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EP: Insight Opening Titles

Opening sequence: Cemetery picture of Raychel and other grave GVs (Tape 1)

Trevor V/O 1: On a summer's day in June 2001 this little girl was admitted to hospital to get her appendix removed. Three days later she was dead. Tonight Insight hears from the expert who says the fluids system used by Altnagelvin caused the condition which killed nine year-old Raychel Ferguson. We set out the tell-tale signs the hospital missed and the obstacles now frustrating her parents who say they still don't know why a routine operation went so drastically wrong.

Title bar: Vital Signs

Sequence of parents arriving in the cemetery, the Foyle Bridge in the background covering the sound to start with (Tape 2)

Marie Ferguson (Tape 2 - 02:38:46 - 02:39:30) "It is very heartbreaking for my to come here but it is the only place now that I can feel that I am close to Raychel. I come here and talk to Raychel and tell Raychel that, tell her what is happening, the boys are away to school, the boys are coming back from school and I have to go home now to make the dinner but I will be straight back as soon as I get that done. And then at night when we come over to say night-night we will see you in the morning."

Set-up shots of Dr Ted Sumner (Tape 6)

Trevor V/O 2: Hundreds of miles away in London, this eminent physician has studied the events that led to Raychel's death. Dr Ted Sumner, who was a paediatric anaesthetist at the world-renowned Great Ormonde Street Hospital, was an expert witness at Raychel's inquest and believes she should never have died.

Dr Sumner (Tape 5 - 7:04:52 - 7:05:15) Q) Did Altnagelvin hospital fail Raychel Ferguson?

A) Well, in that she was a normal little girl who came in for a minor procedure and then died as a result of it, then I would say that was a failure.

Q) A catastrophic failure?

A) A catastrophic failure.

Westlife "Queen of My Heart" over amateur video and stills of Raychel

Trevor V/O 3: Raychel Ferguson was Ray and Marie's only daughter. A lively child, she was like a second mother to the two youngest of her three brothers as they grew up at Coshquin on the outskirts of Derry. Like many of her friends, she had a passion for fashion and the boy band Westlife.

Marie Ferguson (Tape 1 - 01:02:09 - 01:02:37) "Ah, she just loved all her brothers, but Jason and Jamie, the youngest two, she just doted on the two, she was just like a second mother to them and very particular about her bedroom, she wouldn't let anybody into her bedroom, especially Jason and Jamie. If they went into you would hear Raychel from the end of the street shouting 'get out of my room'. But no, she loved her brothers so much."

Raychel's room (Tapes 2)

Trevor V/O 4: On June 7 2001 Raychel came home from school a winner. She'd won a medal in her sports day but she wasn't in the mood for celebrating. Instead, she complained of stomach pains.

Ray and Marie Ferguson (Tape 1 - 01:05:51 - 01:06:20) " Raychel then followed me into the living room and then that's when I noticed her face had changed, a grey colour. I said, no, there is something badly wrong here. So I rung Mary and put Raychel into the car and collected Ray and took her straight to the hospital."

Journey to Altnagelvin (Tape 10)

Trevor V/O 5: At Altnagelvin Hospital Raychel was quickly diagnosed as suffering from appendicitis and underwent surgery that night. The operation went ahead without complications.

Ray and Marie Ferguson (Tape 1 - 01:09:53 - 1:11:45) "Raychel wakened up around, just shortly before 8 o'clock and she is chatting starting to come round great, fantastic I thought. She got up out of the bed, I couldn't believe this, Raychel getting out of the bed just a short while after the operation, she walked up the corridor with me and she walked back down again, I think she went to the toilet and she came back. I said everything is great, I said I will scoot down and get to pens and colouring book, came back up chatting away, she sitting drawing and then she set on the bed and started drawing, I phoned Marie, I said you will not believe our Marie is up and down the corridor the walking."

Reconstruction material (Tape 9) & Music

Trevor V/O 6: But eleven hours after the operation came the first sign that all was still not well with Raychel.

