

**In the Family Care Centre sitting at Belfast**

**Re DD and DD**

**Her Honour Judge P Smyth**

1. The children's names have been anonymised by the use of pseudonyms. Nothing should be published which would identify the children or any member of their extended family.

**Introduction**

2. This is an application by the Trust for care orders in respect of two children, David and Daniel, who were born on the 12<sup>th</sup> May 2010 and the 9<sup>th</sup> March 2012.
3. Daniel was born six weeks premature, and spent the first six weeks after birth in the neo-natal unit. He has Down's syndrome and in common with many children with this condition, he suffers from hypotonia which means that he has very poor muscle tone. Hypotonic babies are often described as 'floppy' and require differing handling from a normal baby.
4. On the 13<sup>th</sup> June 2012, Daniel who was then aged 13 weeks and 5 days was brought to the accident and emergency department suffering from pneumonia. A chest x-ray was taken, and Daniel was found to have two healing fractures of the anterior 7<sup>th</sup> and 8<sup>th</sup> left side of his ribs. All experts agree that these fractures are likely to have occurred between the 21<sup>st</sup> May

and the 31<sup>st</sup> May 2012, and that they are likely to have occurred at the same time.

5. Daniel's parents do not present as a couple, but at the material time they had a cordial and supportive relationship. It is accepted that there were two incidents of domestic violence between the couple, one which occurred prior to Daniel's birth and one which occurred after the Trust became involved. The mother explained that the first incident related to the discovery of the father's infidelity, and the second was a consequence of the pressure of the present proceedings. The mother denied that there was any other history of violence between the couple and accepted that on the second occasion she had assaulted the father. The mother also accepted that she had felt depressed after Daniel's birth.
6. The parents agree that the mother was the primary carer and that she was present when the father visited the children, apart from very short periods of time when she may have gone to the shops. The father looked after Daniel overnight on one occasion only, and the mother noticed nothing untoward afterwards. The maternal grandmother was a regular visitor to the home. At that time she worked full time and visited perhaps every other day, before or after work and on days off. However, she gave up work in order to care for both children as a consequence of these proceedings.
7. On 13<sup>th</sup> June, both parents were asked to provide an explanation for the fractures. The mother recalled that on occasion Daniel stretched his arm out of the cot. The father could not recall any incident which could have caused the injuries. He believed that the mother handled Daniel very carefully.
8. On 14<sup>th</sup> June, and subsequently on 21<sup>st</sup> June, the grandmother gave an account to medical personnel of an incident that had occurred two or three weeks previously. She repeated this account in evidence. She described how she was present in Daniel's home along with her two daughters and her other grandchildren. She was in the living room, sitting in an armchair and nursing

Daniel. The other grandchildren were running in and out of the living room from the garden carrying toys and in order to protect Daniel, she moved him from her left side to her right, using both hands. As she did so she immediately heard a “click” and Daniel let out a painful cry that she had never heard before. As with many babies with Down’s syndrome, Daniel is a very placid baby. The grandmother said that she had never heard him cry and she was shocked because she believed that she had hurt him. She called to the mother and told her that she had hurt Daniel. The mother lifted Daniel to soothe him and he quickly settled. When the rib fractures were discovered she immediately said to the mother that this incident must have been the cause of the injuries.

### **The Medical Evidence**

9. The court heard evidence from Dr Joanna Fairhurst, Consultant Paediatric Radiologist, Dr Kim Troughton, Consultant Paediatrician and Dr Dewi Evans, Consultant Paediatrician.
10. Dr Fairhurst explained that the degree of force required to cause fractures of the lateral aspects of the ribs is considerable and well in excess of that used in normal day-to-day handling of a child or even during rough play. By way of example, she said that the level of force used in cardiopulmonary resuscitation would rarely cause fractures. She opined that 90% of fractures in infants are non-accidental.
11. In terms of mechanism of injury, a direct blow or compressive force applied to the chest are the most likely causes. In infants, the ribs are very pliable in comparison to adults and so a large degree of force is required to cause fracture.
12. The results of medical investigations confirmed that there is no evidence to suggest that Daniel was more susceptible to fractures than any other infant. In particular, there were no radiological signs of bone deficiency in the

context of a finding of vitamin C deficiency. Radiological literature indicates that if the vitamin deficiency is of a degree which is not severe enough to produce radiological signs, then the infant is highly unlikely to be at increased risk of fractures.

