CLAIRE ROBERTS

Contents

Introduction

3.1 Claire Roberts was born on 10th January 1987, the youngest child of Alan and Jennifer Roberts. She was admitted to the Royal Belfast Hospital for Sick Children (the 'Children's Hospital') on 21st October 1996[1] with symptoms of vomiting and lethargy and died there two days later.[2] Her death was not reported to the Coroner.[3] The post-mortem examination was confined to her brain[4] and a Death Certificate was issued citing cerebral oedema secondary to status epilepticus as the cause of death.[5] Mr and Mrs Roberts never quite understood from what they were told at the Children's Hospital what had happened to Claire or why she had died.[6]

3.2 Eight years later, on 21st October 2004, they watched the documentary 'When Hospitals Kill' on Ulster Television. The programme focused on the deaths of Adam Strain, Lucy Crawford and Raychel Ferguson and on whether the circumstances of their deaths might have been the subject of a cover-up. Mr and Mrs Roberts were struck by similarities between Claire's death and those others featured in the programme. They contacted the Children's Hospital the next day.[7] In consequence, Claire's death was re-considered and referred to the Coroner.[8] An inquest was held in May 2006 and a verdict given that death was caused by:

"*(a) cerebral oedema due to*

(b) meningoencephalitis, hyponatraemia due to excess ADH production and status epilepticus."[9]

1 090-014-020
2 090-009-011
3 090-045-148
4 090-054-185
5 091-012-077
6 WS-253-1 p.17
7 WS-253-1 p.17
8 089-004-008
9 091-002-002

The addition of Claire's case to the Inquiry

3.3 When this Inquiry resumed in 2008, having been stayed for three years to permit Police investigation into the other cases, I added Claire's death to those I had been tasked to investigate.[10] I did so because hyponatraemia had contributed to her death and because she had died in the same hospital as Adam, just four months after the inquest into his death. In addition to my concern about the treatment Claire had received, I was troubled by the obvious failure to report Claire's death to the Coroner in 1996 and what was revealed at her inquest ten years later.

Expert reports

3.4 The Inquiry, guided by its advisors, engaged experts to appraise the involvement of the doctors and nurses involved in Claire's care, particularly the Consultant Paediatrician,[11] Consultant Paediatric Neurologist[12] and the nurses on duty in Allen Ward. The experts were:

(i) Dr Robert Scott-Jupp[13] (Consultant Paediatrician of Salisbury District Hospital) who reported on the role and responsibilities of the Consultant Paediatrician and on paediatric medical issues.[14]

(ii) Professor Brian Neville[15] (Consultant Paediatric Neurologist and Professor of Childhood Epilepsy, Institute of Child Health, University College London and Great Ormond Street Hospital), who advised on neurological issues and the role and responsibilities of the Consultant Paediatric Neurologist.[16]

10 303-008-176
11 Dr Heather Steen - 310-003-003
12 Dr David Webb - 310-003-002
13 310-003-007
14 File 234
15 310-003-007
16 File 232

(iii) Ms Sally Ramsay[17] (Independent Children's Nursing Advisor) who provided a report on the nursing care.[18]

3.5 The Inquiry also engaged experts to address specific issues, including:

(i) Professor Keith Cartwright[19] (Consultant Clinical Microbiologist) who provided reports on the cerebral spinal fluid ('CSF') sample, the CSF report and changes in Claire's white blood cell count.[20]

(ii) Professor Brian Harding[21] (Consultant Paediatric Neuropathologist and Professor of Pathology & Laboratory Medicine, University of Pennsylvania) who provided a supplemental report to that provided by him to the PSNI on 22nd August 2007[22] dealing with the diagnosis of encephalitis in relation to neuropathological changes.[23]

(iii) Dr Waney Squier[24] (Consultant Neuropathologist and Clinical Lecturer, John Radcliffe Hospital, Oxford) who provided neuropathological opinion on histological slides.[25]

(iv) Dr Philip Anslow[26] (Consultant Neuroradiologist, John Radcliffe Hospital, Oxford) who interpreted the Computerised Tomography ('CT') scans of 23rd October 1996.[27]

(v) Dr Caren Landes[28] (Consultant Paediatric Radiologist, Alder Hey Children's NHS Foundation Trust), who examined and reported on chest x-rays taken at 03:50 and 07:15 on 23rd October 1996 and a CT scan taken the same day.[29]

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17 310-003-007
18 File 231
19 310-003-007
20 File 233
21 310-003-007
22 096-027-357
23 File 235
24 310-003-007
25 File 236
26 310-024-009
27 File 236-006
28 310-003-007
29 File 230

(vi) Dr Jeffrey Aronson[30] (Consultant Pharmacologist, Oxford University Hospitals NHS Trust) who provided a report on pharmacological issues and in particular the probable effects of the medication prescribed and/or administered.[31]

(vii) Dr Roderick MacFaul[32] (Consultant Paediatrician, now retired) who reported on governance considerations and in addition addressed incidental clinical issues.[33]

(viii) Professor Sebastian Lucas[34] (Professor of Clinical Histopathology and Consultant Histopathologist, Guys and St Thomas' Hospitals Trust, London) who provided expert opinion on the autopsy.[35]

(ix) Dr Audrey Giles (former Head of The Questioned Documents Section of the Metropolitan Police Forensic Science Laboratory; now Lead of the Giles Document Laboratory) who provided a handwriting analysis report.[36]

3.6 In addition the Inquiry had the benefit of two further reports prepared for inquest, by:

(i) Dr Robert Bingham[37] (Consultant Paediatric Anaesthetist at the Hospital for Sick Children, Great Ormond Street, London),[38] and

(ii) Dr Ian Maconochie[39] (Consultant in Paediatric Accident and Emergency Medicine, St Mary's Hospital London).[40]

30 310-003-007
31 File 237
32 310-024-009
33 File 238
34 310-024-009
35 File 239
36 File 241
37 310-024-010
38 091-006-023
39 310-024-010
40 091-007-031

Schedules compiled by the Inquiry

3.7 In an attempt to summarise the very considerable quantities of information received, a number of schedules and charts was compiled:

(i) List of Persons - Clinical[41] and Governance.[42]

(ii) Chronology of Events - Clinical[43] and Chronology of Hospital Management and Governance.[44]

(iii) Timeline of treatment (21st - 23rd October 1996).[45]

(iv) Schedule of Consultant Responsibility (22nd - 23rd October 1996).[46]

(v) Schedule of Medication.[47]

(vi) Schedule of Fluid and Medication Input.[48]

(vii) Timeline of Over-lapping Medication.[49]

(viii) Schedules of Expert Views on Cause of Death[50] & Cerebral Oedema.[51]

(ix) Schedule of Glasgow Coma Scale ('GCS') scores (22nd October 1996).[52]

(x) Schedule of Recorded Sodium Levels (21st - 23rd October 1996).[53]

(xi) Schedule of Blood Cell Counts (21st-24th October 1996).[54]

41 310-024-001
42 310-023-001
43 310-004-001
44 310-021-001
45 310-016-001
46 310-005-001
47 310-006-001
48 310-015-001
49 310-020-001
50 310-009-001
51 310-019-001
52 310-011-001
53 310-013-001
54 310-022-001

(xii) Cerebral Oedema Flow Chart.[55]

(xiii) Glossary of Medical Terms.[56]

3.8 All of the above schedules and reports have been published on the Inquiry website in accordance with Inquiry Protocol and procedures.

Clinical history prior to October 1996

3.9 When Claire was six months old, she suffered a number of seizures.[57] No clear cause was ever identified.[58] Her condition was assessed and controlled with Epilim (an anti-convulsant medicine) which stabilised her condition from July - September 1987.[59] The treatment worked allowing the Epilim to be reduced and then discontinued at least 18 months prior to her admission to the Children's Hospital in October 1996.[60] By then she had not suffered seizures of any sort for at least four years.[61]

3.10 Claire was also diagnosed with developmental delay and a moderate learning difficulty.[62] She attended Tor Bank School, which was able to cater for her needs and where she thrived. She was described as a happy, loving, vibrant and active child who enjoyed all sorts of outdoor activities, adventure playgrounds, trampolines and her motorised bicycle. She was said to have made a positive impact on all who knew her.

3.11 In May 1996, she was seen by Dr Colin Gaston,[63] Consultant Community Paediatrician, in relation to behavioural issues. In his letter to Claire's GP, Dr Gaston referred to her as having both moderate learning and attentional difficulties and suggested a brief trial with a stimulant medication such as Ritalin.[64]

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55 310-014-001
56 310-007-001
57 099-059-075
58 090-035-120-123
59 090-015-026-027
60 099-006-008
61 090-013-018
62 090-013-018
63 310-003-004
64 090-013-018

3.12 Dr Gaston saw the family again on 1st August 1996 and discussed some additional options with them.[65] Claire was then treated with Ritalin on a daily basis until 2nd October 1996 but by the time of her admission to the Children's Hospital on 21st October, she was no longer taking any medication.[66]

Admission to the Children's Hospital on 21st October 1996

3.13 On Friday, 18th October 1996, Claire suffered a loose bowel motion but without diarrhoea. The following day she visited her paternal grandparents for 3 or 4 hours[67] and came into contact with her 12-year-old cousin who had had a stomach upset earlier in the week. Claire spent the afternoon of Sunday, 20th October, with her maternal grandparents, having been to church in the morning. Her state of health over the weekend was regarded as normal[68] and she went to school as usual on Monday, 21st.

3.14 However, during the course of the school day, Claire's teacher noted her to be unwell and made a record in the homework diary, describing her as pale and lethargic.[69] When Claire returned home at approximately 15:15,[70] she vomited several times.[71]

Examination by GP

3.15 The family GP, Dr Deirdre Savage,[72] was called and examined Claire at home at approximately 18:00. She noted "*No speech since coming home. Very lethargic at school today. Vomited x 3 – speech slurred. Speech slurred earlier.*"[73]

3.16 Dr Savage described Claire as pale and photophobic on examination. She was unable to find any neck stiffness but did think Claire's tone was

65 090-013-016
66 090-022-050
67 WS-253-1 p.2
68 WS-253-1 p.2
69 WS-253-1 p.19
70 WS-253-1 p.2
71 WS-253-1 p.2
72 310-003-004
73 090-011-013

increased on the right side and suggested that Claire was perhaps post-seizure and/or had an underlying infection.[74] Mr and Mrs Roberts did not themselves think that she had suffered a seizure[75] but were advised to and did take Claire to the Children's Hospital.

Examination at Accident & Emergency

3.17 Claire entered the Accident and Emergency Department ('A&E') of the Children's Hospital at approximately 19:00 on Monday, 21st October 1996.[76] The initial nursing assessment recorded:

"*Medication- none... Epileptic... H/O off form and lethargy. GP referral with H/O seizure. Apyrexic O/A pale and drowsy. O/A mental handicap.*"[77]

3.18 She was seen by Senior House Officer ('SHO') Dr Janil Puthucheary[78] in A&E. This was his first posting and he had been there for 2 months.[79] He assessed Claire at 19:15[80] and took a history of severe learning difficulties and a past history of epilepsy. He noted that she was no longer taking anti-epileptic medication and had been fit-free for three years. Whilst he did not record diarrhoea, cough or pyrexia, he did note that she had been vomiting since earlier that evening and that her speech was very slurred. Indeed, he observed that she was hardly speaking.[81]

3.19 On examination, Dr Puthucheary noted that Claire was drowsy, tired and apyrexic, with no abnormality other than increased left sided muscle tone and reflexes. Whilst her pupils were reacting she did not like the light. Her tone was generally increased and her tendon reflexes were heightened on the left compared to the right. He observed Claire's plantar reflexes to be

74 090-011-013
75 WS-253-1 p.2
76 090-010-012
77 090-010-012
78 310-003-002
79 WS-134-1 p.2
80 090-012-014
81 090-012-014

reduced bilaterally, in contrast to the GP's observation of some asymmetry.[82]

3.20 Dr Puthucheary made a primary diagnosis of encephalitis on the basis of Claire's altered mental state. He noted the GP's finding of photophobia and her concerns about a possible fit or underlying infection.[83]

Admission to Allen Ward

Examination by Dr O'Hare

3.21 Dr Bernadette O'Hare[84] was then asked to review Claire.[85] She was the on-call Paediatric Registrar and had been a Registrar since December 1995.[86] Dr O'Hare examined Claire at 20:00 and took a history from Mrs Roberts.[87] Her note refers to Claire having vomited on an hourly basis since 15:00. There is a record of slurred speech, drowsiness, a loose bowel motion 3 days before and having been off-form the previous day. The history records that Claire was usually capable of meaningful speech and made reference to the recent trial of Ritalin.[88]

3.22 Dr O'Hare observed that Claire was unresponsive to her parents' voices, staring vacantly and responding only intermittently to deep pain stimulus.[89] She recorded Claire's pulse at 96 beats per minute, slowing to 80. This was within the normal range for a child of her age.[90]

3.23 She made an initial working diagnosis of "*1. viral illness 2. Encephalitis,*"[91] but then scored out her secondary diagnosis on the basis that it was unlikely in the absence of fever.[92] In addition, Dr O'Hare thought that she must also

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82 090-011-013
83 WS-134-1 p.7
84 310-003-002
85 090-012-014 & WS-134-1 p.5
86 WS-135-1 p.2
87 090-022-050
88 090-022-050
89 090-022-051
90 WS-135-1 p.7 - It should be noted in this context that a child with cerebral oedema and raised inter-cranial pressure might have been expected to have a slower pulse rate
91 090-022-052
92 WS-135-1 p.3

have considered the possibility of sub-clinical seizures at that time, because she gave a direction that Claire be given diazepam in the event of such a seizure.[93]

3.24 At about 20:45, Dr O'Hare decided to admit Claire.[94] Mr and Mrs Roberts were not expecting this.[95] Her admission was made under the care of Dr Heather Steen,[96] the on-call Consultant Paediatrician.[97] Dr Steen was not informed at that time or at any time that night about Claire's admission, condition or treatment.

3.25 Claire was formally admitted onto Allen Ward at 21:14.[98] Her nursing admission sheet was completed about 21:45 by her "*accountable nurse*"[99] Staff Nurse Geraldine McRandal.[100] The "*reason for admission*" was entered as "*? seizure, vomiting.*"[101]

3.26 Mr and Mrs Roberts stayed with her until she fell asleep at about 21:00. Before they left the hospital, they were told that Claire had a viral infection. They felt relieved it was not meningitis.[102]

3.27 Dr O'Hare directed a number of tests[103] including a full blood count, bacterial culture, viral titres and urea and electrolytes. It is likely that the blood sample for these tests was taken on Allen Ward at 22:30 at the same time as a cannula was inserted for IV fluids. [104] Claire was started on an IV infusion of Solution No. 18 at a rate of 64 mls per hour.[105]

3.28 Dr Robert Scott-Jupp, Consultant Paediatrician, provided favourable expert comment on Dr O'Hare's "*clear and competently set out*" admission

93 WS-135-1 p.3
94 090-012-014
95 Mr and Mrs Roberts T-31-10-12 p.28 line 14
96 310-003-003
97 090-014-020
98 090-014-020
99 090-041-143
100 310-003-005
101 090-041-142 to 143
102 096-001-004
103 090-022-052
104 090-038-133
105 090-038-134

notes.[106] However, he considered her initial investigation "*somewhat limited*" and thought, albeit with hindsight, that a diagnosis of encephalopathy and/or status epilepticus might have been included.[107] In addition, he indicated that would have expected more extensive biochemical tests to have been performed.[108]

3.29 Professor Brian Neville, Consultant Paediatric Neurologist, regarded Dr O'Hare's examination of Claire to be "*competent,*"[109] but considered:

(i) That hyponatraemia/cerebral oedema should have been considered as part of a differential diagnosis in light of Claire's vomiting and reduced consciousness.[110]

(ii) That Dr O'Hare should have contacted the on-call Consultant, Dr Steen.[111]

(iii) That a CT scan should have been performed to explore potential causes for Claire's reduced consciousness.[112]

(iv) That more extensive biochemical tests should have been undertaken.[113]

3.30 In considering these criticisms, I have taken account of the following:

(i) Dr O'Hare's competence has been acknowledged by both experts.

(ii) Professor Neville's specialism in paediatric neurology might lead him to be rather more alert to the range of possibilities than a paediatric registrar.

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106 234-002-002
107 234-002-002
108 234-002-002
109 232-002-003
110 232-002-003
111 232-002-004
112 232-002-004
113 232-002-003

(iii) The Children's Hospital did not have the night staffing necessary to conduct the suggested steps.

(iv) There was ample opportunity for the suggested failings in Dr O'Hare's approach to be remedied the following day.

3.31 In her oral evidence, Dr O'Hare agreed that, whilst it would have been reasonable to perform liver function tests,[114] her overall view was that the other tests suggested were matters to have been pursued the following morning had there been no improvement.[115] This has some force. It is relevant that in oral evidence, both experts were less critical than they had been in writing. Indeed, Professor Neville accepted that, on reflection, a CT scan was not required on Monday night but remained of the view that it should have been performed as soon as possible the following day.[116] By the time they gave their evidence, Dr O'Hare had given hers and explained in clear and reflective terms what she did and why. Her evidence was impressive as indeed was her engagement with the Inquiry in trying to understand how things had gone so terribly wrong. In the circumstances, I believe that it would be unfair to single her out for criticism.

3.32 There are many 'if onlys' about what happened to Claire, including that if only Dr O'Hare had contacted Dr Steen on the Monday night, as suggested by Professor Neville[117] (but not Dr Scott-Jupp),[118] Dr Steen might then have become involved from the start. However, I do not believe that it would be fair to blame Dr O'Hare in this regard because she could not possibly have known on the Monday night that at no point on the Tuesday would any consultant paediatrician have any contact with Claire.

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114 Dr O'Hare T-18-10-12 p.138 lines 15-18
115 Dr O'Hare T-18-10-12 p.155 line 13
116 Professor Neville T-01-11-12 p.70 line 12
117 232-002-007
118 Dr Scott-Jupp T-12-11-12 p.39 lines 1-9

Review at midnight

3.33 Dr O'Hare reviewed Claire at midnight. She found no signs of meningitis and recorded a slight improvement in responses. On that basis, she suggested that Claire be observed overnight and re-assessed in the morning.[119]

3.34 It is thought that shortly after midnight, the results of the blood tests became known. They were recorded in Claire's notes as:

"*NA [Sodium] 132↓ IC+ [Potassium] 3.8 U [Urea] 4.5 Gluc [Glucose] 6.6 Cr [Creatinine] 36 Cl [Chloride] 96 Hb [Haemoglobin] 10.4 PCV [Packed cell volume] 3^ WCC [White Cell Count] 16.5↑ Plate [platelets] 422.000.*"[120]

The entry was made immediately below the record of Dr O'Hare's midnight review. However, the entry is untimed with the result that the timing of the test sample itself is not immediately apparent. It is unclear who made the written entry[121] but it does not seem to have been either Dr O'Hare or the SHO Dr Andrea Volprecht,[122]

3.35 Of note, was the serum sodium reading of 132mmol/l[123] which was just below the normal range of 135-145.[124]

3.36 Notwithstanding some difference of opinion, I accept that the slightly lowered sodium level was not one that should have triggered any further action or investigation that night. Furthermore, I accept that it was reasonable to leave the IV fluid infusion of Solution No. 18 unchanged at 64mls per hour.[125] However, I do find that the lowered serum sodium reading was a marker to be followed up the following morning.

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119 090-022-052
120 090-022-052
121 Dr O'Hare T-18-10-12 p.153 & Dr Volprecht T-01-11-12 p.17
122 310-003-002
123 090-031-099
124 090-031-099
125 090-038-134

3.37 The other blood test result of note was the white cell count ('WCC') which was high at 16.5 (normal range 4 - 11).[126]

3.38 Whilst Dr Volprecht did not enter the Urea &Electrolyte ('U&E') results into Claire's records, she did add the downward pointing arrow beside the "*132*" and the upward pointing arrow beside the "*16.5*" WCC, to indicate that the readings were outside the expected range.[127] The balance of the evidence was that this should have acted as a reminder the next morning to re-test to see if Claire's sodium had fallen further.[128] Indeed, Dr Volprecht assumed that a repeat U&E test would be undertaken in the morning.[129]

Fluid management on 21st October 1996

3.39 On admission, Dr O'Hare had directed IV fluid management and suggested that any seizure activity be treated with intravenous diazepam. She also indicated the necessity to review after administration of fluids.[130]

3.40 Claire's 'Nursing Care Plan' allowed for the administration of *'IV fluids as prescribed by doctor, according to hospital policy.'*[131] Dr Volprecht seemingly made the IV Fluid Prescription for 500ml of Solution No. 18 at 64ml/h.[132] It was at this rate that Solution No. 18 would continue to be infused until Claire was eventually transferred to the Paediatric Intensive Care Unit ('PICU').[133]

3.41 Dr O'Hare considered that the prescription was correct for Claire's maintenance fluid requirements and was for a fluid in standard use in paediatrics in 1996.[134] Moreover, she indicated that it was not then conventional practice to restrict fluids in a child who was vomiting "*unless*

126 090-032-108 & 090-022-052
127 090-022-052 & Dr Volprecht T-01-11-12 p.17 line 17
128 Dr Volprecht T-01-11-12 p.24 line 5
129 Dr Volprecht T-01-11-12 p.19 line 1
130 090-022-052
131 090-043-146
132 090-038-134 equivalent to 65ml/kg /24h
133 090-022-060
134 WS-135-1 p.11

the electrolytes indicated that they were significantly hyponatraemic."[135] Dr Steen agreed and described Claire's fluid regime as "*normal.*"[136]

Care and treatment overnight and into the morning of 22nd October 1996

'Nursing Care Plan'

3.42 Claire's 'Nursing Care Plan' was devised by Staff Nurse McRandal on admission and was subject to daily review.[137] It indicated the necessity to "*ensure safe administration of IV fluids*"[138] and noted the potential for further vomiting and seizures.[139] Observations were planned for every four hours to include temperature, pulse and respiration.[140]

3.43 Otherwise planned "*Nursing Actions*" included,

(i) Administering medicine as prescribed and observing effects.

(ii) Recording an accurate fluid balance chart.