Ray Ferguson (Tape 1 - 01:11:30 - 01:12:15) "I think Marie came over at 10.30 and we were chatting away and she said to Marie guess what mummy I vomited but she never told me, shortly afterwards she said mummy I have to vomit again. So Marie took her out to the toilet, carried her out to the toilet, Marie came in and said she had a big vomit down in the bathroom she nearly filled the sink.

Reconstruction material

Trevor V/O 7: Then she was sick again. But those caring for Raychel didn't seem especially worried.

Ray Ferguson (Tape 1 - 1:12:26 - 1:13:25): "It was right and regular, I went down a number of times to the nurses and they just said, 'ah her stomach is empty now she will not throw up any more'. But we left then around 3 o'clock, we had to get the boys from school. Marie came back over at 4.00 again now, and soon as I walked into the ward Raychel was just lying on the bed and there was a lady across from Raychel with her child she said that since you left at 3.00, your daughter hasn't stopped vomiting, she had been vomiting constantly and then I was talking to Raychel and said are you alright love. But at this stage she was really weak, she was very pale, I kept talking to her, but Raychel wasn't really responding she was just looking at me with her eyes. I said my God, you are weak love there is something wrong."

Pan from reconstruction bed to drip, insert graphic and return to drip again

Trevor V/O 8: Raychel was in fact exhibiting the early signs of a condition called hyponatraemia. Dr Sumner says there was nothing unique about Raychel that caused her to develop it. Instead, he says, the hospital was responsible. Like any other patient after an operation, Raychel's brain was telling her body to retain water. It's known as the anti-diuretic response. But the hospital was giving her more water through a drip which, according to Dr Sumner, began a vicious circle. Firstly there was too much water in Raychel's system, causing her brain to swell. This swelling was making her sick. By vomiting so heavily, Raychel was losing vital sodium which would otherwise have helped her system balance itself out. The drip was not replacing that lost sodium and was giving her too much water. By giving Raychel too much fluid and not enough sodium, Dr Sumner says the hospital was causing the lethal condition.

Dr Sumner (Tape 5 - 6:13:30 - 6:14:57): "If you give generous volumes of a solution that doesn't contain much sodium, contains mostly water, then you will get dilutional hyponatremia. And of course in Raychel's case this problem was exacerbated by her vomiting which makes you lose sodium. So sadly she was on a course to get hyponatraemia because she was being given, first of all she mounted the anti-diuretic hormone response which is absolutely routine, usual. She was given a very generous amount of post-operative water and she vomited, so to me it isn't surprising that after 24 hours she became moribund from this condition."

Night-time shots of Altnagelvin (Tape 11) plus Reconstruction material (sickness)

Trevor V/O 9: So the hospital was giving too much water and not enough sodium. A basic blood test would have identified the problem and a conventional saline drip corrected it. But other patients were given given similar fluids to Raychel. So why did only she die? Dr Sumner says it was because Raychel was vomiting so much. And he says the hospital failed again by not monitoring how sick she was.

Dr Sumner (Tape 5 - 6:06:09 - 6:06:40): "Well, I would think that after the second large vomit, that would go my mind, that should have raised alarm bells that there was something wrong. "

Dr Sumner (Tape 5 - 6:33:36 - 6:34:05): "I think that by, after the second big vomit at 10.30 in the morning they might have decided to see how much she was losing ... in this way and probably replace it intravenously by the same volume of saline."

Reconstruction material (anti-sickness injection)

Trevor V/O 10: Raychel continued being sick into the evening. At around teatime one of the doctors gave her an injection of an anti-sickness drug. She was now weak and listless - more evidence of hyponatraemia.

Ray and Marie Ferguson (Tape 1 - 1:14:07 - 1:15:10): "I brought the boys, her wee brothers over and a wee friend and when I came in she didn't look well at all to me. She didn't even acknowledge her brothers and usually she is piping up once she sees her brothers, she never even acknowledged them. Her wee friend set down beside her, she never even acknowledged her. I said to Marie she doesn't look well at all, you know, she is really lifeless in the bed more or less, you know just lying there, just more like a glaze looking around."

