Trust had the Trust apologised and admitted fault.
- (d) Mr and Mrs Roberts believe the meeting was designed to put them off any further digging into Claire's death. At the meeting, Dr Steen actively encouraged the parents not to take the matter any further.
- (e) Furthermore, in the light of the serious mis-management of Claire's treatment and the complete absence of any management of her fluids and the catalogue of mistakes that were made and failure to treat Claire from 22 October 1996 onwards, that the "review" was at best superficial. Mr and Mrs Roberts will call into question the bona-fides of this review which failed to identify the most basic mistakes such as drug overdoses, major faults in the record-keeping with notes not signed, later additions to the notes and the mistake in relation to the repeat copying of the blood test results that were done the day before.

## (ii) Inquest 2006

At the inquest, the Royal Group of Hospitals had the opportunity to set the record straight. They had the opportunity:

- (a) To admit that fluid mis-management was the cause of Claire's hyponatraemia and cerebral oedema;
- (b) To admit the failure to take a timely blood sample and the doctor's failure to recognise that the blood sample that they relied upon had been taken the previous day;
- (c) To admit to the diagnostic errors, drug overdoses, poor record keeping and lack of communication.

In fact, at the Inquest, the hospital, its doctors and staff maintained their position that there was no fault in the treatment of Claire during her admission at the Royal Belfast Hospital for Sick Children. Dr Steen told the Coroner (140/043/001) that Claire's fluid management was "normal" and there was "no issue of fluid management at the time". (This is entirely contrary to Dr Steen's evidence to the Inquiry).

Mr Walby's evidence to the Inquiry encapsulates this defence-minded attitude (139/156/001 onwards). Further, Mr Walby's editorial stance of the witness statements reflects this defence-minded attitude. The contents of the Royal's litigation file – File 139 – are the physical manifestation of this. What is contained is in stark contrast to the evidence given by Dr Murnaghan where he stated "mea culpa". Why did Claire's parents have to wait until 2013 to hear an admission that the Trust had failed Claire in the treatment they provided to her in 1996?

The answer, of course, is that the Hospital Trust would not have made such an admission unless the weight of evidence was so against them. They acquiesced in a "cover up" from the very top level to the bottom of the nursing ranks. They failed Claire in 1996, 1997, 2004, 2006 and, had it not been for the thorough investigation carried out by this Inquiry, the failings in Claire's care may have never come to light.

It remains the fact that the cause of death recorded on Claire's death certificate is not correct—and—the Roberts'—family—now have two—incorrect—death—certificates:—It—is respectfully submitted that the Attorney General should consider a review of the Inquest verdict and order a new Inquest to allow this death certificate to be revised.

Reviews and investigations should be carried by the Health & Safety Executive and the General Medical Council. There are difficult issues that need to be tackled, but

we call upon the Inquiry, once the evidence is reviewed, to come to the conclusion there should be further investigation and reviews by the relevant authorities.

STEPHEHN QUINN QC MICHAEL MCCREA BL JOHN FERGUSON, SOLICITOR 3 DECEMBER 2013