(iii) Reporting abnormalities to doctor/nurse in charge.[141]

(iv) Informing doctor of seizures.

3.44 The Inquiry nursing expert, Ms Sally Ramsay, was mildly critical of the planned frequency for vital sign observations[142] but was otherwise generally positive about the plan for nursing care. In particular, she thought that the nursing actions were "*comprehensive*",[143] were prepared "*in a timely manner*" and reflected the problems likely to be associated with a child who may have had seizures and had vomited.

135 WS-135-1 p.12
136 091-011-067
137 090-043-145
138 090-043-146
139 090-043-146
140 090-044-147
141 090-043-145
142 231-002-023
143 231-002-019

Fluid balance measurement

3.45 Ms Ramsay considered that recording the urinary output of children receiving IV fluids is a nursing responsibility[144] and should have been done.[145] She noted that whilst nurses did make accurate entries of fluid intake[146] they failed to measure the output. They recorded it only as "*PU*" ('passed urine')[147] giving no indication of the volume of urine actually passed. In Ms Ramsay's opinion this was "*not an accurate measurement of output*"[148] and indicated furthermore that "*urine output could easily have been measured by weighing nappies before and after use.*"[149]

3.46 Additionally, she believed that in the case of a child with altered consciousness, the nurses should have been aware of the possibility of dehydration or fluid overload[150] and consequently of the importance of making an accurate fluid balance chart. However, as Ms Ramsay acknowledged, such failure was in keeping with custom and practice at that time.[151] Indeed, and as Staff Nurse McRandal pointed out, had medical staff required a more accurate measurement of urinary output, they could have asked for it, as they sometimes did, but they did not.[152]

3.47 The overnight nursing records indicate that between 22:30 on Monday and 07:00 on Tuesday, Claire suffered one medium and five small vomits.[153] These were recorded as bile stained[154] in contrast to her vomits at home, which had been described as non-bilious.[155] Ms Ramsay indicated that the volume of vomit was appropriately recorded, but considered that it would have been better had the colour of vomit been noted as well.[156]

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144 231-002-029
145 231-002-029
146 231-002-028
147 090-038-135
148 231-002-028
149 231-002-029
150 231-002-029
151 231-002-028
152 WS-145-1 p.10
153 090-038-133
154 090-040-140
155 090-012-014
156 231-002-028

Care and treatment on the morning of 22nd October 1996

Nursing handover

3.48 Staff Nurse McRandal recorded at 07:00 the next morning 22nd October that Claire "*Slept well. Much more alert and brighter this morning*".[157] She then handed care over to Staff Nurse Sara Jordan (née Field)[158] at about 07:45.[159] She told her that Claire had been admitted with suspected seizure activity and for the management of vomiting. She indicated Claire's history of learning difficulties and previous seizure activity.[160] Whilst Staff Nurse Jordan could not recall any reference to a diagnosis of viral illness or encephalitis,[161] she was given a sound 'Nursing Care Plan', Staff Nurse McRandal's 07:00 entry and a verbal handover. That represented appropriate nursing teamwork.

Medical handover

3.49 Dr O'Hare had started work on Monday at 09:00 as the on-call registrar in Musgrave Ward.[162] Later at 17:00, she assumed responsibility for all 120 hospital beds and A&E. It was thus that she came to see Claire in both A&E and on Allen Ward. During her night shift, she had the support of nursing staff, one SHO in A&E and one SHO on the wards. At 09:00 on Tuesday, instead of going home after 24 hours on duty, she started a further day shift. Accordingly, and in order to correctly perform all her formal handovers on the Tuesday morning, she would have had to visit a number of wards speaking to all those coming on duty, at a time when she herself was expected to start her next shift on Musgrave Ward.[163]

3.50 Dr O'Hare's ability to effect handovers was therefore compromised by unsatisfactory staffing levels. However, she indicated that she would have

157 090-040-140
158 310-003-005
159 WS-148-1 p.6
160 WS-148-1 p.6
161 WS-148-1 p.6
162 WS-135-1 p.2
163 WS-135-2 p.5

made an informal handover had she been concerned about a patient.[164] Her fellow Paediatric Registrars, Dr Andrew Sands[165] and Dr Brigitte Bartholome,[166] both agreed that informal handovers were often conducted.[167]

3.51 It seems to me that making even an informal handover would have been difficult, given Dr O'Hare's responsibilities from 09:00 on Tuesday. Her evidence was that, had she handed over to a doctor on Allen Ward, she would have indicated that she was unsure about Claire's condition and suggested a review at ward round.[168] I think it unlikely that she was able to conduct a handover. In any event, Dr Sands, the registrar who came on duty on Tuesday morning, gave evidence that when a ward round came to a new patient such as Claire, doctors would take a fresh history, investigate, examine and draw up their own management plan.[169] This seems close to the sort of review, which would have been urged on them in any event by Dr O'Hare, and one which would necessarily have entailed review of the blood test results.

3.52 The lack of clear procedure for handovers between doctors was a weakness in the clinical care provided. There would appear to have been too little focus on this critically important aspect of care. Despite the pressures of work, none of the clinicians engaged in Claire's case took responsibility to ensure that effective handover procedures were followed or that communication between doctors was better ordered.

Dr Steen's involvement in Claire's case

3.53 Dr Heather Steen remained the named Consultant Paediatrician responsible for Claire's care from the time of her admission on Monday evening to the time of transfer to PICU on Wednesday.[170] She did not

164 Dr O'Hare T-18-10-12 p.175 line 21
165 310-003-002
166 310-003-003
167 WS-137-1 p.33
168 Dr O'Hare T-18-10-12 p.178 line 18-21
169 Dr Sands T-19-10-12 p.48 line 20
170 WS-143-1 p.3

attend upon Claire during that period. It is to be noted that Dr Steen may have been disadvantaged in giving her evidence by reason of ill health.

3.54 Normally, but not invariably, ward rounds were led by consultants but this did not happen in Claire's case. Her round was led by Dr Sands[171] who was a paediatric registrar of limited experience having been appointed less than three months before after some four months as a locum registrar in paediatric cardiology.[172] However, his evidence was that it was not unusual for him to lead a ward round in 1996 given the commitments of Dr Steen and others.[173]

3.55 I have already indicated that Dr O'Hare was justified in not contacting Dr Steen on Monday night, but how was it that Dr Steen did not see Claire on the Tuesday? This was extensively considered.

3.56 Dr Steen's duties at that time involved taking a clinic outside the Children's Hospital at Cupar Street.[174] This was off-site, but not far from the hospital. Her clinic started at 13:00. Dr Steen's evidence was that before that, she would have been in the hospital and available to her patients, junior doctors and nurses, whether in person, by bleeper or telephone. She would thereafter have made contact with Allen Ward at approximately 17:30 when her clinic finished in order to discuss issues of concern and to decide whether she needed to return.[175]

3.57 Dr Sands did not recall where Dr Steen was on the Tuesday. He stated that whilst he did not believe her to have been in the hospital, he thought she was nonetheless contactable by telephone.[176] There was some limited evidence to suggest that Dr Steen may have seen another patient on Allen Ward and in the same room as Claire in the morning[177] and some evidence to suggest that she was involved in the morning discharge of another

171 090-022-052
172 WS-137-1 p.4
173 Dr Sands T-19-10-12 p.57
174 WS-143-1 p.3
175 Dr Steen T-15-10-12 p.93
176 WS-137-1 p.20 & p.42
177 Dr Steen T-16-10-12 p.49-50

patient because she had noted a change in medication.[178] However, there is no record in Claire's medical or nursing notes of any contact with Dr Steen nor any discussion between her and any other member of the medical or nursing team before Claire's collapse on 23rd October.

3.58 Claire was however seen before midday by Dr Sands on his ward round, and having seen her, Dr Sands brought her case to the attention of Dr David Webb,[179] Consultant Paediatric Neurologist. If Dr Steen had been available, I believe that Dr Sands would have spoken to her as a matter of course and urgency. The fact that he did not leads me to conclude that, for whatever reason, Dr Steen was not available to Dr Sands. I do not know why that was and nor seemingly, does anyone else. On the totality of the evidence presented, I cannot say where Dr Steen was or what she was doing on the Tuesday morning.

3.59 Thus, whilst it is reasonable that Claire should not have been seen by Dr Steen on the evening of Monday 21st, it is a matter of significance and concern that she was not seen by her on Tuesday 22nd.

Ward round on morning of 22nd October 1996

3.60 Dr Sands was accompanied on his ward round by two SHOs, Dr Neil Stewart[180] and Dr Roger Stevenson.[181] Staff Nurse Kate Linskey[182] was also in attendance.[183] The round was running late, perhaps because, as Dr Sands suggested, he was slower than an experienced consultant.[184]

3.61 Claire's parents arrived at approximately 09:30.[185] Although Staff Nurse McRandal's assessment at 07:00 was reasonably positive, Mr and Mrs Roberts were worried by Claire's appearance.[186] They found her lethargic

178 Dr Steen T-16-10-12 p.49
179 310-003-002
180 310-003-003 & WS-141-2 p.2
181 310-003-003 & WS-139-1 p.10
182 310-003-006
183 WS-148-1 p.11
184 Dr Sands T-19-10-12 p.70 lines 4-10
185 WS-253-1 p.6
186 WS-253-1 p.6

and vacant[187] and did not think her anything like her usual self. The improvement they had hoped for was not apparent. They expressed their concern to Staff Nurse Jordan who brought it to the attention of Staff Nurse Linskey.[188]

3.62 There are differing accounts of the events which then unfolded. Given the passage of time, that is not surprising. On many points, variance in the evidence is not important, but as will appear, there are areas where the differences are of significance.

3.63 The ward round note made by Dr Stevenson (and added to by Dr Sands) is as follows:

"*W/R Dr Sands*

Admitted ? Viral illness.

Usually very active, has not spoken to parents as per mother.

Wretching. No vomiting.

Vagueness /vacant (apparent to parents).

No seizure activity observed.

Attends Dr Gaston (UHD).

6 mths old seizures and Ix for this – NAD

U+E- Na+ 132. FBC- WCC ↑ 16.4 Gluc 6.6

O/E Aprexic on IV fluids

Pale colour. Little response compared to normal.

CNS Pupils sluggish to light.

Difficult to see fundi.

Bilat long tract signs.

Ears. Throat. Difficult to swallow. Full see.

187 WS-148-1 p.10
188 WS-148-1 p.17

Imp Non fitting status/ [encephalitis/ encephalopathy][189]

Plan Rectal Diazepam.

Dr Webb.

D/W Dr Gaston re PmHx."[190]

3.64 Dr Sands' impression was that Claire was suffering from "*non-fitting status*"[191] and the nursing record of the ward round notes "*Status epilepticus – non-fitting.*"[192]

Discussions between Dr Sands and Claire's parents

3.65 Mr and Mrs Roberts do not think that the doctors spent very long with Claire, perhaps only ten minutes.[193] They were unable to specifically recall Dr Sands, but do remember introductions being made by the doctors, a history being taken (with which they take no issue) and an examination of Claire which was "*fairly quick.*"[194] They expressed concern to Dr Sands that Claire was unresponsive and not 'herself'.[195] They remember being told about some sort of internal fitting and that another doctor would be consulted.[196] They could not recall any discussion about blood samples and were given no sense that the situation was serious. On the contrary, their perception was that Claire had a 24/48 hour stomach bug.[197]

3.66 Dr Sands however maintains that the possibility of an infection in the brain or encephalitis was discussed on the ward round and was likely to have been discussed with the parents.[198] Mr and Mrs Roberts do not believe that encephalitis was mentioned because the term sounded so serious to them and would have caused them such concern that they would remember.[199]

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189 Words within square brackets were added to the record later. Please see section entitled *"Encephalitis/encephalopathy" note" at page 31*
190 090-022-052 to 053
191 090-022-053 - continuous epileptic activity in the brain without clinical effect - see glossary.
192 090-040-140
193 WS-253-1 p.6 & WS-257-1 p.7
194 Mr and Mrs Roberts T-31-10-12 p.43
195 091-004-006
196 WS-253-2 p.2
197 WS-253-1 p.8
198 Dr Sands T-19-10-12 p.116
199 Mr and Mrs Roberts T-31-10-12 p.48

Alternatively, Dr Sands suggested that not all discussions between doctors would necessarily have been within range of the family, perhaps deliberately, so as not to cause alarm.[200]

3.67 Dr Sands recalled his examination of Claire and remembered Mr and Mrs Roberts telling him that there had been no improvement since the previous night. He said that in fact he was concerned that he had not been alerted earlier to her condition because he too considered that she was unwell.[201] He believes that he spent upwards of 20 minutes with her[202] and agreed with Mrs Roberts that something was "*significantly wrong.*"[203] Indeed, he thought it necessary to consult the Consultant Paediatric Neurologist, Dr David Webb and did so immediately. In such circumstances, Dr Sands does not appear to have adequately communicated his level of concern to Mr and Mrs Roberts.

Electrolyte testing

3.68 Dr Sands gave evidence about the timing of Claire's blood test and the results. He said that he was aware that both the test and the results related to the night before[204] and properly accepted that he should have repeated the blood tests on the morning of 22nd October.[205] Further, and with the benefit of hindsight, he said it would have been appropriate at the time of the ward round to reconsider Claire's fluid regime.[206] He wondered whether there might not have been a separate 'to do' list which included further blood tests[207] but I am not persuaded that there was and Dr Stevenson, who wrote the note, says there was not.[208] Dr Sands was only one of a number of clinicians given the opportunity on 22nd October to repeat the U&E tests. Failure to do so was both individual and collective.

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200 Dr Sands T-19-10-12 p.112
201 Dr Sands T-19-10-12 p.92
202 Dr Sands T-19-10-12 p.93
203 Dr Sands T-19-10-12 p.95
204 Dr Sands T-19-10-12 p.98
205 Dr Sands T-19-10-12 p.112
206 Dr Sands T-19-10-12 p.102
207 Dr Sands T-19-10-12 p.108
208 Dr Stevenson T-15-10-12 p.170

Diagnosis at ward round

3.69 Dr Sands said that his ward round impression of "*non-fitting status*"[209] was informed by Dr Savage's referral note, Mrs Roberts' description of a history of seizures and Dr O'Hare's direction to administer diazepam in the event of seizures.[210] That is understandable but seems to respond to only one of the previously suggested explanations for Claire's presentation. However, Dr Sands' said that a viral infection, specifically encephalitis, was considered and most probably discussed during the ward round although this may not be reflected in Dr Stevenson's note. [211]

3.70 Dr Stevenson was unable to assist. He had no recall of the events of 22nd October or of Claire or her parents.[212] He had a limited role on the ward round and had only been a SHO in paediatrics for two months.[213] Dr Stewart was however quite sure that not only was status epilepticus discussed[214] but encephalitis was also advanced at that time as a working diagnosis.[215]

Actions taken after the ward round

3.71 The plan at ward round was to administer rectal diazepam, consult Dr Webb and discuss Claire's previous medical history with Dr Colin Gaston. Dr Sands gave direction for hourly neurological observations to commence at 13:00[216] and then went to find Dr Webb. Critically it is to be noted that at that stage, the blood tests were not repeated, the fluid regime was left unchanged and there was no further investigation by CT scan or Electroencephalography ('EEG'). Whilst the doctors did not know what was wrong with Claire, they agree that she was a cause for increasing concern.

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209 090-022-052-053
210 Dr Sands T-19-10-12 p.112-113
211 Dr Sands T-19-10-12 p.116
212 Dr Stevenson T-15-10-12 p.130
213 WS-139-1 p.2
214 Dr Stewart T-06-11-12 p.15
215 Dr Stewart T-06-11-12 p.19
216 090-039-137

Her condition had not improved since Monday evening, her parents were worried and now so too it would appear was Dr Sands.

3.72 Dr Sands said that he was concerned by her level of consciousness indicating that whilst not totally unresponsive[217] she was certainly not "*bright.*"[218] He confirmed that even though he did not know how ill she was, he felt that she was more than just a patient of concern.[219] He hoped and expected that Dr Webb would see her sooner rather than later. [220] In fact, he went so far as to say that had he known that her parents intended to leave at lunchtime he would have advised them not to[221] because she was "*very unwell.*"[222]

3.73 I find it difficult to reconcile this evidence with Dr Sands' failure to warn Mr and Mrs Roberts about how ill Claire was and his subsequent departure from the hospital at 17:00 without alerting them to his concerns. Dr Sands should have ensured that Mr and Mrs Roberts were properly informed as to Claire's condition.

Decision to seek neurological opinion

3.74 Dr Sands explained that "*what I saw was outside my experience and I then contacted Dr Webb*".[223] There is some uncertainty about when they spoke. Dr Sands believed it was about midday[224] because he had wanted to ask Dr Webb[225] about the diazepam and he noted that this was not administered until 12:15.[226] Alternatively, he speculated that he may have spoken initially to Dr Webb to get his approval for the diazepam and then spoken to him again later and in more detail.[227]

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217 Dr Sands T-19-10-12 p.137
218 Dr Sands T-19-10-12 p.138
219 Dr Sands T-19-10-12 p.132
220 Dr Sands T-19-10-12 p.35
221 Dr Sands T-19-10-12 p.138
222 091-009-056
223 091-009-059
224 Dr Sands T-19-10-12 p.33
225 Dr Sands T-19-10-12 p.34
226 090-026-075 & 090-040-141
227 Dr Sands T-19-10-12 p.33-34

3.75 Dr Webb believed that, in all probability, he did not speak to Dr Sands until after he had given a pre-arranged talk between 12:45 and 13:30.[228] Then, having spoken to him and with the understanding that there was a real problem, he went quickly to Claire and saw her around 14:00. I am unable to resolve this uncertainty but the point is that they did speak and Dr Webb became involved in Claire's care.

3.76 There is no record of their discussion. Dr Webb's thinks he was asked to advise on the possibility of non-convulsive seizures associated with a fluctuating level of consciousness against a background of seizures in infancy and a learning disability.[229] He believes that he was told about both the sodium reading of 132 Mmol/L and the high white cell count but understood that these were results from that same morning rather than the night before.[230] He was asked about medication and getting a CT scan. He believes that the differential diagnoses occurring to him at that time included the possibility of epilepsy, encephalopathy and encephalitis.[231]

3.77 Dr Sands did not seemingly remember the discussion beyond the fact that it happened and may have been repeated and that they discussed why a CT scan might help.[232] He also said that whilst he suggested encephalitis, it would have been Dr Webb who proposed encephalopathy because he did not himself understand the condition.[233] He could not actually recall being present when Dr Webb attended with Claire.

3.78 Dr Webb regarded his role as confined to assessment and the formulation of diagnosis and management plan for the assistance of the paediatric medical team.[234] Dr Webb said that Dr Sands did not request that he take over Claire's case.

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228 Dr Webb T-30-11-12 p.169
229 Dr Webb T-30-11-12 p.172
230 Dr Webb T-30-11-12 p.175-176
231 Dr Webb T-30-11-12 p.173
232 Dr Sands T-19-10-12 p.34
233 Dr Sands T-19-10-12 p.167-168;
234 WS-138-1 p.4

3.79 Dr Sands said that although he sought guidance from Dr Webb, he did not attempt to specify the role Dr Webb was to have in Claire's care, because that was something more usually discussed between consultants.[235] He could recall no further communication with Dr Webb after their initial discussion.[236] Nonetheless, he stated that Dr Webb's assessment of Claire may have lessened some of his own concerns[237] because he would then have expected Dr Webb to direct the further investigations and provide further information to Claire's parents.[238]

3.80 At that time, and as and between Dr Sands and Dr Webb, a decision should have been taken to investigate further. That would probably have meant a CT scan to diagnose haemorrhage, hydrocephalus or cerebral oedema, or in the event of that proving inconclusive, an MRI scan. Professor Neville advised that an EEG was the only way to confirm non-convulsive status epilepticus.[239] Until such tests were done, doctors were treating a "*very unwell*" child without really knowing what was wrong or doing anything to confirm a diagnosis. In addition and critically, active fluid and electrolyte management was being ignored.

"*Encephalitis/encephalopathy*" *note*

3.81 Mr and Mrs Roberts have since expressed concern about changes made to the ward round notes. The words "*encephalitis/encephalopathy*" have been added at a later time and in a different hand so as to augment Dr Sands' noted impression of "*non-fitting status.*"[240] Dr Sands indicated that he added this to the notes after he had spoken to Dr Webb.[241] Regrettably, he did not date or sign the addition.

3.82 Claire's parents became increasingly suspicious about this evidence and questioned whether the words might not have been added as late as

235 WS-137-1 p.17
236 WS-137-1 p.39
237 WS-137-1 p.51
238 WS-137-2 p.8
239 232-002-002
240 090-022-053. Please see paragraph 3.69
241 WS-137-1 p.10

2004/05 so as to place Dr Sands and the hospital in a better light.[242] This suggestion was strongly denied by Dr Sands.[243] One of the points made by Mr and Mrs Roberts was that Claire did not receive any treatment for encephalitis or encephalopathy until Dr Webb prescribed acyclovir at around 17:00 and accordingly to use these words at any earlier stage would be inconsistent with the logic of the record.[244]

3.83 The Inquiry engaged Dr Audrey Giles, a highly experienced forensic document analyst to examine this and other entries made by Dr Sands in order to determine when this controversial addition was made. Her findings were essentially inconclusive. She stated that "*I am unable to determine when the questioned entry* "*encephalitis/encephalopathy*" *in the Medical Notes was made by Dr Sands, or the entry* "*4pm*" *was made by Dr Webb, either in absolute terms or in relation to other entries made by him on these documents.*"[245]

3.84 I understand why Claire's parents should question all that is said by the doctors who treated Claire. However, I do not accept this specific allegation against Dr Sands on the evidence before me. It is plausible that the additional words do indicate the differential diagnosis as suggested by Drs Sands, Stewart and Webb[246] and that Claire did not receive the relevant treatment at the time because it was hoped that she would respond to another regime. I do not accept it proved that the disputed entry was made dishonestly or to mislead. It was, however, a yet further example of substandard record keeping.