Reconstruction material (headache)

Trevor V/O 11: Then came another vital sign of Raychel's accelerating deterioration... a headache ... a result of Raychel's brain swelling and pressure building up within her skull.

Ray and Marie Ferguson (Tape 1 - 1:15:10 - 1:16:11) "I just said to the nurse 'look my daughter is not very well at all, she is not well' I said she has got up on the bed there now, with her hands on her head, shouting daddy, daddy my head is very sore and I said her face is very red. I will come in now and give her a paracetamol. I just said right to myself, you know better."

Reconstruction material (sickness)

Trevor V/O 12: The anti-sickness drug wasn't working either. Raychel was sick again ... only the material she was bringing up contained what looked like coffee grounds ... an unmistakable sign that Raychel was vomiting blood.

Ray Ferguson (Tape 1 - 1:16:45 - 1:17:15): "I went out a phone Marie and I was kind of panicking on the phone and I said to Marie our Raychel is not well at all and I don't even think the nurses is even taking me on. That is what you did say, he said 'the sweat is running down my back, our Raychel is not well, she is throwing up blood now and everything.'"

Dr Sumner (Tape 5 - 6:28:39 - 6:29:47): "Well, I think after vomiting coffee grounds that really is abnormal, really, because it implies bleeding in the stomach ... It is something that happens to a very stressed patient for example but it is completely pathological so I think at that stage that would be the final stage in my view that something could have been done. Because they didn't have very long. I mean, that was 9 o'clock by which time her electrolytes, the cerium, sodium and potassium and magnesium would all have been very deranged, but not too late to do something about it."

Night-time GVs of Altnagelvin (Tape 11) Reconstruction shots (nurse talking to parents)

Trevor V/O 13: The hospital has claimed that Raychel's sickness wasn't unusual ... a nurse at the inquest said she'd seen other patients who'd been sicker after an operation ... but with no ill-effects.

Dr Sumner (Tape 5 - 6:09:26 - 6:10:05): "It was severe vomiting and prolonged ... and also she must have strained and strained vomiting because she had little haemorrhage marks in her neck."

Ray and Marie Ferguson (Tape 1 - 1:18:13 - 1:19:30 approx): " We kept coming out and saying to the nurses, look there is something wrong. Its only natural they kept telling us, after an operation. That is all we got, it was only natural.

Reconstruction material (good-night kiss)

Trevor V/O 14: The Fergusons said good night to Raychel at about half past twelve on the morning of Saturday June the ninth. Unknown to them they were also saying good bye.

Telephone rings (tape 10)

Trevor V/O 15: A phone call came from the hospital about three hours later. Raychel was now suffering convulsions.

Ray and Marie (Tape 1 - 1:20:30 - 1:22:00 approx): "Raychel was all tightened up on the bed, you know shacking more or less in the bed and the nurse said to me, 'your daddy is here now' so I grabbed her by the arm but her arm is really stiff and I said ' Raychel daddy is here now Raychel' she never acknowledged one thing at all. So I went out and phoned her right away and said Marie go and come over here right away, she said what is wrong I said just come over. By this time when I came back in they just lifted her as soon as I came in, lifted her out of the bed and rushed her down to the treatment room.

Reconstruction material (Doctor and two nurses) ... maybe more night hospital pix

Trevor V/O 16: But the realisation of just how sick Raychel was had come too late. The fits marked the point where her brain had become so swollen, it was being forced into the hole at the bottom of the skull, a process known as coning. Two brain scans were carried out on Raychel ... she was given the Last Rites and it was arranged for her to be transferred to the Royal Belfast Hospital for Sick Children. But by this stage the damage was massive and most likely untreatable.

Dr Sumner (Tape 5 - 6:56:30 - 6:57:34): Q) "When you read the notes at the point in which Altnagelvin decided to transfer Raychel to the Royal Victoria Hospital for Sick Children what was the condition in your estimation then?"