242 Mr and Mrs Roberts T-13-12-12 p.128
243 Dr Sands T-18-12-12 p.130
244 Mr and Mrs Roberts T-13-12-12 p.120
245 241-001-008
246 Dr Sands T-19-10-12 p.168-9, Dr Stewart T-06-11-12 p.31-32 & WS-138-1 p.6

Care and treatment during the afternoon of 22nd October 1996

Dr Webb's attendance with Claire at 14:00

3.85 Dr Webb saw Claire at about 14:00.[247] Her grandparents were with her at the time.[248] Dr Webb may have been accompanied by Dr Stevenson and a nurse. It is unfortunate that Dr Sands does not appear to have attended but he was engaged elsewhere.[249]

3.86 The entry made by Dr Webb in the record was:

"*Neurology – Thank you.*

•9 yr old girl with known learning difficulties – parents not available. Grandmothers Hx - vomiting + listless yesterday pm – followed by prolonged period of poor responsiveness. On no AED.

•Note appeared to improve following rectal diazepam 5mg at 12.30pm.

O/E Afebrile. No meningism. Pale.

Rousable – eye opening to voice, Non-verbal, withdraws from painful stimuli. Reduced movements rt side? Antigravity all 4 limbs. Mildly increased tone both arms. Reflexes symmetrically brisk. Clonus – sustained both ankles. Toes ↑↑. Sits up – eyes open + looks vacantly. Not obeying commands. PEARL – 5mm. Optic discs pale. No papilloedema. Facial palatal + lingual movements appear (N).

Imp - I don't have a clear picture of prodrome + yesterday's episodes. Her motor findings today are probably long standing but this needs to be checked with notes. The picture is of acute encephalopathy most probably restricted in nature. I note (N) biochemistry profile.

Suggest

i) starting iv phenytoin 18mg/kg stat followed by 2.5mg/kg 12hrly. Will need <u>levels</u> 6hrs after loading dose

247 090-040-141 & WS-138-1 p.5
248 Mr and Mrs Roberts T-31-10-12 p.59
249 Dr Sands T-19-10-12 p.26

ii) Hrly neurobs

iii) CT tomorrow if she doesn't wake up. D. Webb."[250]

3.87 Dr Webb maintained that the most likely explanation for Claire's presentation was a recurrence of seizures within a context of inter-current viral illness.[251] He agreed with Dr Sands that she was probably suffering semi-continuous non-convulsive seizures, which were contributing to her altered level of consciousness. It was these he attempted to treat.[252]

3.88 Dr Webb acknowledged his error in thinking that Claire's serum sodium result of 132mmol/L was from a test undertaken that morning rather than the previous evening. Indeed, he admits that had he understood that the results were from the previous evening, he "*would have requested an urgent repeat sample*"[253] because Claire was receiving IV fluids and he could not therefore be confident that the sodium level was not relevant to her presentation.[254]

3.89 Dr Webb's confusion about the timing of the blood tests is a matter of significance and concern. Whilst the results were untimed in the medical record (and that is a notable deficiency), the very fact that they were the only results for a patient admitted the previous day should have caused him to double check the timings. Furthermore, the presence of the downward pointing arrow beside the sodium reading should have attracted his particular attention. In the circumstances he should have interrogated the notes for the time of the blood test.

EEG & CT Scan

3.90 Professor Neville, being of the view that an EEG was the only means to confirm non-convulsive status epilepticus,[255] stated quite simply that Claire should not have been treated for status epilepticus without an EEG because

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250 090-022-054
251 WS-138-1 p.10-11
252 WS-138-1 p.10-11
253 090-053-174
254 WS-138-1 p.21-22, p.69-70 & p.88
255 232-002-002

anti-epilepsy medication can further reduce levels of consciousness.[256] However, there was no EEG. Dr Webb said that he had intended an EEG for the following day should Claire still have been a cause for concern.[257]

3.91 In addition, Professor Neville was of the opinion that an urgent CT scan was indicated because Claire was suffering from unexplained reduced consciousness and a scan could confirm or exclude cerebral oedema or haemorrhage. He said it should have been carried out on the evening of 21st October,[258] or at the latest, on the morning of 22nd October.[259] In his view, the failure to do so was a "*major omission.*"[260]

3.92 Dr Webb did not think that either CT scan or EEG would have been of much assistance.[261] He thought the most likely diagnosis was non-fitting status and whilst that could have been confirmed by an EEG, resources were stretched.[262] He believed that had he insisted on an EEG that afternoon, it could have been arranged but at the cost of the operator working extra hours. Accordingly, he decided to wait until the following morning, taking the view that Claire was probably experiencing seizures because of a viral illness. He accepted that his suggestion "*CT tomorrow if she doesn't wake up*"[263] was poorly phrased but was really meant to indicate that she should have a CT scan if she did not improve.[264]

3.93 Is it fair to criticise Dr Webb for not directing an EEG or CT scan that afternoon? With hindsight, it is obvious that they were more urgently indicated than he thought and that they could have been arranged, however awkward that may have been. It is also acknowledged that Professor Neville, who was particularly critical in this regard,[265] is rather more familiar with larger hospitals and their superior access to testing facilities. However,

256 232-002-006
257 WS-138-1 p.67
258 232-002-004
259 232-002-007
260 232-002-006
261 Dr Webb T-30-11-12 p.225
262 Dr Webb T-30-11-12 p.208
263 090-022-054
264 Dr Webb T-30-11-12 p.216
265 232-002-008

it was repeatedly asserted in evidence that while children can recover very quickly from illness, they can also deteriorate very rapidly. Claire was clearly very unwell and at best, Dr Webb had an insecure primary diagnosis of non-fitting status. Accordingly, I believe that he should have done more. He started Claire on anti-convulsant medication with hourly neurological observations at a time when he could and should have reviewed her fluid and electrolyte management and pursued additional investigation.

Phenytoin

3.94 Phenytoin was the anti-convulsant drug which was then prescribed for Claire by Dr Stevenson on Dr Webb's direction. It was administered intravenously from 14:45 onwards[266] notwithstanding that there was some suggestion to Dr Webb that Claire might have improved.[267]

3.95 The treatment gave rise to the following specific concerns

(i) Claire was given an overdose of the phenytoin. Her loading dose was incorrectly calculated by Dr Stevenson at 632mg rather than 432mg.[268] His was an error in multiplication. Whilst there is confusion in the medical record about exactly how much phenytoin Claire was given and when, it is clear that an overdose was administered in keeping with Dr Stevenson's miscalculation. Notwithstanding, the expert evidence was that, in all probability, this overdose had no material effect on what was to happen.[269]

(ii) The phenytoin given would have acted in conjunction with diazepam administered at 12:15. Each would have had a sedating effect and together could have further affected her levels of consciousness. This is a matter of importance because her consciousness was

266 090-026-075
267 Dr Webb T-30-11-12 p.214
268 090-026-075 & 090-022-054
269 232-002-009

already a cause for concern and was the subject of hourly Glasgow Coma Scale ('GCS') assessment.[270]

(iii) Accordingly, the combined effect of the phenytoin and diazepam would have made it more difficult for doctors to assess the extent to which Claire's neurological impairment was due to her underlying illness. Furthermore, diazepam remains active for a prolonged period with the effects of a single dose persisting for up to two days. Claire's GCS score may thus have been compromised on an ongoing basis.[271]

Seizures on 22nd October 1996

3.96 Mr Roberts left the hospital at 15:00 and Mrs Roberts remained with Claire. During the afternoon, Claire's condition deteriorated and she suffered a number of seizures.[272] These are noted on the 'Claire Roberts Timeline' in red.[273]

3.97 There is uncertainty about the precise number and timing of these events. Between 15:10 and approximately 15:25, seizures were noted in the 'Record of Attacks Observed'. Mrs Roberts herself noted one at 15:25.[274] She thought it had lasted 5 minutes. Dr Sands does not believe he was present on Allen Ward when this seizure occurred and does not recall being informed.[275] At 16:30, a further entry notes "*teeth tightened slightly.*"[276]

Neurological observations during 22nd October 1996

3.98 Throughout Tuesday 22nd, the nursing observations relevant to Claire's neurological condition were collated for GCS assessment of her levels of consciousness.[277] In a patient with reduced consciousness painful stimulus

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270 237-002-016
271 237-002-008
272 090-042-144
273 310-001-001
274 090-042-144
275 WS-137-1 p.49
276 090-042-144
277 310-007-003

is applied and the best visual, verbal and motor responses assessed and scored out of 15.[278] The scale is modified for use in the very young by omitting one of the scores to give a total GCS score out of 14.[279]

3.99 Claire's GCS scores were recorded on an observation chart[280] starting with a score of 9 at 13:00 and continuing at either a 6 or 7 for the next few hours. Whilst there is a subjective element to these scores, it remains clear that the lower they are the more worried a clinician should be. A score of 8 or less is consistent with the onset of coma.[281] Generalised entries in the record at that time appear to confirm Claire's loss of consciousness. Some entries are very telling, for example the clear contrast appearing between the record of "*Eyes open to pain*" at 14:30 and the subsequent failure of all further attempts to repeat this response.[282] In Professor Neville's view, any score between 9 and 12 required investigation and all below 9 demanded urgent intervention.[283] He also stated that any drop in the GCS score (as for example that occurring at 21:00) should have prompted the SHO to contact the registrar or consultant.[284]

3.100 Ms Sally Ramsay considered that a GCS score of 8 in combination with complex IV therapy should have prompted discussion between nursing and medical staff about admission to PICU.[285] However, the nursing notes do not suggest that these neurological observations were brought to the attention of the medical staff. In any event, and as Ms Ramsay pointed out, the charts would have been readily available for the doctors to check[286] and because Claire was seen by doctors on at least seven occasions, they ought to have been aware of her vital signs and changed neurological status.[287] These were warning signals.

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278 090-053-170 *et seq*
279 090-053-171
280 090-039-137
281 090-053-171
282 090-039-137
283 232-002-016
284 232-002-011
285 231-002-031
286 231-002-033
287 231-002-033

Dr Webb's second attendance with Claire

3.101 At about 15:15, two letters from Dr Colin Gaston were faxed to the Children's Hospital in response to queries raised on the ward round. They were seen by Dr Stewart.[288] Further information was provided about Claire's medical history with particular reference to her behavioural problems. This does not however appear to have prompted any further discussion or enquiry.

3.102 At some point in mid-afternoon, Dr Webb returned to see Claire.[289] This demonstrated both his interest and concern, even if he did not record his attendance. He believes that he would have reviewed the nursing observations and GCS scores.[290] Whilst he knew she was ill, he did not then consider that a transfer to PICU was warranted[291] but thought that she could be managed on the ward in accordance with his previous treatment plan.

Midazolam

3.103 Dr Webb did, however, direct that Claire be given another drug, midazolam. This was again on the basis that she was suffering from non-fitting status in the context of an "*intercurrent viral infection*."[292] Remarkably, Claire was then given another overdose, this time of midazolam and once again in error. The initial dose was given at "*0.5mg/kg*"[293] rather than 0.12mg/kg, which was several times the recommended dosage.[294]

3.104 Dr Webb's evidence was that he had first encountered this drug during training in Canada but had not at that time previously prescribed it himself.[295] Accordingly, he said he had to check the prescription with his Vancouver notes and then telephone the details to Dr Stevenson so that he

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288 090-013-016 to 019
289 090-022-055
290 WS-138-1 p.31
291 090-053-175
292 WS-138-1 p.11
293 090-022-055
294 WS-138-1 p 32
295 WS-138-3 p.2

could write it up. It transpired however, that Dr Webb had himself directed the same drug be given to another patient and only a few days before.[296] His recollection was therefore clearly unreliable.

3.105 None of the expert witnesses suggested that this overdose would have been fatal but Dr Aronson, Clinical Pharmacologist, stated without contradiction that such an overdose would increase sedation in a patient with reduced consciousness.[297]

3.106 I cannot determine definitively whether the error in prescription was Dr Webb's or Dr Stevenson's. It is possible that Dr Stevenson misunderstood the instructions given by telephone. However, Dr Webb had the opportunity to note the miscalculation of "*0.5*"[298] in the record, both at 17:00 and again in the early hours of Wednesday morning. He raised no issue about it then or later at the inquest. Dr McFaul was of the opinion that the error should have "*been noted at the review of death in the audit meeting and reported as a major medicines error.*"[299] It was not raised at all until May 2012 when Mr Roberts drew it to my attention. That it should have been noticed by a layperson is telling.[300]

3.107 There was, however, a more fundamental problem with the administration of midazolam, which is whether it should have been prescribed at all. It was the third drug, after diazepam and phenytoin to be given Claire in the space of three to four hours on the basis that she had non-fitting status. That was the sole condition for which she was being treated despite the suspicion of encephalitis/encephalopathy and the absence of an EEG to confirm the diagnosis.

3.108 There was consensus of expert opinion that this approach was highly questionable and undertaken at a time when Dr Webb should have considered other diagnoses.[301] His assessment of Claire's condition would

296 WS-138-5 p.4
297 237-002-012 to 014
298 090-022-055
299 238-002-180; Under the Management Executive Directive PEL (93)36 - (210-003-1137)
300 403-005-001
301 232-002-010 & 234-002-009

very clearly have benefited from discussion with Dr Steen and/or Dr Sands but none such took place. That was a failure of all concerned. A joint discussion on 22nd October would have queried why Claire's condition remained so poor despite the treatment administered and that would almost certainly have led to a re-appraisal of diagnosis and a review of treatment.

Dr Webb's examination at 17:00

3.109 Dr Webb returned to see Claire for a third time at around 17:00. This was the only time he met Mrs Roberts on the ward. His note records that Claire flexed her left arm in response "*to deep supra orbital pain*" but she did not speak or respond to his voice.[302]

3.110 Dr Webb discussed Claire's background history with Mrs Roberts recording that Claire had had contact with a cousin on 19th October, that she had gastro-intestinal upset and loose motions on the Sunday (20th) and vomiting on the Monday (21st). Mrs Roberts rejected his note of "*loose motions on Sunday*" maintaining "*Claire had a smelly poo… on Friday...*"[303] and Mr Roberts agreed.[304] Dr Webb's note may not be reliable.

3.111 However, it was the suspected stomach upset that caused him to think that Claire might have a bowel infection, which had spread to her brain and caused meningo-encephalitis or encephalomyelitis.[305] (Otherwise an Enteroviral infection[306]) Accordingly, he prescribed the anti-biotic cefotaxime and the anti-viral drug acyclovir.[307] He directed blood, stool and urine checks and a throat swab for viral culture.[308] However and on balance, he did not consider such a diagnosis very likely in the absence of fever, neck stiffness or photophobia.[309]

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302 090-022-055
303 WS-257-1, p.10
304 WS-253-1, p.3 & WS-253-1, p.21: *"Claire only had one small loose bowel motion on the Friday, with normal bowel motions on Saturday, Sunday and Monday."* See also 090-022-050 - Dr O'Hare's admission note made at 20:00 on 21st October 1996 which records a history of *"loose motion three days ago"*
305 090-053-173 & WS-138-1 p.17
306 310-007-003 & 090-053-173
307 090-022-055 & 090-053-173
308 090-022-055
309 090-053-173

3.112 Notwithstanding, Dr Webb continued with the anti-convulsant medication.[310] He maintained that he had obtained a history from Mrs Roberts of a seizure affecting Claire's right side which had left him in no doubt that she had had a convulsive seizure on 21st October. It was this history in combination with Claire's ongoing altered awareness at 17:00 within a context of stable vital signs and intermittent mouthing movements that suggested to Dr Webb that she had ongoing sub-clinical seizure activity.[311]

3.113 He interpreted her GCS and Central Nervous Observations from 14:00 to 17:00 as reflecting a combination of ongoing non-convulsive seizure activity, post-ictal effects and the possible consequences of the anti-convulsant therapy (midazolam).[312] He did not think her condition was due to raised inter-cranial pressure because his evaluation included an assessment of those features usually expected to be abnormal in the presence of raised intracranial pressure, citing in particular the absence of significant change in heart rate or blood pressure, a cessation of vomiting since his last examination and the fact that her reactive pupils were not enlarged.[313] He did not consider Claire's respiratory rates to be a cause for concern. Overall, he felt that her state was similar to that found on examination at 14:00 notwithstanding that her GCS score was potentially depressed by midazolam.[314] He stated that his diagnosis was predominantly that of an "*epileptic encephalopathy*"[315] with the impression that Claire was suffering subtle non-convulsive seizure activity triggered by recent inter-current viral infection.[316]

3.114 However, and notwithstanding that her sodium levels had not been checked since the previous night, Dr Webb still did not direct a repeat blood test. Dr Sands attended a few minutes later at 17:15 and likewise failed to direct

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310 WS-138-1 p.42-3
311 (Dr Webb defined 'status epilepticus' as seizure activity lasting for more than 30 minutes. 090-053-173 & WS-138-1 p.39)
312 WS-138-1 p.17 & p.74-75
313 WS-138-1, p.35
314 WS-138-1 p.74-75
315 WS-138-1 p.17
316 090-053-173

another blood test. He claimed to have been under the impression that a full blood test had been performed and that the results were awaited.[317] I cannot understand the basis for any such expectation from the entries in the record.

3.115 The experts agree[318] that more should have been done at 17:15. Indeed Drs Sands and Webb both now recognise this.[319] Each was then about to go off duty, even though Dr Webb remained the on-call paediatric neurologist. Notwithstanding and whilst the expert views do not entirely concur, I believe that the following should have been done:

(i) Mr and Mrs Roberts should have been told that Claire was very ill and that diagnosis was unclear.

(ii) The incoming nursing and medical staff should have been alerted to the seriousness of her condition and the uncertainty of diagnosis.

(iii) Dr Steen should have been contacted and asked to return to discuss and review.

(iv) Blood tests should have been carried out.

(v) Diagnosis should have been reconsidered afresh.

(vi) Claire's overall treatment should have been reviewed, including her drug regime and fluid management.

(vii) A paediatric anaesthetist should have been asked to advise on admitting Claire to the PICU.

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317 WS-137-1 p.29

318 232-002-010 - Professor Neville believed that further assessment was required, including electrolyte testing, EEG, CT scan and drug review; and that any differential diagnosis should include causes of raised inter-cranial pressure.
234-002-007 - Dr Scott-Jupp considered that Dr Webb should have made it clear whether he had taken over Claire's care completely or was available only for specialist advice and he should have spoken to Dr Bartholome, the on-call Consultant Paediatrician or Dr McKaigue.

319 Dr Sands T-19-10-12 p.203 line 21 & Dr Webb T-03-12-12 p.60 line 15

(viii) An EEG should have been arranged, preferably that day but certainly before the following morning.

(ix) A clear understanding should have been established as to who was responsible for Claire's care – whether it was the paediatric team or the neurology team.

Responsibility for the failure to take these steps lies overwhelmingly with Dr Webb and Dr Sands.

Discussions between Dr Steen and Dr Sands

3.116 Evidence was given by both Dr Steen and Dr Sands that they probably spoke by telephone at some point during the afternoon of 22nd October when Dr Steen was at the Cupar Street Clinic.[320] I have some difficulty with such a proposition because although Dr Sands regarded Claire as the sickest child on the Ward[321] he is not thought to have spoken with Dr Webb. So how would his conversation with Dr Steen have gone? One possibility is that Dr Sands informed Dr Steen of Claire's condition and told her that he had obtained assistance from Dr Webb, but they agreed or Dr Steen decided that she did not need to return to see Claire. That does not seem likely in light of the detail he would necessarily have to have given about Claire's condition.

3.117 What makes more sense is that if there was a conversation, and I am not at all persuaded that there was, Dr Steen was not alerted to the seriousness of Claire's condition. This may have happened because even though Dr Sands recognised that Claire was "*very unwell*"[322], he was under the impression that he had effectively passed responsibility for Claire to Dr Webb and accordingly felt it was for Dr Webb to determine how to proceed and whether to recall Dr Steen. Meanwhile Dr Webb was unaware of Dr Sands' assumption and remained confident that he had not assumed

320 Dr Steen T-17-10-12 p.10, Dr Sands T-19-10-12 p.37 & WS-137-1 p.16
321 Dr Sands T-19-10-12 p.233
322 091-009-056

responsibility for Claire. This is a more compelling explanation because it fits with both Drs Webb and Sands leaving the hospital between 17:00 and 18:00, Dr Steen staying at Cupar Street, the failure to warn the incoming medical team about the seriousness of Claire's condition, the failure to proceed to EEG or CT scan, the failure to make even preliminary contact with PICU and the extraordinary failure to communicate the gravity of the situation to Mr and Mrs Roberts.

3.118 I do not suggest that any one of these doctors was uncaring. Rather, I believe that the real danger of Claire's situation was not recognised, so that despite Dr Webb's repeated intervention, her condition was allowed to deteriorate. The doctors assumed that they could treat her the following day. I do not believe that it occurred to any of them that her life was in danger. Had it, then I am sure that they would all have done something very different. It is for these reasons that I conclude that if there was conversation between Dr Sands and Dr Steen, the reason it did not lead to the return of Dr Steen was that she was not given to understand that Claire was so seriously ill as to require her attendance.

Consultant responsibility

3.119 The issue arose as to who was primarily responsible for Claire's care. Clarity as to leadership is important for all concerned in patient care. Was it the paediatric medical team under Dr Steen (even in her absence) or did Dr Webb take over primary responsibility in consequence of his having treated Claire on a number of occasions?

3.120 Claire was formally admitted into the care of Consultant Paediatrician Dr Steen. There was no recorded or formal transfer to the neurology team. Dr Webb denied taking over responsibility and there is no evidence that he did. I can only conclude that Claire remained under the care of the paediatric team despite Dr Webb's active and specialist involvement.

3.121 Dr Sands may have been uncertain as to who the lead consultant was after Dr Webb had become involved, but such confusion does not appear to have

affected others. This issue was examined in detail at public hearings. Whilst Dr Sands might have made greater efforts to secure the attendance of Dr Steen, it would not appear that any particular nursing or medical failure resulted from confusion as to primary responsibility.

Nursing care during 22nd October 1996

Review of the 'Nursing Care Plan'

3.122 The Nursing Care Plan was to have been subject to daily review.[323] However, it was neither reviewed nor amended after the ward round on the morning of 22nd, nor seemingly at any time thereafter. The 'Nursing Care Plan' does not plan for Claire's deterioration and remained therefore self-evidently unrevised.

3.123 Ms Ramsay stated that it was conventional practice to evaluate care on a regular basis. She said this should be done at the end of each shift at the very least and prior to handing over to another nurse.[324] On this analysis, Claire's 'Nursing Care Plan' should have been reviewed at 08:00, 14:00 and 20:00 on 22nd October. Ms Ramsay further stated that the plan ought to have been revised in response to changes in Claire's care needs, such as those prompted by ongoing IV therapy, nursing observations and falling GCS scores.[325]

3.124 That the 'Nursing Care Plan' was not updated was an oversight in care. It is impossible to determine what difference, if any, regular updates of the 'Nursing Care Plan' might have made. It is however clear that the discipline of making regular written revisions to a plan, might draw attention to necessary nursing action. The nursing staff are to be criticised for failing to adhere to the necessary standards of their own 'Nursing Care Plan'.

323 090-043-145
324 231-002-012
325 231-002-012

Care and treatment during the evening of 22nd October 1996

3.125 There is no evidence that there was any meaningful handover to the in-coming nursing or medical teams between 17:00 and 18:00; meaningful in the sense that any single nurse or doctor was actually alerted to the seriousness of Claire's condition. There was a handover to Dr Joanne Hughes who attended to administer drugs,[326] but no indication was given her as to the seriousness of Claire's condition. This further confirms the extraordinary failure to recognise just how sick and at risk Claire was.

3.126 Frustratingly, it has not been possible to identify the on-call consultant paediatrician for the night of Tuesday/Wednesday.[327] This is a further and particular failure in the record keeping. The unidentified and unidentifiable consultant should have been the first point of contact for paediatric medical problems. There is no evidence to indicate whether the unknown paediatrician was informed of Claire's illness, or her deteriorating condition or whether there was any attempt to make contact when Claire's condition became critical. If there was a rota of on-call consultant paediatricians, it does not appear to have been used.[328]

3.127 The role of registrar on duty for Tuesday night was now the almost impossible task of Dr Brigitte Bartholome. She had the assistance of two SHOs, Dr Joanne Hughes and the same Dr Neill Stewart who had accompanied Dr Sands on the morning ward round.

3.128 Mr Roberts returned to be with Claire at 18:30. Between 18:30 and 21:15, Claire was reviewed by the nurses on duty but no concern was communicated to the family.[329]

326 310-003-003
327 302-068a-001
328 302-068a-001
329 089-012-035

Involvement of Dr Joanne Hughes

3.129 From 17:00 to 22:00 on Tuesday, 22nd October Dr Joanne Hughes was the sole SHO on the Paediatric medical wards.[330] The only registrar available to her was Dr Bartholome. Dr Hughes was thus responsible for the 40-50 children who were already on the wards together with additional patients admitted through A&E.[331] She had at that time one years' experience in paediatrics. She said that she has no recall of the Tuesday night or of her role in Claire's care.[332] Whilst there had been a handover to her at around 17:00, that handover cannot have alerted her to the real seriousness of Claire's condition.

3.130 Dr Hughes administered anti-biotics to Claire at 17:15 and anti-viral medication at 21:30.[333] Significantly, no other doctor saw Claire during that critical period between 17:30 and 23:00 when effective intervention might still have saved her life. That she failed to effectively intervene was not the fault of the then relatively inexperienced Dr Hughes. Opportunities had been missed throughout the day to direct Claire's treatment. It would be unfair to criticise an over-stretched SHO like Dr Hughes for failing to remedy the mistakes of more senior and experienced colleagues.

Further deterioration in Claire's condition and nursing care

3.131 Signs were however apparent that not only was Claire failing to respond positively to Dr Webb's drug treatment but she was in fact deteriorating. At 19:15, an entry was made in the 'Record of Attacks Observed' noting that Claire had "*teeth clenched and groaned.*"[334] Dr Webb stated that he was unaware of this attack but would have expected to have been informed.[335]

330 Dr Hughes T-05-11-12 p.109
331 Dr Hughes T-05-11-12 p.110
332 Dr Hughes T-05-11-12 p.109
333 Dr Hughes T-05-11-12 p.151-153 & 090-026-077
334 090-042-144
335 090-042-144 & WS-138-1 p.43

Indeed the 'Nursing Care Plan' specified that nurses were to inform medical staff of seizures.[336]

3.132 A further attack was noted at 21:00 as an "*Episode of screaming and drawing up of arms. Pulse rate ↑ 165 bpm. Pupils large but reacting to light. Dr informed.*"[337] However, Dr Hughes could not recall being informed[338] and Dr Webb stated that once again he did not know of the seizure but once again would have expected to be told.[339]

3.133 Whilst Claire's temperature was noted at 20:30 and 22:30,[340] respiratory observations were not recorded at 17:00, 18:00, 19:00, 20:00, 22:00 or 23:00. Ms Ramsay considered that they should have been noted and at least once every 30 minutes during intravenous infusion.[341] Furthermore, Ms Ramsay regarded the failure to record blood pressure at 22:00, 23:00 and midnight as "*serious omissions*" in the record keeping.[342]

3.134 Furthermore Ms Ramsay was clear that the nurses were under an ongoing duty to inform doctors about changes in Claire's condition, and in particular:

(i) The seizure lasting 5 minutes at 15:10.[343]

(ii) The failure to pass urine for six hours by 17:00.[344]

(iii) The blood pressure reading of 130/70 at 19:00.[345]

(iv) The teeth clenching and groaning incident at 19:15.[346]

336 090-043-145
337 090-042-144
338 WS-140-1 p.28
339 090-042-144 & WS-138-1 p.43
340 090-039-137
341 231-002-026
342 231-002-02
343 231-002-024 & 090-042-144
344 231-002-030 & 090-038-135
345 231-002-030 & 090-039-137
346 231-002-025 & 090-042-144

(v) The episode of screaming, the GCS score of 6 and the raised pulse rate at 21:00.[347] (Whilst the nursing record does indicate, "*Dr informed*"[348] this is not confirmed by the medical record).

3.135 Additionally Ms Ramsay believed that the episode of screaming at 21:00[349] should have been documented. This was, she said, a significant error and represented a further failure in record keeping.[350]

3.136 Even allowing for subjective variation, the GCS numbers that evening were consistently low. They fell further at 21:00 to 6/7. Each GCS assessment presented clear warning. Dr Steen,[351] Dr Webb,[352] and Professor Neville[353] all agreed that Claire's management should have been discussed with a consultant when the GCS scores dropped at 21:00.

3.137 It was wholly improper that with a GCS score as low as 6 that Claire should have been left on the ward without urgent reappraisal. She had already received treatment for 24 hours and was not improving. Even if her levels of consciousness had been depressed by medication, there was no positive indication of progress and urgent action was imperative.

3.138 Whilst the nurses did not completely ignore Claire, it cannot be said that they responded to her clinical signs or recognised her danger. Any nurse who was in any doubt about what to do could always have sought advice from the night sister.[354] The individual nurses charged with her care are to be criticised for their failure to make necessary observations with appropriate frequency, to respond to Claire's very low GCS scores or to keep medical staff informed of her condition.

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347 231-002-025, 090-042-144, 090-042-144 & 090-039 to137
348 090-042-144
349 096-025-349
350 231-002-025
351 091-011-068
352 091-011-068 & WS-138-1 p.86
353 232-002-011
354 Ms Linskey T-30-10-12 p.25 line 8

Claire's parents leave for the night

3.139 Claire's family had been at her bedside since the morning. They were constantly available for consultation, reassurance or warning. At some time between 21:15 to 22:30 on the Tuesday night, Mr and Mrs Roberts decided to go home and informed the nurses that they were leaving. Neither doctor, nurse nor any other member of staff told Mr and Mrs Roberts that Claire was seriously ill and in danger.[355] One of the saddest and most frustrating aspects of all is that they were allowed to leave expecting to find improvement the next morning.

3.140 In his witness statement to the Inquiry, Mr Roberts explained that they did not know that Claire had a neurological illness and were unaware of concern about her condition.[356] Indeed, he felt so comfortable that night that he was able to watch 'A Question of Sport' on television with his son.[357]

3.141 I am satisfied that the nurses no more recognised the danger of Claire's deteriorating condition than the doctors did and because the doctors did not inform the nurses of the seriousness of her illness, it would be unfair to criticise the nurses alone in this regard. As Staff Nurse Lorraine McCann,[358] who was on duty at that time acknowledged, the failure to inform Mr and Mrs Roberts was a collective failure.[359]

3.142 However, as a matter of course and at the very least Mr and Mrs Roberts should have been told that:

(i) Claire was very unwell.

(ii) Diagnoses was unclear.

(iii) Further investigations were necessary, and

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355 091-004-006 & WS-253-1 p.11-12
356 WS-253-1 p.11
357 WS-253-1 p.11
358 310-003-005
359 Staff Nurse McCann T-30-10-12 p.90 line 2

(iv) Transfer to PICU might be necessary.

3.143 That no one even so much as suggested concern, let alone danger to Mr and Mrs Roberts is profoundly unsettling. Claire's death must have been made even harder to bear by the thought that they could have stayed with Claire. Fundamental failures in communication with families was one of the most repeated, basic, depressing and serious deficiencies encountered by this Inquiry.

Attendance of Dr Hughes at 21:30

3.144 Dr Hughes saw Claire again at about 21:30 when she gave her anti-viral medication.[360] She also took blood for general testing and to assess levels of phenytoin.[361] These had to be checked before additional phenytoin could be given. She did not make a record of her examination. Whilst this was an omission on her part, it was of little consequence. Nonetheless, she did have time to re-write the prescription sheet detailing the drug regime.[362] With more experience, time and support she might have pieced together the record of attacks, GCS scores, observations and general presentation to appreciate that something was seriously wrong and to make contact with Dr Bartholome.

3.145 The nursing notes record that at 23:00 Claire was given an additional dose of phenytoin[363] to add to the bolus overdose already given by Dr Stevenson. This was administered before the results of the blood tests were received at 23:30. These revealed a phenytoin level of 23.4 mg/l which was in excess of the therapeutic range of 10-20 mg/l.[364] In other words, Claire had already received too much of a drug, experts suggest she should not have been given in the first place and then she was given some more.

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360 090-026-077
361 Dr Hughes T-05-11-12 p.155 line 21
362 090-026-077
363 090-040-138
364 090-022-056

3.146 More importantly, the blood test results revealed that her sodium levels had fallen and were now dangerously low at 121mmol/L. Claire was suffering severe hyponatraemia.

Attendance by Dr Stewart at 23:30

3.147 Dr Stewart saw Claire at about 23:30. He was by then the only doctor covering the Children's Hospital at SHO level outside A&E and PICU. His record of examination reads:

"*Na 121 K 3.3 Urea 2.9 Creat 33 Phenytoin 23.4mg/l (10-20)*

Hyponatraemia - ? Fluid overload c̄ low Na fluids

? SIADH

Imp - ? Need for ↑ Na content in fluids

D/W Reg - ↓ Fluids to 2/3 of present value – 41mls/hr

Send urine for osmolality"[365]

3.148 This was an impressive analysis, particularly from an SHO with Dr Stewart's experience. Recognising that Claire was hyponatraemic, he suggested two causative mechanisms; one the type and volume of fluids under infusion and the other the Syndrome of Inappropriate Anti-Diuretic Hormone secretion ('SIADH'). His proposed response was first, to switch from Solution No. 18 to a fluid with a higher sodium content and secondly, to reduce the volume by a third.

3.149 He telephoned Dr Bartholome who directed him to reduce the fluids by a third but to continue with Solution No. 18. She also told him to give the next dose of phenytoin but to reduce the rate.[366]

3.150 It was thus that between 23:00 and 02:00, Claire received a further 56mls of Solution No.18 at about 18.5mls per hour, together with 7.6mls of 0.9% saline in conjunction with her midazolam infusion. In addition, she was

[365] 090-022-056
[366] Dr Stewart T-06-11-12 p.67

given 110mls of an unknown dilutant with the phenytoin infusion.[367] Dr Scott-Jupp thought that the dilutant was probably 0.9% saline.[368] These fluids amounted to a total of 173.5mls. Dr Scott-Jupp calculated that this was considerably more than the 41ml/hr intended and only slightly less than the rate as originally infused.[369] He added that Claire also received about 133mls more than intended between 20:00 and 02:00 but considered it unlikely that this comparatively small excess would have made any significant difference.[370]

3.151 Dr Stewart believes that he informed Dr Bartholome about the drop in Claire's sodium levels, her GCS readings and the anti-convulsants administered. He fully expected her to come as soon as possible and to assume responsibility. Dr Stewart says that they did not however discuss moving Claire to PICU and then his duties called him elsewhere.[371]

Involvement of Dr Bartholome

3.152 Dr Stewart did not re-visit Claire between 23:30 and 03:00 and Dr Bartholome did not go to Claire until about 03:00.[372] How can it possibly have been that Claire was not seen by a doctor during those critical 3½ hours? In part, it was due to chronic medical under-staffing at night[373] and in part because Dr Bartholome could have done more. Her belief is that she must have been managing another emergency, most probably in A&E. That might very well have been the case but the expert consensus is that by 23:30 the time had most definitely come to call consultants and to contact PICU. Claire had been suffering sporadic attacks and her GCS scores and sodium levels were dangerously low. If Dr Bartholome was unable to see Claire then she should have called for consultant help or got Dr Stewart to make the call. Alternatively, she could have asked him to go

367 090-038-135
368 234-003-002
369 234-003-002
370 234-003-003
371 Dr Stewart T-06-11-12 p.83 line 18 *et seq*
372 090-022-056
373 Dr Stewart T-06-11-12 p.39

back and check on Claire's condition or contact PICU. She did none of those things.

3.153 Dr Bartholome's failure to respond after 23:30 would be almost impossible to comprehend if she had been informed at the 17:00 handover as to exactly how ill Claire was. She cannot now recall the events of that night but I consider it most unlikely that she was informed about the seriousness of Claire's condition. Had she known how critical Claire was, she would have given priority to her care, most especially when she received Dr Stewart's report of deterioration.

3.154 The unavoidable truth is that Claire was deteriorating in plain sight of the doctors and nurses on Allen Ward. The signs were unambiguous but went unrecognised. I conclude that this arose, in part, from the failure of any single clinician to take primary responsibility for Claire's case. Dr Steen was not there and neither Dr Webb nor Dr Sands assumed overall charge or sought to secure Dr Steen's attendance or talk with Dr Bartholome. To make matters worse it would appear that there was no on-call paediatric consultant.

3.155 Leadership was absent from Claire's case and had been from the outset. No single experienced overview was brought to bear to correct, co-ordinate or make connections. None of the doctors treating Claire had individual 'ownership' of her case, none was motivated to push for EEG, CT or PICU and none imposed personal control over her care so as to ensure appropriate record keeping, regular observations or proper communication with Mr and Mrs Roberts.

3.156 There was no firm consensus about whether Claire could still have been saved at 23:30.[374] However, and at the very least, the fall in her sodium levels could have been arrested by switching from Solution No. 18 and reducing the rate. Dr Stewart's plan to change the fluid and reduce the

[374] 234-002-008 & 091-011-067

volume was preferable to Dr Bartholome's direction to continue with Solution No. 18 but at a lesser rate.

Respiratory arrest: 23rd October 1996

3.157 At 02:30, a nurse recorded that "*Slight tremor of right hand noted lasting few seconds. Breathing became laboured and grunting. Respiratory rate 20 per minute. O2 saturations 97% - Claire stopped breathing.*"[375] Dr Bartholome was contacted and attended with Claire at 03:00. She made her sole entry in the medical chart:

"*3AM Called to see. Had been stable when suddenly she had a respiratory arrest and developed fixed dilated pupils. When I saw her she was Cheyne-Stoking and requiring O_2 via face mask. Saturation with bagging in high 90s. Good volume pulse. I attempted to intubate – not successful. Anaesthetic colleague came and intubated her orally with 6.5 tube. Transferred to PICU.*"[376]

3.158 Dr Bartholome explained that her entry is to be understood as being a part of what she would have told staff in PICU.[377] They would also have seen Dr Stewart's entry at 23:30 together with the earlier entries. Her use of the word "*stable*" to describe Claire's condition prior to collapse make no sense whatsoever.

3.159 Dr Bartholome telephoned Mr and Mrs Roberts to tell them that Claire had breathing difficulties and to come to the hospital as quickly as possible. She did this at about 03:45 and it was her last input into Claire's case.

3.160 The expert consensus is that Claire could not have been saved after her collapse and confirms that there can be no criticism of how Claire was treated in PICU.

375 090-040-138
376 090-022-056
377 Dr Bartholome T-18-10-12 p.88-89

Transfer to PICU and Dr Steen's examination of Claire

3.161 Claire was transferred to PICU at 03:25 on Wednesday 23rd October.[378]

3.162 Dr Steen was contacted. She responded immediately and was with Claire shortly before 04:00. This was the first time she had seen Claire. I also believe that it was probably the first time she knew anything about Claire. She made the following entry in the records at 04:00 :

"*9½-year-old girl c̄ learning difficulties admitted 32 hours ago c̄ ↓ level of consciousness.*

SB Dr Webb ∆ acute encephalopathy ? aetiology. Covered c̄ acyclovir + cefotaxime. Loaded ĉ phenytoin + valproate added in @ 17:00 hrs.

11pm – phenytoin level = 23.4. Na+ 121. K+ 3.3. Fluids restricted to 2/3rd maintenance. Obs otherwise stable.

@3am Reg asked to see because of resp difficulties. Cheyne-Stoke breathing – intubated + transferred to ICU.

At present intubated + ventilated. Has had some Midazolam but it is no longer running. Pupils fixed + dilated. Bilateral papilloedema L>R. No response to painful stimuli. BP- 90/65 HR = 100/min.

Plan-Mannitol stat.

Dopamine infusion.

Urgent CT scan."[379]

3.163 Dr Steen explained that she compiled this entry from the notes, from what she was told by the doctors and nurses and her examination.[380] It is a significant entry but not an exhaustive re-listing of every issue and concern. There is specific reference to the "*acute encephalopathy*" as noted by Dr Webb but none to the encephalitis included in Dr Sands' earlier entry (and about which I have already expressed my view). Importantly she refers to

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378 090-040-138-139
379 090-022-057
380 Dr Steen T-16-10-12 p.28

the low sodium levels and the restriction of fluids as noted by Dr Stewart.[381] She examined Claire for raised intra-cranial pressure.

Dr Webb's attendance at 04:40, 23rd October

3.164 It would appear that, in consequence of a call from Dr Steen, Dr Webb came to the hospital as well. His entry in the notes, made at 04:40 and immediately after Dr Steen's, records:

"*Neurology*

SIADH – hyponatraemia, hypoosmolarity, cerebral oedema + coning following prolonged epileptic seizures

Pupils fixed + dilated following mannitol diuresis

No eye movements.

→ *For CT scan*"[382]

3.165 Dr Peter Kennedy, [383] Registrar in Radiology, reported on the CT scan, which was performed at approximately 05:30.[384] He noted severe cerebral oedema.[385] Dr Webb recalled that at that point it was "*clear that Claire had sustained severe brain injury and was not going to survive.*"[386]

3.166 Claire did not recover. With the consent of her parents, ventilation was discontinued at 18:45 on 23rd October 1996[387] and she died in PICU.

Brain stem death tests

3.167 As in Adam's case, there is an issue about the brain stem death tests. They were performed in Claire's case at 06:00 and 18:25 on 23rd October by Drs

381 090-022-057
382 090-022-057
383 310-003-004
384 WS-167-1 p.2
385 090-022-059
386 090-053-168
387 090-022-061

Steen and Webb and recorded on the standard 'Diagnosis of Brain Death' form.[388]

3.168 Dr Simon Haynes, Consultant Paediatric Anaesthetist, commented on the brain stem testing.[389] He said, "*There has to be a certainty that there is no residual effect of any neuromuscular or sedative drugs or other intoxicating agents*" and "*then there has to be the exclusion of metabolic and biochemical causes of coma. And that exclusion has to be made before doctors making the test can go on and do the test.*"[390]

3.169 Dr Aronson considered that several of the anti-convulsant drugs administered to Claire could still have been having an effect even after 24 hours.[391] In the circumstances, it was necessary for both Drs Steen and Webb to carefully review Claire's recorded drug history and only to proceed to the brain stem death test when it was appropriate so to do. Additionally, even though Claire's sodium reading had risen to 129mmol/L by the time of the first test, it was still outside the normal range. Metabolic causes of coma could not therefore be completely excluded.

3.170 Notwithstanding, Dr Webb and Dr Steen determined that Claire fulfilled the criteria for brain stem death and signed the 'Diagnosis of Brain Death' form.[392] In particular, question 1(c) "*Could other drugs affecting ventilation or level of consciousness been responsible for her condition?*" was answered by them both in the negative.[393] I think it is unlikely that these doctors could have been so confused by the slightly odd wording of this question to fail to understand it or its purpose. Dr Aronson was of the opinion that given that the phenytoin probably remained in Claire's system, question 1(c) could not properly have been answered in the negative.[394] Question 1(f) then posed the question: "*Could patient's condition be due to*

388 090-045-148
389 Dr Haynes T-03-05-12 p.106 to 112
390 Dr Haynes T-03-05-12 p.114 line 13-20
391 237-002-008 to 009
392 090-045-148
393 090-045-148
394 Dr Aronson T-08-11-12 p.276 line 22

a metabolic/endocrine disorder?" This was also answered in the negative.[395] The doctors made no reference to Claire's hyponatraemia.

3.171 The protocol for certifying brain stem death requires strict adherence. Just as the protocol was not followed in Adam's case, so too was there failure to comply in Claire's case. I believe that it was inappropriate to start the tests before the effect of the phenytoin could be disregarded and incorrect to answer the questions as they did. It was not suggested that anything could have been done differently so as to affect the outcome but it was quite wrong for Dr Webb to record in his entry at 06:00 that Claire was "*under no sedating/paralysing medication*"[396] when in all probability the drugs which he had prescribed the previous day were still in her system.

3.172 Dr Webb maintained that at the time of the tests he was unaware that Claire had been erroneously prescribed 120g of midazolam. I conclude therefore, that just as he may have failed to review Adam's medical notes for his brain stem death test, so too did he fail to review Claire's drug history. That such an error in prescription remained un-noted for so long further confirms that the drug record cannot have been subject to further or adequate review.