A) "Well she had already become unconscious and was and had changes in her pupils implying that she had already undergone this coning process which unless active steps are taken, is usually fatal. I think she was very sick indeed at that stage. It is possible that she was already in an irreversible cerebral state at the time, which was irrecoverable at that stage."

Q) "She was brain dead?"

A) "I think so."

Ambulance shots (Tape 8) and GVs RBHSC (Tape 8)

Trevor V/O 17: While police escorted Raychel's ambulance the seventy-five miles to the Royal, her parents made the harrowing journey in another car. They arrived in Belfast clinging to hope ... only for the doctors there to give them devastating news.

Ray and Marie Ferguson (Tape 1 - 1:27:15 approx - 1:28:56): " They came in and told us she is brain dead. That was very hard to, we would have to decide to switch off the machine because she is really brain dead. Well Marie didn't want to switch off the machine, so we went outside for a bit of fresh air have a chat talk about it, I kept saying to Marie, Marie she is not there now, its only the machine now that is making her breath, she is already gone. So we decided then we talked to the family, so we decided then for the doctors to go ahead to switch it off. So we went down into the room were she was lying, lifted her out of the bed onto Marie's knee and the nurse said to the other doctors: when you are ready. So they took the pipe out which was keeping her breathing and Raychel just died in Marie's arms, you could never forget that. She died in her arms." (continues with Marie sobbing)

Fade to black

Trevor PTC at Altnagelvin: Still struggling to come to terms with the shock of losing a daughter, the Fergusons were also in dark about what had actually caused her death. They were told it was hyponatraemia but that didn't explain how or even why she had developed it. Their quest for answers led them to Altnagelvin hospital, but a meeting here with senior staff two-and-a-half months after Raychel's death left Marie feeling that the authorities were closing ranks.

Ray and Marie Ferguson (Tape 1 - 1:30:30 - 1:32:45) " I just asked when I went in, what happened to Raychel ... He turned round and said he never seen anything like it, it is very rare. I said well surely when Raychel was throwing up the vomiting and she was throwing up blood, I said surely then there was cause for concern somewhere, for someone to something. I will never forget it the nurse in the chair she just folded her arms and set back in the chair and she said Mrs Ferguson we had no cause for concern.

Trevor V/O 18: DROPPED

Exterior GVs of RBHSC (Tape 8) plus archive hospital interiors

Trevor V/O 19: Compounding the Fergusons' grief was the discovery that Altnagelvin didn't learn from the death of another child - a toddler - from hyponatraemia at the Children's Hospital in Belfast seven years ago. Altnagelvin has hinted that the Royal should have passed on the lessons of that death to other hospitals more effectively. But doctors at the Royal have told Insight that they would expect any teaching hospital like Altnagelvin to be actively on the lookout for all new medical developments. Northern

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Ireland's most senior doctor has now acknowledged that the Province may have been lagging behind other regions in this respect.

Dr Henrietta Campbell (Tape 4 - 5:16:34 - 5:17:28): Q "What lessons do you think have to be learnt from the case of the death of Raychel Ferguson?"

A) "Well Northern Ireland is a very small place with a population of 1.5million people, when untoward and rare events happen we need to find a way of learning from them. Now they only happen every 5 years or every 10 years. It is very difficult for the service to learn from that to remember what happened to have a memory about those untoward events. And what this has shown to us is that together with the rest of the United Kingdom we need to take part very carefully and very clearly in the systems that are now being put in place to ensure patients safety. Northern Ireland is too small a place to learn of itself from these very rare events." (1'00")

Trevor V/O 20: Hyponatraemia IS rare. But that doesn't mean it's unheard of ... and Dr Sumner says the fact that hospitals can cause it, means they SHOULD know about it.

Dr Sumner (Tape 5 - 6:25:57 - 6:26:39): "I would expect them to be aware of this, I would. Yes I would, it is something that is taught to every medical student and, as I said in Court, I mean, I was taught about the need for input and output measurements for the professional management of fluid therapy in the post-operative patient. It is a Cinderella area and I think it is hard to say why people aren't interested in it or think it is routine and therefore things will always sort, the body will sort itself out, you know."