3.173 The 'Diagnosis of Brain Death' form concludes with the final question "*Is this a Coroner's case*" which was answered in the negative and by Dr Steen alone.[397]

Discussions with Claire's parents

3.174 Shortly after the CT scan confirmed Claire's cerebral oedema, Drs Steen and Webb met with Claire's parents. Mr Roberts recalled that Dr Steen informed him that Claire was brain dead and that "*everything possible had been done for Claire and nothing more could have been done.*"[398] He remembered Dr Steen explaining that "*the virus from Claire's stomach had*

395 090-045-148
396 090-022-058
397 090-045-148
398 WS-253-1 p.14

spread and travelled into Claire's brain and caused a build-up of fluid."[399] The Roberts family are emphatic that there was no mention of low sodium.

3.175 Mr and Mrs Roberts' evidence is supported by the Hospital Relative Counselling Record which noted that "*following CT scan Dr Steen and Dr Webb explained that Claire had swelling of the brain and could possibly be brain dead*" and when "*asked why her brain had swollen, it was explained it was probably caused by a virus.*"[400]

3.176 However, Dr Webb considered that this was wrong and did not accurately reflect their conversation. He stated that "... *if a* "*virus*" *was discussed it was probably on the basis of a theory that a virus may have triggered Claire's seizures and her brain oedema*." Although he could not recall the detail of what was actually said about hyponatraemia and cerebral oedema, he believed that he "*would have indicated that the brain swelling was due to hyponatraemia*" and that he communicated his opinion as he had set it out in the medical notes,[401] namely "*SIADH- hyponatraemia, hypoosmolarity; cerebral oedema + coning following prolonged epileptic seizure.*"[402]

3.177 Given the passage of time since 1996 and the traumatic events endured in the interim by Mr and Mrs Roberts, including the 2004 TV broadcast, the inquest and the police investigation, I do not assume that their evidence is necessarily always accurate. Dr Steen has suggested that she would have mentioned low sodium and that this might explain how Mr and Mrs Roberts identified a connection when they watched the documentary in 2004. Dr Steen believed furthermore that she would have mentioned low sodium in the context of SIADH rather than by reference to Solution No.18 because that was still a commonly used fluid at that time. However, neither Dr Steen nor Dr Webb made any note as to the advices given and the detail cannot now be recovered.

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399 WS-253-1 p.14
400 090-028-088
401 090-028-088 & WS-138-1 p.50-51 & p.55
402 090-002-057

3.178 Mr and Mrs Roberts were, as a matter of course, entitled to a straightforward explanation from Dr Steen as to the known causes of Claire's cerebral oedema. At that time all that was understood with any confidence was that hyponatraemia had probably contributed to the swelling of the brain. There is no good evidence that Dr Steen advised Claire's parents as to the role of hyponatraemia at that or indeed any other time. In the light of Dr Steen's subsequent failure to advise them as to the role of hyponatraemia, I conclude, on the balance of probabilities, that Mr and Mrs Roberts were not given an adequate or proper explanation as to what was known about the causes of Claire's death on 23rd October.

Involvement of the Coroner's Office

The legal duty to report

3.179 Claire's death was not referred to the Coroner. The Coroner's office was not notified of Claire's death until 2005. The relevant legislation in Northern Ireland, both then and now, is section 7 of the Coroner's Act (Northern Ireland) 1959 which provides that:

"*Every medical practitioner... who has reason to believe that the deceased person died, either directly or indirectly, as a result of violence or misadventure or by unfair means, or as a result of negligence or misconduct or malpractice on the part of others, or from any cause other than natural illness or disease for which he had been seen and treated by a registered medical practitioner within twenty eight days prior to his death, or in such circumstances as may require investigation (including death as the result of the administration of an anaesthetic) shall immediately notify the coroner within whose district the body of such deceased person is of the facts and circumstances of the death.*"[403]

3.180 The following points emerge from that provision:

[403] 170-001-008 & http://www.legislation.gov.uk/apni/1959/15/section/7

(i) The duty to notify the Coroner is imposed on every medical practitioner and not just the named consultant. Accordingly, in Claire's case, it extended at the very least to Drs Steen and Webb.

(ii) The death need only relate indirectly to any of the circumstances identified.

(iii) The context for reporting a death includes not only negligence, misconduct or malpractice but also "*such circumstances as may require investigation.*"

(iv) It is not only the death that is to be reported – but also "*the facts and circumstances*" of the death.

(v) The report is to be made immediately.

Decision not to notify Coroner

3.181 It is necessary to set out the events which seemingly led to the decision not to report Claire's death to the Coroner.

3.182 By 04:00 on 23rd October, Claire was in reality, already dead. Quite apart from her family, this must have come as a shock to the doctors and nurses who were responsible for her care. It seems to have been completely unexpected – after all Claire had been at school on Monday and was dead by Wednesday. At 14:00 on Tuesday, Dr Webb had considered the option of a CT scan for the following day but had not felt the need to arrange it or an EEG more urgently. Both he and Dr Sands finished their duties by 18:00 and left the hospital in no doubt that Claire would be on Allen Ward the following morning. When Dr Steen and Dr Webb came into PICU in the early hours of 23rd October, they must have been asking how this could possibly have happened, whether there were matters to be investigated and whether or not her death raised questions about the care she had received on Allen Ward.

3.183 Instead, Dr Steen's evidence was that she was able to form so clear and confident a view as to the cause of Claire's death that she did not think it appropriate to contact the Coroner's office.[404] Both she and Dr Webb conceded in their oral evidence that with hindsight they should have called the Coroner.[405] I entirely agree that they should have but I do not accept that this is only apparent with the benefit of hindsight. There was not a single witness to the Inquiry who supported their decision not to contact the Coroner about Claire's death.

3.184 The decision is so questionable that it raises issues about the *bona fides* of Dr Steen in particular, but also of Dr Webb and others, because of their responsibility under Section 7. The Roberts family has come to believe that Claire's death was not notified to the Coroner in order to conceal the inadequacy of her treatment and the responsibility of the Trust for her death.[406] If they are wrong, what was it in 1996, which allowed the doctors to think it unnecessary to contact the Coroner?

3.185 Dr Steen's evidence is that, in October 1996, she knew nothing about the death of Adam Strain in 1995 or anything about the outcome of his inquest four months before. Whilst this is very hard to believe, the shocking possibility remains that it may be true. If it is, it confirms that what happened in Adam's case was largely ignored in the Children's Hospital with the result that lessons were not learned beyond an extremely small group of people. Whilst it is to be recognised that there are obvious differences between Adam's case and Claire's, there were nonetheless sufficient lessons to be drawn in relation to the causation and early treatment of hyponatraemia in children to make it relevant for those caring for Claire.

3.186 On the morning of October 23rd, Dr Steen knew that Claire had suffered acute hyponatraemia and that this had been a contributory factor in the fatal cerebral oedema.[407] Subsequently and with the benefit of hindsight,

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404 Dr Steen T-18-12-12 p.56 line 24 & WS-143-1 p.73
405 Dr Webb T-03-12-12 p.232 line 25 & Dr Steen T-17-12-12 p.43 line 17
406 T-06-12-12 p.96
407 WS-143-1p.79

consultants and experts have expressed a range of opinion about what else may have been wrong with Claire but it is beyond dispute that hyponatraemia was identifiable and indeed identified on 23rd October as a factor in her death. The record contains Dr Stewart's query at 23:30, 22nd October about "*Hyponatraemia - ?Fluid overload [with] low Na fluids. ?SIADH,*"[408] and Dr Steen noted Claire's hyponatraemia and fluid therapy at 04:00 on 23rd October as "*na + 121; fluids restricted to 2/3rd maintenance.*"[409]

3.187 Whilst Dr Steen was alert to the possibility of an excess infusion of hypotonic fluids, she could not then have formed any definite opinion in this regard. Indeed, the debate about the volume of fluid actually given Claire became very protracted and intense at the public hearings. I consider, that the conclusion to be drawn from the evidence is that there was indeed an excess of fluid, which on its own may not have been significant, but which became dangerous because Claire may have had SIADH causing retention of the fluids given intravenously.

3.188 SIADH was in the circumstances a matter for Dr Steen's consideration. It was a well-recognised medical complication arising when particular conditions affect the normal release of ADH. Such conditions include, amongst other things, infection, pain, stress and nausea. In such cases, a syndrome of inappropriate ADH can develop causing the kidneys to stop releasing fluids as normal resulting in a retention of fluids. In such a situation the infusion of low sodium IV fluids can only add to the volume of fluids retained and reduce the levels of sodium by dilution.

3.189 The consequence of not monitoring Claire's serum sodium levels, not understanding her fluid balance and not re-assessing her fluid regime was to permit the development of dilutional hyponatraemia. Even if Dr Steen did not arrive at such a conclusion at that time, she knew enough about the cerebral oedema and sodium levels and sufficient of the uncertainties and

408 090-022-056 (for accuracy of transcription see WS-141-1 p.3)
409 090-022-057

possibilities to understand that further investigation was most certainly indicated.

3.190 Further, and even if it is correct that Dr Steen was entirely unaware of Adam's death, Dr Webb was not. He had formally confirmed brain stem death in Adam on two occasions[410] and clearly understood the connection between dilutional hyponatraemia and cerebral oedema.[411] He had read Adam's notes and provided the Coroner with a statement for inquest. Whilst he claimed to have "*no knowledge of the inquest findings in the case of Adam Strain.*"[412] I found it hard to believe him. He appeared intent on distancing himself from Adam's case. He said that he doubted that he had received Dr George Murnaghan's[413] letter asking him for his statement about Adam[414] or that he received a written request to attend the pre-inquest consultation[415] or that a copy of Adam's post-mortem report was sent him[416] or that he was asked for additional comment in relation to the ongoing medical negligence claim.[417] I found this implausible.

3.191 Accordingly, I believe Claire's death must have come as a clear reminder to him of dilutional hyponatraemia, even if the cause was different. In his evidence, he suggested that in 1996 he did not realise that Claire had received excessive fluid. However, he had read the notes querying fluid overload and his own entry in the notes reveals a clear understanding of the underlying processes, namely "*SIADH, hyponatraemia, hypoosmolarity; cerebral oedema+coning following prolonged epileptic seizure*".[418]

3.192 Just as Dr Webb sought to distance himself from any knowledge of Adam's case, he distanced himself from the decision not to refer Claire's death to the Coroner. On these issues, his evidence was likewise unconvincing.[419]

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410 058-004-009 & 058-035-139
411 Dr Webb T-03-12-12 p.246 line 3
412 WS-138-1 p.93
413 310-023-004
414 Dr Webb T-03-12-12 p.259 line 25
415 Dr Webb T-03-12-12 p.262 line 24
416 Dr Webb T-03-12-12 p.264
417 Dr Webb T-03-12-12 p.265 line 24
418 090-022-057
419 WS-138-1 p.53 & Dr Webb T-03-12-12 p.232 *et seq*

He had made repeated efforts on Tuesday 22nd October to help Claire and had performed both brain stem death tests. Accordingly, it is most improbable that he should avoid discussion about whether the Coroner should be contacted.

3.193 Dr Webb's treatment of Claire was mostly for status epilepticus. He did not investigate other possibilities and without an EEG could not have been sure about his diagnosis of status epilepticus. By the time he left the hospital on Tuesday evening, he knew that Claire's response to the drug treatment was negligible. She then died overnight. In such circumstances, Dr Steen's conclusion that his unconfirmed diagnosis of status epilepticus was sufficiently evidenced as to leave nothing to raise with the Coroner is extraordinary and Dr Webb's failure to question it remarkable.

3.194 Neither Dr Webb nor Dr Steen addressed Claire's wholly unexpected deterioration from admission to collapse and both ignored the need to fully understand the mechanism whereby hyponatraemia might have developed. Neither seem to have questioned why there was no response to the treatment given and whether this might not indicate that the diagnosis was wrong. They seemingly failed to note or perhaps ignored the failings in the fluid therapy and the failing to repeat the blood test, either of which should have prompted referral to the Coroner. They also completely ignored, or failed to recognise, the lack of consultant input after Dr Webb's departure, the lack of medical attendance after Dr Stewart's intervention and the drug overdoses.

3.195 Dr Webb knew enough about Claire's case at that time to recognise that there may have been a problem in relation to her fluid and electrolyte management and to have appreciated that he could not explain with any confidence the cause of her SIADH.[420] His failure in these circumstances, to notify the Coroner is hard to explain in professional terms. He was familiar with the process of a Coroner's inquest and had a duty under the legislation. On the balance of probabilities, I am forced to the conclusion

[420] WS-138-1 p.47

that he did not refer Claire's death to the Coroner because of a reluctance to draw attention to possible failings in her treatment.

3.196 Drs Steen and Webb were wrong not to refer the death to the Coroner. Their decision was a breach of both statutory obligation and professional duty. It was, even by the standards of 1996, a gross error of judgement. Their reasons were hopelessly inadequate, their decision reached without proper reflection, and their evidence unconvincing.

Involvement of Dr McKaigue

3.197 One of those who treated Claire in PICU was Dr James McKaigue.[421] On the night of 22nd/23rd October, he was the on-call consultant paediatric anaesthetist and was contacted about Claire's condition. He examined Claire and reviewed her history. He noted at 07:10 that Claire's serum sodium was 121mmol/L "*presumably on basis of SIADH*" and that the "*CT scan shows severe cerebral oedema.*"[422]

3.198 Dr McKaigue claimed to have initiated a discussion about whether the Coroner should be informed or whether a death certificate could issue. It is to be recalled that he had an understanding of hyponatraemia, having been involved in Adam's case.[423] However, Claire's case was different because she was thought to have encephalitis and status epilepticus in addition to hyponatraemia. These were indeed matters to be discussed and I accept that these conditions should have featured in any debate, but I do not accept that these diagnoses could have been accepted with any confidence at that time. In such circumstances, he should have ensured that Claire's death was reported to the Coroner.

3.199 However, Dr McKaigue concluded that the cause of Claire's death was known and had occurred naturally. He believed that she had status

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421 310-003-003
422 090-022-058-060
423 He was also one of the joint authors of the RGHT statement submitted to the coroner at Adam Strain's inquest and made "*having regard to the information in the paper by Arieff et al (BMJ 1992)*" (011-014-107a & 060-014-025)

epilepticus and encephalitis and explained that Dr Steen had told him that these could bring on SIADH which could in turn cause cerebral oedema. [424] For that reason he sensed no "*red flags*" indicating any necessity to notify Claire's death to the Coroner. His approach ignored both the uncertainties and the very much more obvious conclusion that the cerebral oedema was caused by the hyponatraemia in the presence of SIADH and the administration of hypotonic solution and was therefore a death which could have been prevented.

3.200 Dr McKaigue's position was further undermined by his own entry in the 'PICU Coding Form'. There he made reference to hyponatraemia but not to status epilepticus or encephalitis.[425] In all the circumstances, I consider that Dr McKaigue failed in his duty to ensure that Claire's death was reported to the Coroner.

Involvement of Dr Robert Taylor

3.201 Dr Robert Taylor[426] saw Claire in PICU at approximately 10:00 on 23rd October. He had more cause than most to be alert to the issues of dilutional hyponatraemia. Only four months had passed since the Coroner had conducted the inquest into the death of Adam Strain and Dr Taylor had signed a statement on behalf of the Trust "*having regard to the information in the paper by Arieff et al (BMJ 1992).*"[427]

3.202 He noted that Claire "*appears BS Dead informally. But only 7 hours post arrest. Na+129 (from 121).*"[428] He may therefore be taken to have read the preceding entries in Claire's medical notes and understood that hyponatraemia was probably responsible for the cerebral oedema and that issues of SIADH, fluid overload and fluid therapy were referenced. I find it hard to understand how he could not have wondered whether fluid and

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424 Dr McKaigue T-17-10-12 p.220
425 090-055-203
426 310-003-004
427 011-014-107a
011-011-074: Arieff A. I., Ayus J. C., Fraser C. L. Hyponatraemia and death or permanent brain damage in healthy children. BMJ 1992; 304 :1218
428 090-022-061

electrolyte therapy had been correctly managed and whether notification to the Coroner was appropriate. Dr Taylor had no explanation beyond saying that it "*... didn't strike a chord...*"[429] I find that he too failed in his duty to notify the Coroner.

Certifying the cause of death

3.203 Dr Steen indicated that "*Once the serum sodium result of 121 was known, hyponatraemia would have been considered as a contributory factor in the cerebral oedema.*"[430] However, when she completed the Medical Certificate of Cause of Death on 23rd October she certified that death was due to cerebral oedema secondary to status epilepticus.[431] This was despite the fact that the diagnosis of status epilepticus was unconfirmed in the absence of an EEG test. Furthermore, Dr Steen's evidence that she did not include viral encephalitis in the death certificate because it was unconfirmed[432] only serves to emphasise the illogicality of her citing status epilepticus as a cause of death when it too was unconfirmed. The only confirmed diagnosis at that time was hyponatraemia but that, she specifically omitted from the death certificate.

3.204 Furthermore, and even if it had been appropriate to issue a Medical Certificate of Cause of Death, which it was not, Dr Steen may not have been qualified to sign it because she had not been directly involved in Claire's care and accordingly lacked the necessary credentials[433]

3.205 Mr and Mrs Roberts were thus denied timely coronial investigation into Claire's death and their suspicion of cover-up cannot be regarded as unreasonable. This made matters even worse for them.

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429 Dr Taylor T-11-12-12p.77 line16
430 WS-143-1 p.79
431 090-022-061
432 Dr Steen T-17-10-12 p.225 line 6
433 Article 25 of the Births and Deaths, Registration (Northern Ireland) Order 1976.

Brain only autopsy

Consent

3.206 On the evening of 23rd October, after the 'Diagnosis of Brain Death' form was completed but before Claire's ventilation was discontinued, Dr Steen met with Mr and Mrs Roberts. She obtained their consent for a limited hospital post-mortem[434] examination of Claire. The consent was signed by Mr Roberts and authorised a post-mortem examination restricted to the brain alone.[435] This confirmed, in effect, that Claire's death was not to be referred to the Coroner. Mr and Mrs Roberts are confident that Dr Steen told them at that time that a virus had caused a build-up of fluid on the brain and that the autopsy might identify the virus responsible. [436] There was no mention of hyponatraemia.

3.207 The process of giving and taking a consent for post-mortem must be heart-rending and difficult but it was important that Mr and Mrs Roberts were given enough information to understand why the autopsy and its limitation were necessary and why the death did not need to be referred to the Coroner.

3.208 Mr Roberts recalls that he did not request any limitation to the post-mortem but that this was recommended by Dr Steen, who "*stated that there would be no need for an Inquest but the Hospital needed to carry out a brain only post-mortem.*"[437] He described his "*understanding at that time was that doctors were aware of the reasons for Claire's death, Dr Steen had explained that a virus had caused the fluid build-up around Claire's brain. If I had been informed that there was any unknown or uncertainty regarding the cause of death then I would have consented to an Inquest.*"[438] He said there were no discussions regarding the option of a full post-mortem.[439]

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434 090-022-061
435 090-054-185
436 WS-253-1 p.15
437 WS-253-1 p.15
438 WS-253-1 p.15
439 WS-253-1 p.15

3.209 Dr Steen stated that she has "*no recollection of events but would assume I hoped to... determine if encephalitis was present... determine an underlying cause for seizures and developmental delay...*"[440] Again, she made no record of the conversation or the reasons given.

3.210 Mr and Mrs Roberts were very clear in their evidence that nothing was said about the possibility of the post-mortem providing an explanation for Claire's developmental delay. They stated that they would have wanted to know and it was definitely not raised.[441]

3.211 Dr Steen advised that a limited post-mortem is most usually indicated when particular organs only are involved in the disease process and additional information as to cause of death, or underlying disorders, is to be obtained by examining those organs.[442] Accordingly, she said a post-mortem of the brain alone was appropriate in this case because the only additional benefit of a full post-mortem might have been the identification of an enterovirus[443] from the content of the gut.[444]

3.212 I consider that a full post-mortem must not only allow positive identification of some factors but also the positive exclusion of others. Additionally, it might from the perspective of Dr Steen, have identified other non-brain related factors implicated in the suspected SIADH. A restriction of examination is a restriction of the potential for information. It seems that the Pathology Service was not consulted as to the limitation imposed upon the post-mortem.[445] It was to subsequently note the consequence of limitation, stating that because "*as this was a brain only autopsy it is not possible to comment on other systemic pathology*"[446]

3.213 Dr Webb was unable to recall his input into the decision to limit the autopsy but stated that "*I believe I would have expected her post-mortem to have*

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440 WS-143-1 p.72
441 Mr and Mrs Roberts T-01-11-12 p.196 line 19 & WS-253-1 p.20-21
442 WS-143-1 p.71
443 310-007-003
444 WS-143-1 p.72 & Dr Steen T-17-10-12 p.190 line 5
445 WS-224-1 p.7
446 090-003-005

been a full post-mortem."[447] I share this view in light of the lack of certainty surrounding Claire's diagnoses at that time and the necessity to understand the reasons for her rapid and unexpected deterioration.

3.214 The advices given to Mr and Mrs Roberts were not recorded and the justification for pursuing a restricted hospital post-mortem was not documented. There was however no guidance to assist in this very important process. It is far from certain that Mr and Mrs Roberts were given sufficient information to allow them to give a fully considered consent to the post-mortem. That is regrettable.

3.215 That Dr Webb did not engage more in this process is surprising given both his involvement and his expectation that a full post-mortem might have been necessary. Yet again, he distanced himself and allowed Dr Steen to pursue her own course.

'Autopsy Request Form'

3.216 Dr Steen completed and signed the 'Autopsy Request Form' to be sent to the pathologist. It names the consultant as "*Dr Webb/Dr Steen*" and cites a clinical diagnosis of "*cerebral oedema 2° to status epilepticus ? underlying encephalitis.*" Dr Steen listed the clinical problems in order of importance as:

"*1 Cerebral oedema.*
2 Status epilepticus.
3 Inappropriate ADH secretion.
4 ? viral encephalitis."[448]

3.217 Under "*history of present illness*", Dr Steen wrote:

"*Well until 72 hours before admission. Cousin had vomiting and diarrhoea. She had a few loose stools and then 24 hours prior to admission started to vomit. Speech became slurred and she became increasingly drowsy. Felt*

447 WS-138-1 p.91
448 090-054-184

to have sub clinical seizures. Treated [with] rectal diazepam / IV phenytoin / IV valproate. Acyclovir + cefotaxime cover given. Serum Na+ dropped to 121 @ 23-30 hrs on 22-10-96. ?Inappropriate ADH secretion. Fluids restricted. Respiratory arrest 0300 23-10-96. Intubated + transferred. ICU – CT scan – cerebral oedema. Brain stem death criteria fulfilled @ 0600 + 18.15 hrs. Ventilation discontinued 18-45 hrs."[449]

3.218 In the "*past medical history*" section she stated:

"*Mental handicap*

Seizures from 6 months – 4 years."[450]

3.219 There was some criticism as to the accuracy of this undated form as completed by Dr Steen. It omits all reference to the treatment with midazolam (whether miscalculated or not) and remains silent as to the clinical diagnosis of hyponatraemia which was then thought a contributory factor to the cerebral oedema. Whilst the form does refer to sodium levels, suspected secretion of inappropriate ADH and restriction of fluids it fails to list hyponatraemia as a clinical problem or diagnosis. This is odd given the entries in the record made by Drs Stewart and Webb which both clearly cite hyponatraemia and the 'Case Note Discharge Summary' issued by PICU which recorded Claire's death with a diagnosis including hyponatraemia.[451]

3.220 My greater concern is that I believe that the form actually betrays the uncertainty that the consultants must have shared about the cause of death. Not only does it differ from the Death Certificate by including the clinical diagnosis of "*? Underlying encephalitis*"[452] but it expresses it in terms of a query. This uncertainty should have led to something more substantial than a request for a brain-only autopsy. It should, as a matter of course, have led to the Coroner. Again Dr Webb's failure to involve himself in this

449 090-054-183 to 184
450 090-054-183
451 090-009-011
452 090-054-183

administrative process is as striking as Dr Steen's single-handed control of it.

Autopsy

3.221 The autopsy of the brain alone was carried out on 24th October by Dr Brian Herron[453] who was then a senior registrar in neuropathology. The brain was cut on 28th November 1996 and the slides examined in January 1997. The final autopsy report was completed on 11th February 1997.[454] In relation to matters arising from the autopsy, the expert evidence of Dr Waney Squier, Professor Brian Harding and Professor Sebastian Lucas was received.

3.222 In October 1996, the Neuropathology Service in Belfast comprised a team of three. It was headed by Dame Professor Ingrid Allen who was a leading figure in neuropathology within the United Kingdom and in addition to Dr Brian Herron, included at consultant level Dr Meenakshi Mirakhur,[455] The service provided by these three specialists had been accredited in February 1996,[456] a process which involved review of the Neuropathology Service to ensure that it met the standards of the time.

3.223 As the evidence unfolded from Drs Herron and Mirakhur and the three Inquiry experts, it became clear that the differences between them were limited. It is fair to acknowledge that the independent experts had significantly more time and opportunity to explore the issues in Claire's case than Drs Herron and Mirakhur had in 1996/7 when they were working in a hard-pressed service.

3.224 At the outset, they agreed that the purpose of an autopsy is to identify the cause of death. To that end, new cases are conventionally discussed by the neuropathology team who both welcome and expect discussion with the

453 310-003-004
454 090-003-003(there is some question about this being the final report – it is neither signed or dated but for present purposes I will regard it as the final report).
455 310-003-004
456 Dr Mirakhur T-30-11-12 p.24 line 9

clinical team. This can be useful before and after a post-mortem in order to help formulate opinion. In some cases, a draft autopsy report will be issued for discussion, to be finalised after clinical input.[457]

3.225 After a final report, there were then two further opportunities to discuss the case, namely:

(i) The grand round which focussed on the learning and training issues emerging from cases such as Claire's. This would have been attended by the core neuroscience group including the pathologists and radiologists.[458]

(ii) The audit/mortality meeting conducted by the paediatricians but which the pathologists might also attend. At such meetings, a number of cases were discussed. In the mid-1990s, such meetings were un-minuted at the behest of medical insurers who did not wish discussions to be recorded lest their insured be compromised.[459]

The significance of such discussions was the opportunity for those involved to question and probe how a disease or condition had developed, how a child was treated, how a death occurred and how things might be done better or differently in the future.

3.226 As outlined above, Dr Steen's 'Autopsy Request Form' identified four clinical problems.[460] The evidence indicated the following in relation to each:

(i) Cerebral oedema – this was clear to Drs Herron and Mirakhur and was confirmed by the Inquiry experts.[461]

457 Dr Mirakhur T-30-11-12 p.10 line 2
458 Dr Mirakhur T-30-11-12 p.135 line 7
459 WS-156-2 p.6 & WS-224-4 p.5
460 090-054-184
461 Dr Mirakhur T-30-11-12 p.36 line 19 & Professor Lucas T-18-12-12 p.170 line 12

(ii) Status epilepticus - the pathologists could make no finding because there was no EEG confirmation. The identification of status epilepticus was a matter for clinicians and not pathologists.

(iii) Inappropriate ADH secretion – it was agreed in evidence that this could neither be proved or disproved at post-mortem even if it is a plausible diagnosis in the light of the cerebral oedema and hyponatraemia.[462]

(iv) Viral encephalitis - Drs Herron and Mirakhur thought that there was mild inflammation of the brain perhaps justifying a 1 - 2 on a notional scale of 1 - 10.[463] Such would indicate that there was some evidence of encephalitis, but only that. On looking at the same slides, Dr Squier and Professor Harding could not see this evidence at all. In any event, Drs Herron and Mirakhur agreed that for encephalitis to be identified as a factor contributing in any way to Claire's death, it would have to reach a minimum of 5 on such a scale.[464] Since it did not do so, the effective result of the post-mortem was that encephalitis could not be confirmed as a cause of Claire's death.

3.227 In short, the only certain finding after the post-mortem was that Claire had cerebral oedema and hyponatraemia but this was already known. None of the three other clinical issues suggested by Dr Steen was established. In effect, the importance of the post-mortem was to exclude encephalitis as a cause of Claire's cerebral oedema. Unfortunately, the autopsy report as it was eventually drafted did not exclude encephalitis but allowed it as a possible diagnosis.

Autopsy report

3.228 Regrettably, the autopsy report[465] repeats some of the factual error originating from Dr Steen's 'Autopsy Request Form', illustrating how easy it

462 Dr Mirakhur T-30-11-12 p.36 line 2 & Dr Herron T-29-11-12 p.27 line 13
463 Dr Mirakhur T-30-11-12 p.138 line 18 & Dr Herron T-29-11-12 p.46 line 1
464 Dr Mirakhur T-30-11-12 p.38 line 3 & Dr Herron T-29-11-12 p.154 line 21
465 090-003-003 *et seq*

is for a wrongly stated 'fact' to become validated by the process of repetition. It also introduced fresh error. Mr Roberts has indicated that the summary in Claire's autopsy report is inaccurate in that:

(i) It was wrong to state Claire was well until 72 hours before admission because she was well when she went to school on 21st October and it was only thereafter that she was noted to be unwell.[466]

(ii) Claire's cousin had a slight tummy upset, not the vomiting and diarrhoea as stated.[467]

(iii) Claire did not have the same symptoms as her cousin nor the history of recent diarrhoea as noted. She did have one loose bowel movement but that was on the Friday.[468]

(iv) Claire did not start to vomit 24 hours before admission; in fact, she did not start to vomit until 21st October.[469]

(v) Claire did not have any seizures on 20th October.[470]

3.229 Nor, it should be emphasised, did Claire have the "*h/o epileptic seizures since 10 months of age*" as stated. Dr Squier was concerned with the comment that Claire had "*iatrogenic epilepsy since 10 months*"[471] as there was no evidence that the she suffered any convulsions after the age of four (and her convulsions began at six months, not ten).[472] In addition, obvious error appears in the autopsy report revealing how little attention can have been paid to Claire's medical chart. For example, the dates of admission and time of death are both incorrectly stated[473] and no reference is made to Claire's medication with midazolam.

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466 WS-253-1 p.19
467 091-003-004
468 WS-253-1 p.3
469 WS-253-1 p.3
470 091-003-004 & 091-005-016
471 091-005-016
472 090-015-026
473 090-022-050 to 061

3.230 Given that the autopsy was performed, in Dr Herron's words - "*to address the presence or absence of status epilepticus and encephalitis*"[474] the erroneous introduction of an incorrect clinical history of diarrhoea and epilepsy is of concern. There can have been no check of the medical records against the 'Autopsy Report Form' and no discussion with the clinicians. It must be the responsibility of pathologists to gain familiarity with the case, satisfy themselves as to the information supplied and to seek assistance if necessary. Further, it should be the duty of the person preparing the report to sign it in order to confirm finality and authorship.[475]

3.231 The important part of the report is headed "*comment*" and states "*In summary, the features here are those of cerebral oedema with neuronal migrational defect and a low grade subacute meninoencephalitis [sic]. No other discrete lesion has been identified to explain epileptic seizures. The reaction in the meninges and cortex is suggestive of a viral aetiology, though some viral studies were negative during life and on post-mortem CSF. With the clinical history of diarrhoea and vomiting, this is a possibility though a metabolic cause cannot be entirely excluded. As this was a brain only autopsy, it is not possible to comment on other systemic pathology in the general organs. No other structural lesion in the brain like corpus callosal or other malformations were identified.*"[476]

3.232 In the absence of any meaningful discussion between pathologist and clinician, the reference to "*low grade subacute menin*[g]*oencephalitis*" is susceptible to misinterpretation. Drs Herron and Mirakhur were clear in their evidence that even on their interpretation of the results; they could not say that Claire had encephalitis, much less that it contributed to her death.[477] The Inquiry experts queried whether there was any evidence of encephalitis at all and are firm in their view that it definitely did not contribute

474 WS-224-1 p.7
475 236-007-056
476 090-003-005
477 Dr Mirakhur T-30-11-12 p.138 line 18 & Dr Heron T-29-11-12 p.146 line 3

to death. Professor Lucas's interpretation of "*low grade*" was that it meant that it was not at all clear that encephalitis was present in Claire's brain.[478]

3.233 The question has arisen as to whether Drs Herron and Mirakhur drafted their autopsy report to obscure rather than inform. It would appear that:

(i) They introduced erroneous clinical information into their Report suggesting a possible viral aetiology.

(ii) They produced a potentially misleading conclusion by way of comment suggestive of encephalitis.

(iii) They do not appear to have carried out the usual tests for the diagnosis of encephalitis.

(iv) They did not attempt to explain the causation of the cerebral oedema or to have sought specialist opinion in that regard.

(v) They do not appear to have read the medical chart or taken any steps to satisfy themselves as to the information they were given.

(vi) They do not appear to have asked for discussion or clarification at any time to ensure that a full and accurate account had been obtained.

(vii) They failed to take any steps to review the case with the clinicians in the light of their examination.

(viii) They were slow to produce the Report, denying it the topicality which might have made audit more likely.

(ix) They failed to sign the Report.

(x) They experienced difficulty in attributing authorship of the report as and between themselves.

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[478] 239-002-012

(xi) They failed to send a copy of the Report to the family GP.

(xii) Notwithstanding their uncertainty as to the cause of an unexpected child death, they did not refer the matter to the Coroner.

3.234 Whilst their report does not compare favourably with that produced by Dr Armour[479] in Adam Strain's rather more complex case, it must be acknowledged that none of the Experts doubted their motivation. Whilst mild criticism was expressed about shortcomings in the autopsy report, Professor Lucas considered that the report broadly followed the 1993 Royal College of Pathologists Guidelines for Post-Mortem Reports.[480] He did however; identify the lack of clinico-pathological correlation as a major shortcoming and the one which would have allowed the further discussion and review which was so very necessary.

Clinico-pathological discussion and audit presentation

3.235 All the pathology witnesses agreed that after the preparation of a preliminary report, it is important for the pathologist and the clinicians to meet, especially in a case such as Claire's where only limited insight has been gained into the cause of death.[481] Unless and until there is such a meeting, it is unlikely that there can be any satisfactory explanation as to causation such as might be given the parents.

3.236 The consensus of expert opinion was, that at that time and on the basis of what was known and the low sodium reading, the only conclusion that could have been reached with any confidence was that Claire had suffered hyponatraemia and that had caused her cerebral oedema. Beyond that there was no clear explanation as to the cause of death, save to say that it was not encephalitis. Nor could the pathologists confirm that the cause was SIADH, although that was a plausible cause of the hyponatraemia.

479 303-001-001
480 306-072-001
481 Dr Herron T-29-11-12 p.17 line 2 & Dr Mirakhur T-30-11-12 p.44 line 7

Professor Harding also believed that one could suggest some form of encephalopathy but not much more.[482]

3.237 In such circumstances, it is striking that the clinicians do not appear to have made any response whatsoever in follow-up to the autopsy report. I was told that the report was sent to both Drs Steen and Webb but neither pathologist could remember any contact from these doctors afterwards. What happened instead was that Dr Steen wrote to the family GP and Dr Webb wrote to Mr and Mrs Roberts. The autopsy report was sent to neither.

3.238 In this context it should be stated that Dr McKaigue recalled Dr Steen presenting Claire's case for discussion at an audit meeting but could not remember any lessons being learned. Nor could he recall who was there or whether the autopsy report was available.[483] Whilst this may be accurate, it may also be quite mistaken because Drs O'Hare,[484] Webb,[485] Sands,[486] and Bartholome[487] could not remember and Dr Steen could not help on the issue.[488] If such a meeting was held, it cannot possibly have been with either Dr Mirakhur or Dr Herron in attendance, because either of them could have corrected the impression given by their autopsy report that encephalitis had contributed to Claire's death. If Dr Steen did make an audit presentation and nothing was learned, one has to question the value of such a meeting. There is no other evidence that Claire's case was subject to audit or review and correspondence from the Directorate of Legal Services ('DLS') suggests that no such meeting took place.[489]

3.239 I can only conclude that these responses to Claire's death reveal, even on the most charitable interpretation, a want of curiosity about why Claire died

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482 Professor Harding T-05-12-12 p.167 line 8
483 Dr McKaigue T-12-12-12 p.40 line 4
484 Dr O'Hare T-18-10-12 p.184 line 19
485 Dr Webb T-03-12-12 p.273 line 23
486 Dr Sands T-18-12-12 p.151 line 1
487 Dr Bartholome T-18-10-12 p.97 line 23
488 Dr Steen T-17-12-12 p.15 line 4
489 302-075b-001. Dr McKaigue's claim echoes his "*vague memory that Dr Hanrahan presented Lucy Crawford's case at an audit meeting*" (WS-302-3 p.3) which proved unfounded. (Dr Hanrahan T-05-06-13 p.225 line 13 *et seq*)

and a lack of determination to identify the cause of her death and discover if things could be improved for the future.

Correspondence relating to autopsy report

3.240 Dr Steen wrote on 6th March 1997 to the Roberts family GP as follows:

"*Claire's post-mortem results are now available. The cerebral tissue showed abnormal neuronal migration, a problem which occurs usually during the second trimester of pregnancy and would explain Claire's learning difficulties. Other changes where* [sic] *in keeping with a viral encephalomyelitis meningitis. Doctor Webb and myself have since seen Claire's parents and discussed the post-mortem findings with them. They are obviously both finding this an extremely difficult and traumatic time but do not want any further professional counselling at present, however they know our doors* [are] *open and we will be happy to see them if they want to discuss things further with ourselves. Mr Roberts wanted a short summary of the post-mortem report which Dr Webb will send to him shortly. If there are any concerns at all please do not hesitate to contact us.*"[490]

3.241 Dr Webb wrote on 21st March 1997 to Mr and Mrs Roberts as follows:

"*My sincere condolences after the loss of your daughter Claire. In summary the findings were of swelling of the brain with evidence of a developmental brain abnormality (neuronal migration defect) and a low grade infection (meningoencephalitis). The reaction in the covering of the brain (meninges) and the brain itself (cortex) is suggestive of a viral cause. The clinical history of diarrhoea and vomiting would be in keeping with that. As this was a brain only autopsy it is not possible to comment on other abnormalities in the general organs. No other structural abnormality in the brain has been identified.*"[491]

490 090-002-002
491 090-001-001

3.242 Both letters suggest that Claire's death was caused by encephalitis. Such a suggestion is a misleading interpretation of the autopsy report and on the evidence before me is clearly wrong. Any discussion between the doctors and the pathologists would have confirmed that. Furthermore, status epilepticus, which is the only entry apart from cerebral oedema on the death certificate issued by Dr Steen, is entirely omitted from these explanations given to the family and their GP. This suggests that, rather than add their clinical expertise and assessment to the information provided by the pathologists, Drs Steen and Webb decided to abandon their previous analysis in order to rely solely on a highly suspect interpretation of the post-mortem report. Their letters make absolutely no reference to hyponatraemia nor how it may have played a part in Claire's death. In addition, for Drs Steen and Webb to so pointedly omit all reference to those expressions of uncertainty contained in the autopsy report suggests that they were keenly aware of those issues. Again, this was an opportunity to report Claire's death to the Coroner and for that very reason. Again, these doctors failed in their duty.

Meeting with Mr and Mrs Roberts

3.243 Drs Steen and Webb met Mr and Mrs Roberts in March 1997 after the autopsy report had been released. The report was not shared with them. Mr Roberts recalled being told that Claire's death had been caused by a virus but that it could not be said which.[492] Mrs Roberts recalls leaving the meeting deflated because they still knew so little and could not understand how a virus could have taken Claire so quickly.[493] It was, however, a source of comfort to her and her husband that Dr Steen had said that everything possible had been done for Claire.[494] That was false comfort. No one could possibly look at what happened and say that everything possible had been done.

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492 WS-253-1 p.17
493 Mr and Mrs Roberts T-13-12-12 p.86
494 WS-253-1 p.17

3.244 If Claire's parents are correct, they were not properly informed as to the cause of death, the autopsy report was misrepresented and information about hyponatraemia was withheld. There was no record made of the meeting and Dr Steen cannot remember what was said but has stated "*I think the low sodium was mentioned to Claire's family. We didn't use the word 'hyponatraemia' and we don't particularly now.*"[495] I prefer the account given by Mr and Mrs Roberts because it appears consistent with the letters written by Dr Steen and Dr Webb. Mr and Mrs Roberts were denied that which was their right, namely basic information about the reasons for their daughter's death. Dr Steen and Dr Webb failed in their duty to inform.

Dr Steen

3.245 The evidence relating to the procedural steps taken after Claire's death by the doctors in the hospital reveals how Dr Steen in particular appeared to take the lead at each stage. She acted without apparent interference from colleagues or management control. That a lone doctor was able to administratively process an unexpected and problematic death without supervision or second opinion and so shield it from proper inquiry must be a matter for concern.

3.246 Dr Steen was able to:

(i) Decide against referring Claire's death to the Coroner and to enter this decision in the 'Diagnosis of Brain Death' form without the formal collaboration of Dr Webb, her co-signatory, or opposition from Drs Webb, McKaigue or Taylor.[496]

(ii) Enter a cause of death in the 'Medical Certificate of Cause of Death' without reference to hyponatraemia, which was a known and probable factor in the death and to cite instead the unproven status epilepticus.

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495 Dr Steen T-17-10-12 p.122 line 22
496 090-045-148

(iii) Inform Mr and Mrs Roberts that a virus was the likely cause of Claire's brain swelling, without reference to hyponatraemia or the other matters, which might properly have described the problems in treatment.[497]

(iv) Complete the 'Autopsy Request Form' so as to communicate an incorrect history of illness, give emphasis to an inaccurate background of viral infection, minimise the period of hospitalisation, omit reference to the overdose of midazolam and fail to list the known hyponatraemia as one of the four main clinical problems.[498]

(v) Fail to make any report of the death or the circumstances of death to the paediatric clinical lead, the medical director, the director of nursing or any other governance representative of the Trust.

(vi) Fail to liaise with the pathologists in relation to the autopsy report, whether to correct known error or to clarify opinion.

(vii) Fail to investigate, review or, in all probability, present or discuss Claire's case at a mortality meeting, grand round or other opportunity.

(viii) Fail to review her decision not to refer to the Coroner in the light of the autopsy report and the continuing lack of certainty in relation to cause of death.

(ix) Meet with Mr and Mrs Roberts (with Dr Webb) and fail to explain the true import of the autopsy report and to once again propose a viral cause for death.[499]

(x) Write to Mr and Mrs Roberts in similar terms so as to mislead and yet again deny them the information to which they were entitled.[500]

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497 WS-253-1 p.15
498 090-054-183 to 184
499 WS-253-1 p.17
500 090-004-006

(xi) Fail to keep any note or record detailing what was said to Mr and Mrs Roberts.

3.247 Such singular response to Claire's death is very hard to explain on any other basis than that Dr Steen set out to conceal what she knew about the likely cause of Claire's death.

3.248 To that extent, I am persuaded that a 'cover up' was attempted by Dr Steen and to the extent indicated above, by Dr Webb. However, I do not consider that the Trust was complicit in any such attempt. Indeed, it is to be noted that Claire's discharge from PICU was documented as being a death from, amongst other causes, hyponatraemia. That was communicated within days to Claire's own family GP. Her condition, correctly diagnosed as including hyponatraemia, was clinically coded and recorded by the Trust and made available for reference and research. None of the directors of the Trust had any knowledge of her death. Such circumstances cannot be said to reflect a 'cover up' by the Trust.

Events in 2004

Mr and Mrs Roberts seek a meeting

3.249 In 2004, the UTV documentary rekindled Mr and Mrs Roberts' anguish and their memories of events in the Children's Hospital. They watched the programme on 21st October. It focussed on hyponatraemia and the deaths of Adam, Lucy and Raychel. They were prompted to ring the Children's Hospital the next day. They received a return call from Dr Nicola Rooney[501] with whom they met on 25th October.