"How surprised were you to read the facts of this case that this hadn't been spotted?"

"We I think it was a very, it is a tragic case, this and I was very sad actually that this series of events had been allowed to happen."

"Were you surprised by them?"

"I supposed I was surprised. I was surprised and possibly a little exasperated that the sort of the basics, the really true basics of fluid therapy had not been understood. That you replace what is being lost. And it seems to me to be totally basic post-operative fluid management."

Dr Sumner (Tape 5 - 6:32:45 - 6:33:30): " I think it was in the back of everybody's mind, Raychel has appendicitis, it wasn't even a very severe appendicitis and it was always in the back of their mind, I think, "Oh she will be all right until it was too late"

Daytime exterior GVs Altnagelvin (Tape 7); Hospital statement; drip

V/O 21: Insight approached Altnagelvin Hospital but but senior management declined to take part in this programme, citing the possibility of future legal action by the Fergusons. Altnagelvin changed its fluids protocol after Raychel's death and the Department of Health drew up new guidelines about Hyponatraemia to be displayed in wards. This cases certainly raises questions about standards in our healthcare system ... but it's also being held up as an example of why that system needs to be more open.

Ray and Marie Ferguson (Tape 1 - 1:40:18 - 1:41:23): "We feel that somebody has to be held accountable for what happened to Raychel. We want somebody more or less, to put their hands up and say I am to blame, we are to blame, but we know ourselves that is never going to happen."

Fergusons arrive at Coroner's court (Tape 12); GVs Coroner's court

V/O 22: Earlier this month the Fergusons arrived at the Coroner's Court in Belfast hoping that Raychel's inquest would cast more light on what had happened to her. But they came away disappointed. The Inquest system here doesn't allow the Coroner to reach verdicts or apportion blame. His finding was what already knew: that Raychel died of a Cerebral Oedema caused by Hyponatraemia. But the Fergusons were particularly incensed that the two surgeons who dealt with Raychel and who were responsible for her fluids, were not there to give evidence. One was excused, the other didn't turn up, the court was told he was off on leave. **(we obviously may need to amend this part)**

Ray and Marie Ferguson (Tape 1 - 1:51:19 - 1:52:45): "Well Dr Leckey he excused one which I don't agree, he shouldn't have excused him even he had exams he shouldn't have excused him. He was supposed to be looking after our Raychel he had questions to be answered to, but we never got the answers from him."

Graveside GVs??? (Tape 2)

Trevor V/O 23: The Fergusons search for answers about Raychel's death continues but they're still haunted by what could have been had healthcare professionals simply **listened** to them while their daughter was still alive.

Dr Ted Sumner (Tape 5 - 7:00:35 - 7:01:35): Q) The parents of Raychel Ferguson will feel. Raychel Ferguson parents would say that they were raising the alarm bells but they weren't being listened to. Is there an issue of arrogance here that parents are too easily dismissed?

A) I think it is a good point, I think there is often a feeling among medical and nursing staff that they know best. In my opinion it is always very unwise to dismiss the opinions of the parents after all it is they who know their child best. And in this case there does seem to have been a failure of communication." (1'00")

Graveside GVs and music

Ray and Marie Ferguson (Tape 1 - 1:41:33 - 1:42:40): "If they had maybe took more heed of what we were saying about the vomiting and the blood and that and had really got that checked, then Raychel would have been here ... They are professionals, we have to go with what they say. But yet she was our daughter and we knew that she wasn't well."

Pictures of Raychel's room. (Tape 2) to programme out

Ray and Marie Ferguson (Tape 1 - 1:47:07 - 1:48:00) "I am just sorry I took her to the hospital, I thought I was doing the best thing for Raychel. (weeps)."

Marie in Raychel's room (Tape 2 - 2:18:17 - 2:18:51): "I come in here every night and say, look at her picture and say look Raychel what did happened love. I keep saying to her, I come in here and talk to her and say that someday somebody will be hopefully be held accountable for what they done to you, because you didn't deserve what you got."

Closing Titles

Production Caption.

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