3.250 Dr (now Professor) Rooney is a clinical psychologist who was, in 2004, the Psychology Service Manager in the Royal Group of Hospitals. It had been decided in advance of the broadcast that she would take the lead in responding to any enquiries generated by the programme. This was a helpful and well-conceived plan. It ensured that families who made contact

[501] 310-023-003

had an experienced and senior professional available to them. She, in turn, had the standing within the Trust to help families gain the information they needed. She also had significant experience in working with bereaved parents.[502]

3.251 Dr Rooney made a note of their meeting on 25th October which, it has been agreed, is accurate.[503] It records that Mr and Mrs Roberts outlined the circumstances of Claire's admission to the hospital and her death. Dr Rooney was struck by their description of how they had gone home on the Tuesday evening, thinking that Claire's worst day was over, only to receive the completely unexpected call from the hospital at about 03:30 on Wednesday morning.[504]

3.252 She said, "*alarm bells rang for me when they said that they had left*" because she recognised that Mr and Mrs Roberts were not parents who would have left their daughter had they known how serious her condition was.[505]

3.253 Dr Rooney's plan to follow up on the meeting was set out in her contemporaneous note:

"*? Deterioration - ? Misdiagnosed*

? Role of fluid management in her deterioration

Action: I will order Medical Notes✓

Discuss with M.McBride and H.Steen✓

Do PT journey✓

? Fluid mgt

Will liaise with Mr & Mrs Roberts."[506]

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502 WS-177-1 p.5
503 WS-177-1 p.14-17
504 Dr Rooney T-13-12-12 p.15 line 21
505 Dr Rooney T-13-12-12 p.15 line 21
506 WS-177-1 p.17

Involvement of Professor Young

3.254 Dr Rooney proceeded to brief Dr Michael McBride,[507] the Medical Director.[508] He in turn emailed Dr Steen and asked her to review the notes with the proviso that "*If there is any reason to suggest that fluid and electrolyte management may have been a factor in this case, then I would suggest that you ask Peter Crean as the Clinical Governance Lead, Prof Ian Young, Elaine and Brenda Creaney to carry out a case note review to determine whether this case needs to be referred to the Coroner.*"[509]

3.255 Dr McBride's suggestion that a multi-disciplinary group perform a case note review was both sensible and timely. In the event, it seems Dr Steen did not involve those individuals but enlisted Dr Sands to assist. Dr McBride did not pursue his proposal for more formalised review but requested that Professor Ian Young,[510] Consultant in Clinical Biochemistry,[511] review the records and advise as to whether hyponatraemia and fluid balance could have played a part in Claire's death.[512] Professor Young held joint appointments as an academic at Queen's University, Belfast and as a clinician with the Royal Group of Hospitals Trust ('RGHT'). He was eminently well-qualified to advise on this issue having significant expertise in hyponatraemia.

3.256 An issue arose about Professor Young's independence because he was described to Mr and Mrs Roberts as being independent of the Trust. That was not correct in the sense that a person who is employed by a Trust cannot be regarded as being independent of that Trust. However, Professor Young was independent in the sense that he had no engagement with the Children's Hospital, had not been involved in Claire's care and had no previous involvement with the clinical team.

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507 310-023-004
508 WS-177-1 p.54
509 WS-177-1 p.54
510 310-023-003
511 Also known as Chemical Pathology
512 Professor Young T-10-12-12 p.63 line 10

3.257 More importantly, he demonstrated his independence at that stage by advising Dr McBride that hyponatraemia may have made a significant contribution to Claire's death.[513] He said that it did not take him long, maybe not even an hour, to reach this conclusion having reviewed the notes.[514]

3.258 On 6th December 2004, there was an 08:30 meeting between Dr McBride, Professor Young and Dr Rooney to discuss the role of fluid management in Claire's death.[515] By that stage, Dr McBride had read Claire's medical records.[516] Later, at 14:00, Professor Young and Dr Rooney met Dr Steen. Professor Young gave Dr Steen his opinion. He reported that her views on fluid management were rather different to his and that she would only acknowledge as a possibility the relevance of hyponatraemia. She maintained that status epilepticus and viral encephalitis were more likely to have been the significant causes.[517] At that point, the only option was to finally notify the Coroner of Claire's death. That step was however, delayed until they could speak with Mr and Mrs Roberts.

Meeting with Mr and Mrs Roberts

3.259 On 7th December, a meeting was arranged for Mr and Mrs Roberts with Drs Steen, Sands and Rooney, and Professor Young. I make the following points about that meeting:

(i) Professor Young said that he would have preferred to have met the Roberts family alone. That was because his role was limited to the issues of fluid management and the question of whether hyponatraemia was a factor in Claire's death. He was to have no input into discussions about Claire's "*clinical journey.*"[518]

(ii) It appears that a view was taken, that on balance, it might be better for Claire's parents to have a single stressful meeting with Professor

513 089-005-010
514 Professor Young T-10-12-12 p.59 line 11
515 WS-269-1 p.20
516 302-007-002
517 Professor Young T-10-12-12 p.74 line 2
518 139-153-001

Young and the treating clinicians rather than separate stressful meetings.[519] I accept the legitimacy of that view.

(iii) There is no reference in the minute of the meeting to the drug overdoses or the content of the medical record or autopsy report.[520] Nor was any reference made to the inconsistency between Dr Steen's 'Medical Certificate of Cause of Death' citing status epilepticus and the letters from Drs Steen and Webb suggesting a viral cause for the death.

(iv) There was no governance representation by or on behalf of Dr McBride or Dr Peter Crean,[521] the Clinical Governance Lead.

3.260 However, my main concern about the meeting is that there was no acknowledgement of any of the very many failings in care. In advance of the meeting, Dr Steen had taken time to prepare a document detailing Claire's treatment. That suggests that she had reviewed Claire's case and looked at it afresh. Any analysis of Claire's treatment would have revealed that she was not seen by a doctor between 23:30 on 22nd October and 03:00 on 23rd October. That was not mentioned to Mr and Mrs Roberts on 7th December 2004 any more than it was mentioned to them on 23rd October 1996. Moreover, whilst Dr Steen was able to tell this Inquiry that "*the minute we looked back at the case in 2004, in light of what we knew by 2004, it became very obvious that fluid mismanagement was a contributory factor to her underlying condition,*"[522] there was no acknowledgment at the meeting that Claire should have had a repeat blood test on the morning of 23rd October , even though Professor Young was already of the opinion that the "*monitoring of serum electrolytes did not occur with sufficient frequency given the severity of Claire's clinical condition.*"[523] Dr Steen persisted with her explanation that "*viruses known as enterovirus can enter the body via*

519 Professor Young T-10-12-12 p.71 line 15
520 089-002-002
521 310-023-002
522 Dr Steen T-17-10-12 p.143 line 15
523 WS-178-1 p.6

the stomach and then cause swelling of the brain."[524] Furthermore, it was not even conceded (as queried by Claire's parents) that they should have been alerted to the seriousness of her condition before they left the hospital on Tuesday night. There are more examples but they all illustrate a lack of openness, especially on the part of Dr Steen.

3.261 That this was a very serious breach of duty and good faith becomes even more obvious when one considers that at that point Claire's death was about to be referred to the Coroner and Mr and Mrs Roberts had already indicated that they wished it referred to this Inquiry (which had been started some weeks before).

3.262 The Roberts' response to the meeting was a request for more information and answers to 10 specific questions.[525] Their queries included issues such as:

(i) The identity of the doctor co-ordinating Claire's treatment after 23:00.

(ii) Why Claire's death was not reported to the Coroner.

(iii) Why they were not told how ill Claire was.

They also raised detailed queries about fluid management, which showed how alert they were to this aspect of care. (In his evidence, Professor Young commented that when he saw this list he was amazed at how much they had taken in at the meeting).[526] Their letter confirmed that they wished both the Coroner and this Inquiry to investigate Claire's death.

3.263 Formal notification of Claire's death was made to the Coroner on 16th December 2004.[527] On 17th December 2004, Dr McBride wrote to Mr and Mrs Roberts "*Our medical case note review has suggested that there may have been a care management problem in relation to hyponatraemia and this may have significantly contributed to Claire's deterioration and*

524 WS-177-1 p.59
525 089-003-006 to 007
526 Professor Young T-10-12-12 p.103 line 25
527 140-074-001

death."[528] (In this context "*care management problem*" is defined as "*actions or omissions by staff in the process of care.*")[529]

3.264 Dr Rooney then circulated the questions posed by Mr and Mrs Roberts to Professor Young, Mr Peter Walby[530] of the Trust Litigation Office and Drs Steen, Sands and McBride.[531] On 12th January 2005, the Trust wrote to make its formal response to Mr and Mrs Roberts.[532] Although the letter was issued in Dr Rooney's name, it must largely have been the work of Dr Steen with contributions from Professor Young.[533] Unfortunately, some of the content is highly questionable:

(i) It states that the death was not referred to the Coroner in 1994 because the death was believed to be from viral encephalitis whereas and in fact the death certificate issued cited cerebral oedema secondary to status epilepticus.

(ii) It wrongly claims that a diagnosis of encephalitis was confirmed at post-mortem.

(iii) It asserts that Dr Bartholome co-ordinated Claire's treatment after 23:00 whereas she did not actually attend upon her until 03:00 by which time it was too late.

(iv) It ignores other matters completely e.g. it simply did not address the question as to why Mr and Mrs Roberts had not been told how ill Claire was on the Tuesday evening in consequence of which they left her.

3.265 The letter was inaccurate, evasive and unreliable. To make matters worse, it was not only sent to Mr and Mrs Roberts but was also forwarded to the Coroner[534] who must have assumed that it represented the Trust's

528 089-005-010
529 WS-061-1 p.4
530 310-023-003
531 WS-177-1 p.45
532 089-006-012
533 139-139-001
534 090-048-152

considered assessment of the issues he was to investigate. Whilst Dr Rooney was well qualified to liaise with the Roberts family, she was not at all qualified to sign the 12th January letter. It should have been the work of an informed clinician. In this context, Dr Steen had responsibility in relation to the 'care management problem' and could not therefore have been the author of the letter, Professor Young was supposed to be independent of the hospital and it would have been inappropriate for the letter to come from the Litigation Management Office. Accordingly, more thought should have been given to the identity of the hospital representative taking responsibility for the content of this important letter and indeed, because of his personal involvement and earlier correspondence, Dr McBride should have signed the letter himself.

Other Trust responses

3.266 I think it relevant to make the following further observations about what was and what was not done in the Trust in 2004/5:

(i) The initial responses of Dr McBride and Dr Rooney were in my view, both appropriate and effective for handling enquiries from the public. My criticism about what the family was told or not told is largely directed at Dr Steen. I am entirely satisfied that not only did she know more than she was prepared to disclose but that she actively misrepresented matters to the family.

(ii) Furthermore, Dr Steen was permitted to make the initial case note review and influence the format of subsequent review, notwithstanding that Dr McBride recognised the possibility that the acts and omissions of clinicians contributed to Claire's death. His failure to insist upon his initial suggestion of multi-professional involvement was regrettable. The consequent case review, meeting with family, and letter of explanation were all undermined by a narrowness of focus and the views of Dr Steen. Had Dr McBride directed a broader review then Claire's parents might have received

better answers to their questions and the Coroner might have been more accurately informed as to the issues.

(iii) DHSSPS guidance was available to Dr McBride in 'Reporting and Follow-Up on Serious Adverse Incidents', [535] which very clearly advised that "*In those situations where a body considers that an independent review is appropriate, it is important that those who will be conducting it are seen to be completely independent. In addition such reviews should normally be conducted by a multi-professional team, rather than by one individual. It is also important that the Department is made aware of the review at the outset.*"[536]

(iv) The question arises as to whether the Trust should have instigated its own belated review of what had happened by activating its recently introduced procedures for the investigation of adverse clinical incidents by root-cause analysis?[537] In normal circumstances, the clear answer to this question would be yes. However, Mr and Mrs Roberts were anxious for this Inquiry to investigate Claire's death in the same way that it was intended it should investigate the deaths of other children. Dr McBride's evidence was that he decided against an adverse incident review within the Trust because of the likelihood of this Inquiry investigating Claire's case.[538] Notwithstanding that he might otherwise have become better informed as to the issues, I do not think that it is fair to criticise that decision, any more than it is fair to criticise the Trust for a delay in formally reporting Claire's case to the Department when the Coroner and this Inquiry had already become involved.

Inquest preliminaries

3.267 Claire's inquest was held in May 2006. The Trust had 17 months from the date of referral to prepare for it. There are aspects of the preparation which

535 314-009-001 - Circular HSS (PPM) 06/04
536 314-009-004
537 302-096-004
538 WS-061-2 p.422

concern me. Witness statements were gathered by Mr Walby who had become an associate medical director in the Litigation Management Office of the Trust in 1998 upon the retirement of Dr George Murnaghan. He was a consultant ENT surgeon who assumed the hospital litigation management work in addition to his full-time clinical duties. The witness statements obtained by him were intended to form the basis of the formal inquest depositions. They were transcribed by Mr Walby's office onto Police Service of Northern Ireland ('PSNI') pro-forma witness statement sheets and then forwarded to the Coroner. The impression thus given was that the PSNI had been involved in obtaining them. Not only had the Police not been involved but the Trust was actually opposed to the closer involvement of the police in hospital inquests.[539] It is for the Coronial Service to decide how to take this issue forward but I note that in autumn 2003, a person described by HM Coroner Mr John Leckey as a senior detective had expressed concern about the very limited role of the police in the investigation of hospital deaths.[540] I share that concern.

3.268 This leads to a second issue. One of the witness statements came from Dr Webb who was, at that time, working in Dublin. Dr Webb made the following concession in the statement he sent to Mr Walby: "*I made the mistake of not seeking an Intensive Care placement for Claire before I left the hospital on the evening of October 22nd…*"[541] In response Mr Walby deleted that part of the statement which referred to the "*mistake*" and returned it to Dr Webb[542] with the suggestion that it should read as follows: "*Although I did not seek an intensive care placement for Claire before I left the hospital on the evening of October 22 ...*"[543]

3.269 Mr Walby's suggested alternate wording was accepted by Dr Webb and became part of his formal deposition which was transcribed onto police paper and presented to the Coroner, who did not see the original

539 129-006-001
540 129-007-001
541 139-098-021
542 139-096-001
543 139-098-021

statement.[544] Mr Walby explained that he advanced his alternative to Dr Webb (who did not have to accept it) because, in his opinion, a witness statement should be factual and should not contain opinion or comment.[545] This appears to me to be a difficult position to adopt. Dr Webb was not just an incidental witness to the death – he was both expert and the consultant paediatric neurologist who had been involved in the failed care of Claire.

3.270 Mr Walby said furthermore that he thought Dr Webb was being too harsh on himself.[546] I do not share that opinion and do not think it for Mr Walby to judge. Since part of the purpose of an inquest is to identify things which have gone wrong so as to prevent recurrence, the Coroner is positively helped if an expert clinician suggests that treatment might have been better had he acted differently. I conclude that Mr Walby's intervention on this occasion was intended more to protect the Trust than to assist Dr Webb. It could not be said to have assisted the Coroner.

3.271 Mr Walby also provided the means whereby misleading information was supplied to the Coroner, namely Dr Rooney's letter.[547] In addition, he forwarded a copy of the autopsy report to the Coroner, which also contained factual error originating from Dr Steen.[548] Notwithstanding that Dr McBride took the view that a "*care management problem*" may have been implicated in Claire's death and that Dr Steen did not agree with this, Dr Steen was permitted to influence the information submitted to the Coroner and to edit and indeed approve Mr Walby's correspondence with the Coroner.[549]

3.272 There was potential for conflict between Mr Walby's job requirement, to "*assist H.M. Coroner with enquiries and the preparation of statements prior to inquests*" and at the same time to "*give advice and support to staff involved in... Coroner's cases.*"[550] Mr Walby was in the unusually influential position where he could decide whether some witnesses provided

544 139-095-001
545 Mr Walby T-12-12-12 p.133 line 2
546 Mr Walby T-12-12-12 p.134 line 12
547 090-048-152
548 089-004-008
549 WS-176-1 p.4 & 090-049-152 &139-148-001
550 WS-176-1 p.14

statements to the Coroner or not and furthermore where he could and did, edit, correct and partially redraft their statements.[551] He was so placed that he could protect the interests of the Trust at a time when his duty was first and foremost to assist the Coroner. The Trust should not have allowed the potential for such conflict to arise.

3.273 My general view on this issue was shared by the Coroner, Mr Leckey, who helpfully gave evidence. It was very clear from what he said, as it is from any analysis of the coronial process, that the public interest is protected if evidence is given frankly. He said that all clinical staff "*have to be totally transparent... not only for me exercising a judicial function, but for the bereaved family.*"[552] It is only in this way that a Coroner can properly analyse and understand a death such as Claire's, help answer the questions of the bereaved and assist in the process of learning from experience. It is therefore a matter of critical importance that all proper assistance be given the Coroner with the utmost candour and that all hospital staff engaged in this process regard that as their paramount objective.

Inquest

3.274 Unfortunately, there is no formal transcript of the oral evidence given at inquest. However, such notes and minutes as do exist, strongly suggest that neither Professor Young, nor Drs Webb, Sands or Steen explained to the Coroner that Claire's hyponatraemia was related to fluid or electrolyte mismanagement.[553]

3.275 The failure to repeat the initial blood test was an issue of mismanagement, which had to be addressed by the Trust. This was apparent during preparation for inquest. When the Litigation Management office sent witness statements to Professor Young (on 7th April 2006) for comment,[554] he drew attention to what he termed "*substantial issues*" in Dr Webb's

551 139-096-001 &139-106-001
552 Mr Leckey T-25-06-13 p.83 line 12
553 140-043-007 & 097-012-110
554 139-043-001

statement – namely his recognition that there had been a failure to take a routine electrolyte sample on the morning after admission and that it was indeed the hyponatraemia which had led to the cerebral oedema. Professor Young indicated that these issues "*could certainly become significant at the inquest*"[555]

3.276 In this connection, Dr Webb had specifically conceded in his statement to the Coroner that he had misunderstood the Monday night blood test as being a blood test from the Tuesday morning[556] and that had he not so misunderstood it, he would have directed an urgent repeat blood test at about 14:00 on Tuesday. Professor Young agreed that this is indeed what should have been done[557] and even Drs Steen and Sands were both to agree that the blood test should have been repeated long before Tuesday night.[558]

3.277 However, I find little evidence that Professor Young brought this matter to the attention of the Coroner. Instead and having agreed that Claire had the potential for electrolyte imbalance, he advised the Coroner that "*a blood sample every 24 hours would be good clinical practice.*"[559]

3.278 I consider that it was misleading to suggest to the Coroner that a blood sample once a day in such circumstances would have been good clinical practice.[560] Notwithstanding the practice in other cases, it was not good clinical practice in the case of a child on low sodium intravenous fluids, with a neurological history, a low level of consciousness, a low sodium reading, an unknown fluid balance, and in circumstances where she was not responding to treatment.

3.279 Although Professor Young understood that his role was "*to assist on the key issues being drawn out at the Inquest.*"[561] there appear nonetheless to

555 139-042-001
556 139-098-020
557 Professor Young T-10-12-12 p.208 line 13
558 Dr Sands T-19-10-12 p.110 line 21 & Dr Steen T-17-12-12 p.11 line 5
559 091-010-060
560 140-043-007
561 Professor Young T-10-12-12 p.205 line 25

be other examples where Professor Young failed to draw key issues to the attention of the Coroner. While the Medical Director, Dr McBride, informed Mr and Mrs Roberts that Professor Young's "*review has suggested that there may have been a care management problem in relation to hyponatraemia and that this may have significantly contributed to Claire's deterioration and death*"[562] Professor Young flatly denied contributing to this particular assertion[563] and advised the Coroner that the death was not one which necessarily would have had to have been reported to the Coroner in 1996 because of a lack of awareness of hyponatraemia at that time.[564] He told the inquest that he did not believe that there were lessons to be learned from Claire's case[565] and gave further reassurance that Claire's fluid management was in keeping with the recommendations of 1996.[566]

3.280 In the light of this evidence,[567] I am of the view that Professor Young shifted from his initial independent role advising Dr McBride to one of protecting the hospital and its doctors.

Inquest verdict

3.281 Claire's condition, diagnosis and treatment were not straightforward matters in October 1996. She had a history from earliest childhood of seizures and developmental delay. The cause of these has never been established. When she was admitted to hospital on 21st October her sodium level was only a little low at 132mmol/L. Hospital induced hyponatraemia from excessive administration of low sodium fluids was not the cause of that reading and as various experts, including Professor Neville pointed out, low sodium levels are a feature of neurological conditions.[568] It was entirely reasonable for the admitting doctors to suspect status epilepticus and/or an encephalopathy such as encephalitis. The expert view was that these were perfectly rational differential diagnoses.

562 139-145-001
563 097-012-113
564 140-043-004 & 097-012-112
565 097-012-112 & 140-045-004
566 097-012-113
567 140-043-003 *et seq*, 097-012-111 *et seq* & 091-010-060 *et seq*
568 Professor Neville T- 01-11-12 p.163

However, on the basis of the very much fuller evidence now available, I conclude that the only definite, known and proven causes of Claire's death were cerebral oedema due to hyponatraemia.

3.282 The inquest finding as to the cause of death was made in the following terms:

"*1 (a) Cerebral oedema*

Due to

(b) meningo-encephalitis, hyponatraemia due to excess ADH production and status epilepticus."[569]

On the evidence before me, I believe that finding is wrong.

3.283 It is certainly possible, if not probable, that Claire suffered from some form of encephalopathy but it does not appear to have been encephalitis and that cause of death cannot be advanced any further. It is noted that the Coroner's final formulation does not refer to encephalopathy but rather to meningoencephalitis. It is also possible that she suffered from status epilepticus but that likewise remains unproven.

3.284 In reaching this view, I have taken into consideration the evidence which the Coroner received from two additional experts; Dr Robert Bingham, Consultant Paediatric Anaesthetist at the Hospital for Sick Children, Great Ormond Street, London,[570] and Dr Ian Maconochie, Consultant in Paediatric A&E medicine at St Mary's Hospital, London.[571] They both agreed to frame Claire's death in the following terms:

"*I (a) cerebral oedema*

(b) encephalitis/encephalopathy and hyponatraemia…

II status epilepticus."[572]

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569 091-002-002
570 091-006-023
571 139-090-001
572 091-007-028

3.285 However, analysis of their evidence to the Coroner reveals uncertainty about what happened. It indicates that they were attempting to explain what might have happened as opposed to stating what was known to have happened. I understand that it is not so unusual for autopsies or inquests to end with only partial identification of the cause of death. This may be unwelcome and unsettling for the family, and that is unfortunate, but in Claire's case nothing further can be confirmed.

Internal response to inquest verdict

3.286 A further disturbing feature of this matter is that even after the inquest was completed and the Coroner had delivered his verdict and circulated his written finding, Mr Walby appeared keen to emphasise that there had been no criticism of the Trust's care of Claire. In an e-mail of 5th May 2006, he wrote:

"*This inquest ended on 4 May 2006 with no criticism of the Trust's care of this patient.*"[573]

On 16th June 2006, he wrote to the Trust's then solicitor to state:

"*Evidence given at the inquest was not critical of the fluid management.*"[574]

3.287 I do not believe that all of the many mistakes revealed to this Inquiry could possibly have come as a surprise to Drs Steen, Webb or Sands at the time of the inquest. Against such a background, Mr Walby's comments about the absence of criticism have a jarring note of satisfaction when he should have been deeply troubled by what had happened. Indeed, by that time he had already decided that the electrolyte management had been so mishandled that he would have to try to settle any claim brought against the Trust in negligence.[575] He appears to have been more concerned with the interests and reputation of the Trust than with the lessons to be learned.

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573 139-163-001
574 140-013-001
575 Mr Walby T-11-12-12 p.168 line 7

Governance: reporting Claire's death within the Trust

3.288 Dr Elaine Hicks[576] had been appointed Paediatric Clinical Lead in the Children's Hospital on 1st October 1996.[577] Her evidence was that she was not informed about Claire's death in 1996.[578] Nor was the death reported to the Director of Nursing[579] Miss Elizabeth Duffin[580] or to the Director of Medical Administration Dr George Murnaghan, who then had charge of risk management.[581] Dr Ian Carson,[582] who was the Medical Director of the Trust in 1996, was similarly unaware of Claire's death.[583] In his evidence to the Inquiry, he agreed that there was "*sufficient happening in Claire's case*"[584] to mean that it should have been brought to the attention of the clinical director as a starting point. He agreed that the system "*did not do justice to Claire*"[585] and that "*more could have been done and more should have been done.*"[586] If it is correct, as I believe it to be, that few children die in the Children's Hospital, apart from those with terminal conditions, the failure to report Claire's death to Dr Hicks in particular, is impossible to comprehend unless there was a recognition that mistakes had been made and attention should not be drawn to them.

3.289 I am compelled to the view that clinicians did not admit to error for the obvious reasons of self-protection and that this defensiveness amounted to concealment and deceit. Such can have no place in the Health Service but appear nonetheless to have become established in this the regional paediatric training hospital.

3.290 The failure to report repeats in part what happened in Adam's case. The Director of Medical Administration, Dr Murnaghan, was aware of Adam's case and of the Coroner's damning conclusion delivered only months

576 310-023-005
577 WS-264-1 p.2
578 Dr Hicks T-11-12-12 p.53 line 16
579 WS-265-1 p.3
580 310-023-004
581 WS-273-1 p.3
582 310-023-004
583 WS-270-1 p.3
584 Dr Carson T-15-01-13 p.151 line 67
585 Dr Carson T-15-01-13 p.151 line 15
586 Dr Carson T-16-01-13 p.11 line 23

before. Just as he took no steps to extract lessons from Adam's death, he took no steps to ensure that subsequent unexpected and unexplained deaths in the Children's Hospital were reported within the Trust.

3.291 Mr William McKee,[587] who was, at the relevant time the Chief Executive of the Trust, acknowledged failings in Claire's case.[588] Notwithstanding that he was unable to describe the duty of a clinician to report the sudden and unexpected death of a child patient at that time; he believed "*that it should have gone up the chain as far as the Medical Director.*"[589] He confirmed that no notification of her death was made to him but said that this did not surprise "*because of the predominance of clinical independence justified through the heavy, or almost entire, reliance on professional self-regulation. That was the dominant paramount culture at the time.*"[590]

3.292 However, it appears that Mr McKee did little to lead clinicians away from their paramount culture of self-regulation, even so far as to ensure reporting to the Medical Director, or to encourage their acceptance of the structures of accountability around which the Trust purported to operate. In Claire's case, the clinicians were left to determine amongst themselves whether there had been mismanagement and if so, what they might do about it. In practical terms the lack of effective risk management controls meant that the Trust Board did not know what was happening in the Children's Hospital and had accordingly no effective means of satisfying itself that its patients were safe. I find that this was a failure in both leadership and governance.

3.293 The inclination not to draw attention to the shortcomings in Claire's case was encouraged by underdeveloped internal controls, poor leadership and the complicity of medical colleagues. This meant that lessons were not learned, poor standards were tolerated, the coronial system was undermined and grieving parents were misled.

587 310-023-004
588 Mr McKee T-17-01-13 p.107 line 8
589 Mr McKee T-17-01-13 p.119 line 23
590 Mr McKee T-17-01-13 p.120 line 12

Adam Strain and Claire Roberts

3.294 Mr and Mrs Roberts were initially alerted to the possibility that Claire had been the victim of fluid mismanagement by the UTV investigative revelation of the similarities between the other deaths. Evidence has now revealed other similarities not then suspected.

3.295 Both Claire and Adam died in the same ward of the Children's Hospital within 11 months of each other. Some of the same doctors were on duty for each. Dr Taylor had involvement with both and Dr Webb carried out the final brain stem death tests. Trust risk management systems remained unchanged and the same individuals were responsible for 'governance' within the Trust.

3.296 Claire's admission to the hospital was only 4 months after Adam's inquest and at a time when the medical negligence claim relating to his treatment and death was ongoing. It might be supposed that Adam's death and the Coroner's very critical finding would have prompted reflection and debate about how to respond. Seemingly it did not. Even though the consultant paediatric anaesthetists now understood Professor Arieff's guidance and, possibly, as Dr Bartholome explained "*the events surrounding this inquest had been known to me and to most of the doctors in the Children's Hospital*"[591] there was no formal response by the doctors. Their inactivity went unnoticed by a Trust Board uninterested in learning from mistakes.

3.297 The failure of Drs Murnaghan and Carson to exploit the opportunity for learning, obvious from the tragic circumstances of Adam's death, had consequences not only for fluid therapy but also for the response of 'governance', which was allowed to repeat its earlier failings. In Claire's case, as in Adam's, there was significant failure to report, investigate or review. Those who should have been informed and involved were by-passed. Parents were not informed about the part played by sodium in the avoidable hospital deaths of their children. The performance of clinicians

591 Dr Bartholome T-18-10-12 p.4 line 11

was not assessed, referrals were not made to the General Medical Council ('GMC') and patient safety was potentially jeopardised.

3.298 The question must be asked, how could hospital 'governance' within the Trust be so weak as to allow this to happen?

Governance 1995-96

3.299 It is to be emphasised that the failure of those doctors involved in the care of Claire and Adam to properly report, review or candidly advise the parents, was both individual and collective. Such basic aspects of professional practice were matters of common sense and well known to doctors. They were enshrined in the GMC code and the long-standing obligations of membership of professional bodies. The duty to refer a death to the Coroner was a matter of statute and the requirement to audit was often a contractual obligation.[592]

3.300 Professional guidelines at that time gave clear advice on many of the key areas of deficiency highlighted in Claire's case e.g. audit,[593] record keeping,[594] retention of medical records,[595] communication between the clinician, nurse, parent, and pathologist,[596] drug prescription checking,[597] consultant responsibility, the organisation of cover for patients, inter-consultant handover arrangements and supervision of junior doctors,[598] nursing accountability[599] honesty in professional practice,[600] reporting clinical performance jeopardising patient safety to employer or regulatory authority[601] etc. Similarly and at the time of Adam's case extant guidance

592 WS-129-1 p.39
593 314-001-004 'Good Medical Practice Guidelines for Doctors' General Medical Council, October 1995
594 202-002-052 'Standards for Records and Record-Keeping' UKCC, April 1993
314-001-004 'Good Medical Practice Guidelines for Doctors' General Medical Council, October 1995
595 WS-251-1p.9 'Retention of Medical Records' Circular HSS (083) 1/83
596 314-003-001 'Guidelines for Professional Practice' UKCC, 1996
314-001-006 'Good Medical Practice Guidelines for Doctors' General Medical Council, October 1995
239-002-014 'Guidelines for Post-Mortem Reports' Royal College of Pathologists, August 1993
597 214-005-001 'Standards for the Administration of Medicines' UKCC, 1992
598 314-001-001 *et seq* 'Good Medical Practice Guidelines for Doctors' General Medical Council, October 1995
599 202-002-063 'Code of Professional Conduct' UKCC, June 1992
600 314-001-012 'Good Medical Practice Guidelines for Doctors' General Medical Council, October 1995
601 314-001-009 'Good Medical Practice Guidelines for Doctors' General Medical Council, October 1995

was available to prompt the reporting[602] and investigation[603] of his most unexpected death.

3.301 The failure to follow applicable guidance in Adam's case and in Claire's was a professional failure. Failure to regulate compliance with guidelines was a failure of both the clinician and the systems of internal control.

Weakness in systems of clinical risk management and internal control

3.302 The early 1990s was a period of significant restructuring of hospital management. A new beginning was intended and guidance became available promoting clinical risk management and quality control procedures to support the previously self-regulating clinician.[604] Hospital governance was not therefore a new concept in 1996. However, it took longer for the Trust to engage with it than might have been expected and financial constraint slowed its introduction. Despite knowledge of what should be done[605] and the introduction of formalised management structures, the development of functioning governance systems proved difficult. It was not seemingly a developed part of the control of services within the Children's Hospital at the time of Adam's admission. Although formal Trust publications and annual reports boasted of systems of governance control and quality assurance, the evidence before the Inquiry confirmed that the opposite was often the case.[606] The Children's Hospital was subject to very weak governance control.

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602 306-117-013
603 314-016-010
604 E.g.
1989: 'Working for Patients: Medical Audit Working Paper 6' DoH (HMSO Cmd. 555)
1990: 'A Guide to Consent for Examination and Treatment' NHS Management Executive.
1991: 'Welfare of Children and Young People in Hospital' DoH (314-004-001)
1992: Northern Ireland- 'Charter for Patients and Clients' HPSS (306-085-001)
1993: 'Risk Management in the NHS' Manual (211-003-001)
1994: 'Allitt Inquiry' Report into Children's Ward at Grantham & Kesteven General Hospital NHS (210- 003-038)
1995: Northern Ireland 'Patient Consent Handbook' HPSS (306-058-002)
1996: 'Complaints. Listening... Acting...improving - Guidance on Implementation of the HPSS Complaints Procedure' HPSS Executive (314-016-001)
605 Dr Carson T-15-01-13 p.126
606 Dr Murnaghan T-25-06-12 p.17-18 & Dr Murnaghan T-25-06-12 p.71 line 12

3.303 It is hard upon initial examination to understand how this could have been so, given that structures of responsibility and accountability were apparently in place, with governance committees and coordinators assigned to act within directorates led by clinical leads reporting to a medical director in turn accountable to the Trust Board and Chief Executive. The Board was committed to act within its 'Code of Conduct and Accountability'[607] to "*provide active leadership of the organisation within a framework of prudent and effective controls to enable risk to be assessed and managed*" and its Chief Executive, Mr McKee was the principal accountable officer.

3.304 The Trust appeared outwardly confident at that time about its systems of quality control. The Royal Hospitals Annual Report 1993-1994 recorded the development of "*an effective organisational framework for medical audit which supports and encourages changes in clinical practice as a natural part of organisation-wide quality assurance.*"[608] The Trust mission statement proclaimed the "*fundamental purpose in the Royal Trusts* [is] *to provide the highest quality cost-effective healthcare... through exceptional service to our patients...*"[609]

3.305 The Trust even produced a Health and Safety Policy[610] in 1993 purporting to create a Medical Risk Management Group under the Chairmanship of the Medical Director. It was to have assumed specific responsibility for untoward incident reporting (clinical), clinical audit, complaints and medical negligence issues[611] and to have been accountable to the Chief Executive and the Trust Board. Dr Murnaghan however, described the policy as "*aspirational.*"[612] In fact, the Group simply did not exist. Mr McKee wrote in his introduction to the policy that "*This Policy has my commitment and I expect all employees to give their commitment too.*"[613] However, the evidence was that in this regard Mr McKee not only failed to give his

607 210-003-009 and 'Codes of Conduct and Accountability' Circular HSS (PDD)8/1994, DHSS
608 WS-061-2 p.58
609 WS-061-2 p.26
610 Approved by Hospital Council (WS-061-2 p.232)
611 WS-061-2 p.241
612 Dr Murnaghan T-25-06-12 p.71 line 12
613 WS-061-2 p.235

commitment but failed also to encourage or ensure the commitment of others.

3.306 In 1995-96, the Trust made application to the Kings Fund Organisational Audit ('KFOA') for accreditation.[614] This allowed an opportunity to compare standards and systems with independent criteria. The Chief Executive personally oversaw the application[615] and the Director of Nursing personally managed it.[616] All concerned must thus have become familiar with the Kings Fund criteria, which covered a range of best practice from communication with patients and record keeping to adverse incident recording and audit.[617]

3.307 The application to the Kings Fund did not succeed in 1995.[618] This does not surprise. Evidence was given that up-to-date governance guidance published in England was not felt to apply because it wasn't local,[619] the Northern Ireland patient consent guidance[620] failed to 'cascade' to clinicians as directed,[621] the introduction of clinical guidelines in the Children's Hospital lagged behind that in England undermining attempts to audit by reason of a lack of agreed standards. There was no obligation to report adverse clinical incidents beyond choosing to make an entry in a book[622] and no mechanism to ensure serious matters were reported to the Medical Director or Chief Executive in line with extant recommendation.[623] This was in a context where no obligation was felt by the newly created Trust to report any adverse clinical incident to the Department.[624] The Trust Board dealt with administrative issues almost to the exclusion of patient matters. The Board minutes for November 1995 - December 1996 contain only two

614 305-001-001
615 305-008-560
616 WS-061-2 p.8
617 211-003-024
618 305-001-001
619 WS-061-2 p.7&14 & Mr McKee T-17-01-13 p.44 line 7 & p.51 line 5
620 306-058-002
621 Professor Savage - 18-04-12 p.65 to 66
622 WS-061-2 p.168
623 210-003-038: EL(94)16 'Report of the Independent Inquiry into Deaths on the Childrens' Ward at Grantham & Kesteven General Hospital' NHS Executive 1994 (the 'Allitt Inquiry') - *"There must be quick route to ensure that serious matters... are reported in writing to the Chief Executive of the hospital... NHS Trust Boards should take steps immediately to ensure such arrangements are in place."*
624 WS-061-1 p.2

references to specific clinical cases.[625] Most disturbingly, the Chief Executive stated that he operated at that time on the basis that neither he nor the Trust Board had any responsibility for the quality of healthcare given to patients in the hospital.[626]

3.308 In this regard, evidence was received as to the responsibility of Trusts for the quality of hospital care at that time. The almost unanimous view, which I accept, is that Trusts were responsible for the quality of clinical care prior to the creation of a statutory duty of care under the Health and Personal Social Services Quality Improvement and Regulation (Northern Ireland) Order 2003.[627] Indeed it is hard to understand how there could have been any confusion given the explicit advice provided to Trusts by the Management Executive that "*the primary accountability of Trusts*" to their commissioning Health Boards is for the "*... quality and efficiency of the service they provide.*"[628]

3.309 Financial constraint,[629] a lack of appetite for change, the failure of political engagement[630] and time limitations were all suggested as explanations for the failure to progress governance in the Trust. It must ultimately have been a matter of leadership. The primary focus of the Chief Executive's leadership of the Trust was on financial and administrative issues. The clinical leadership on the Board, comprising the Medical Director, Dr Carson and the Director of Nursing and Patient Services, Miss Duffin failed to champion clinical issues and the primary obligation to the patient was left largely to the clinician to discharge. The care provided was not however properly audited and the outcomes were not reviewed. The situation therefore prevailed that those accountable for the provision of appropriate standards of care were often ignorant as to the quality of care actually

625 305-016-012 & 305-016-084
626 Mr McKee T-17-01-13 p.48 line 7
627 http://www.legislation.gov.uk/nisi/2003/431/contents/made
628 WS-062-1 p.528
629 WS-077-2 p.8
630 Dr Carson T-15-01-13 p.127 line 25

provided. Unscrutinised, some doctors and nurses became defensive to criticism, protective of reputation and tolerant of less-than-best practice.

3.310 The failure to enforce prevailing guidance in 1996 suggests an institutional complacency. That recommendations on hospital risk management were not adopted earlier or brought to bear on hospital performance can be attributed to a failure within Trust leadership.

3.311 That failing was not however, limited to the 1990's. DHSSPSNI serious adverse incident investigation and reporting guidance was inadequately followed in 2004 when Claire's case was brought to the Trust's attention. This suggests that clinical governance had not even then become fully operational. Notwithstanding, the Annual Report 2004-05 claimed: "*In line with good governance and our commitment to openness and transparency, the Royal Hospitals acknowledges to patients and the public when things go wrong and systematically ascertains what happened, how it happened and why, so that we can do all that is possible to ensure lessons are learned to prevent a re-occurrence.*"[631] Trust practice had yet to honour Trust claims.

Aftermath

Litigation

3.312 This Inquiry heard evidence relating to Claire's treatment and death between 24th September 2012 and 19th December 2012. As the evidence unfolded, the full extent of what had gone wrong emerged. When Mr and Mrs Roberts gave evidence on 13th December, they confirmed that they had not intended bringing a claim for medical negligence against the Trust.[632] All they wanted, they said, was for the doctors to admit that they had made mistakes. In the words of Mrs Roberts:

631 302-096-004
632 Mr and Mrs Roberts T-13-12-12 p.143 line 2

"*...everyone makes mistakes but all you have to do is hold your hands up.*"[633]

3.313 It is difficult to appreciate the depth of dismay that the Roberts family must have felt by the end of the oral hearings. The revelation of the full scope of error and everything associated with those errors must have left them bewildered and suspicious about how so many clinicians and experts could have missed so much in 1995/96, during the 2004/05 investigation, at inquest and during the police investigation that followed.

3.314 I assume that there must then have been a re-appraisal by Mr and Mrs Roberts of their attitude towards litigation, because on 26th September 2013, their solicitors sent a letter of claim to the Trust.[634] On 16th October, the Trust replied through the DLS to indicate that while the Trust could mount a defence on unspecified legal grounds, it did not intend to do so. Instead, the Trust's position was stated as follows:

"*...We have obtained specific instructions from the Trust not to contest your clients' claim. The reason why this approach is being adopted is that the Trust acknowledges that there were shortcomings in the management of this patient and the Trust does not wish to in any way add to the distress of your clients by availing of any legitimate defences open to it in this action... Please also note that any offer of compensation in this case will be made in open correspondence as a means of demonstrating that the Trust is keen to deal with this matter in a wholly open and transparent manner.*"[635]

3.315 This development was referred to at the public hearing the next day. On behalf of the Roberts family, Mr Stephen Quinn QC welcomed this public acknowledgement of failing and implied admission of liability together with the apology offered by the doctors and staff who had treated Claire.[636]

633 Mr and Mrs Roberts T-13-12-12 p.142 line 12
634 302-185-003
635 302-185-001
636 T-17-10-13 p.4 line 19

3.316 I consider that this was entirely the correct position for the Trust to adopt. I have to note however, that the preliminary remarks in the letter of 16th October contain the following unnecessary observations:

"*We note that the Roberts family now wish to make a claim for damages arising out of the death of their daughter. We note that the initiation of such a claim somewhat contradicts the earlier assertions of the family that they were not interested in claiming compensation but were only interested in getting at the truth.*"[637]

3.317 The inclusion of such insinuation is regrettable. In all the circumstances of Claire's treatment and death and all that had ensued in the following years, those unnecessary observations were inappropriate and insensitive. On 12th November 2013, Mr Colm Donaghy, Chief Executive and Dr Anthony Stevens, Medical Director on behalf of the Belfast Health and Social Care Trust, (which incorporates the former RGHT), addressed the public hearings. Mr Donaghy commenced his opening statement by saying:

"*Let me begin by categorically stating that the Belfast Trust, on behalf of the former Royal Hospitals Trust, regrets most sincerely the pain and suffering experienced by the families of Adam Strain, Claire Roberts, Lucy Crawford, Raychel Ferguson and Conor Mitchell and apologises for all the shortcomings in care at the Royal Hospitals that have been identified either prior to this inquiry or during the hearings... The abject sorrow and grief felt by the families, I know, has not lessened with the passing of time. In fact, I fully accept that it is as raw today as it was then, exacerbated by the actions of the three Trusts involved.*"[638]

3.318 Mr Donaghy then proceeded to acknowledge individual failings on the part of the Trust including the way in which the litigation had been handled. He said "*it is clear that... fluid management was poor... communication with the families was not sufficiently transparent, our medical and nursing staff missed the opportunity to reflect on what may have gone wrong... record*

637 302-185-001
638 Mr Donaghy T-12-11-13 p.5 line 9-13

keeping was incomplete and our governance was not sufficiently developed or robust. I also accept that reflective clinical practice and candour... was clearly missing."[639] He further accepted that he was "*... aware through this Inquiry that how litigation has been handled by the Belfast Trust has added to the hurt and grief felt by the families... I wish to apologise unreservedly to the families for the unacceptable delay in the Belfast Trust accepting liability.*"[640] After making his statement, Mr Donaghy and others from the Trust agreed to meet the families. As a result of those meetings, Mr Donaghy wrote to Mr and Mrs Roberts on 21st November 2013 to state that:

"*In relation to the letter from the Directorate of Legal Services, as I indicated to you on Friday, 15 November 2013, I believe that some of the wording in the letter is insensitive. I accept that your reason for pursuing Claire's case is to, as far as possible, ascertain the truth.*"[641]

3.319 Mr and Mrs Roberts were more than fully justified in that pursuit.

639 Mr Donaghy T-12-11-13 p.5 line 22 *et seq*
640 Mr Donaghy T-12-11-13 p.5, line 15
641 314-018-001