13. Dr Fairhurst was questioned about the account given by the grandmother. She confirmed that a "clicking" sound at the time of fracture has been reported in previous cases, although such reports are very unusual. There have also been reports of a "clicking" sound several days after a fracture has occurred. She said that at the time of fracture, she would expect the baby to cry out in pain and to be very distressed for a period. The duration of distress would be variable, depending on the baby's disposition and how the baby is subsequently handled. She said she would expect the baby's carer to be immediately aware that the baby had been hurt.
14. Dr Fairhurst was "slightly hesitant" about the grandmother's account representing a valid explanation for the injuries because it described normal handling of a baby and she would not expect that degree of force to cause a fracture. She was asked to comment on the pressure which may have been applied because the baby was "floppy". She said that she found it difficult to accept that sufficient force had been used unless the baby had been slipping and dropping and had to be firmly gripped, which was not the account given. There is no evidence in the literature of normal handling of a floppy baby causing fracture. She did say however, that if the baby already had the fractures when he was handled by the grandmother, they may have been aggravated if pressure had been applied to the area.

Dr Fairhurst concluded that the fractures were highly indicative of non-accidental injury which occurred between 21<sup>st</sup> and 31<sup>st</sup> May 2012.

15. On 9<sup>th</sup> January 2013, all three medical experts held a professionals meeting. Dr Fairhurst gave evidence that she did not change her view as a result of that discussion. However, it was put to her that her concluding comments

recorded in the minute of the meeting suggested a much lower degree of certainty regarding the nature of the injury than she had expressed in her initial report and in evidence to the court. The relevant extract from the minute is as follows:

“Jim McAlister: Just to sum up on whether or not we are going to be able to narrow it down any, I’m not sure. In terms of what Dr Evans has said in the report, Dr Evans has said from his point of view there are two possible explanations. Either a non-accidental injury caused by a force we don’t know about or an incident that we don’t know about or the incident with the granny. Is it possible at all to say one is more likely than the other or is that unfair to yourselves? Is there any comment you would like to make in that?”

Dr Evans: My own view is that the granny history is more likely than the other one but I wouldn’t want to rule either out. How’s that for being totally helpful?

Jim McAlister: From yourselves Dr Troughton and Dr Fairhurst?

Dr Fairhurst: *I simply don't know the answer. I can't judge between them.*

Jim McAlister: Ok. Dr Troughton?

Dr Troughton: Yeah on the knowledge that I have I would feel that non-accidental injury is more probable.

Jim McAlister: Yes.

Dr Troughton: But I can't take out the possibility that the granny caused an injury that day when she moved him from one knee to the other.

16. Dr Fairhurst explained that she had concluded that this injury was highly indicative of non-accidental injury because 90% of all fractures in infants are non-accidental. In order to conclude that the injury was accidental a plausible explanation is required and in addition the family history and all of the evidence has to be considered.
17. In cross examination on behalf of the mother, Dr Fairhurst said that she had considerable difficulty with the case. She pointed to the fact that there was no history of concern with the family, and Daniel was a child who generally did not cry and the grandmother had given an account that he did cry out on this occasion. She commented that the fracture may already have been present.
18. Dr Fairhurst also explained that anterior lateral fractures are more indicative of non-accidental injury. However, she accepted that the account given by the grandmother was within the time frame for the injury and that the grandmothers description of a 'click' may well be something that occurred. The child's unusual cry was also a relevant consideration.
19. Dr Troughton, Consultant Paediatrician, is the designated officer for child protection in the Trust. She examined Daniel upon admission to hospital on 13<sup>th</sup> June 2012. She said that tests confirmed there was no organic reason for the fractures. In the case of a 14 week old baby presenting with fractures there is an immediate concern that the cause is non-accidental. Dr Troughton agreed with Dr Fairhurst that the fractures were likely to have occurred at the same time. Her immediate thoughts were that the fractures were caused by a significant squeeze or impact to the chest. Such a squeeze would not occur during normal handling.

20. Upon examination, no bruising was noted. Dr Troughton stated that in cases of significant squeeze, you would expect to find finger print bruising, but not necessarily. After 2-3 weeks, bruises would have faded, if they had ever been present. She explained that rib fractures are often found accidentally because unlike other types of fracture rib fractures in children are remarkably well tolerated.
21. Dr Troughton spoke with both parents and the grandmother. On 14<sup>th</sup> June she spoke firstly with the mother. The mother gave a history of a good baby who never cries. She described the baby stretching his left arm out of the cot although she didn't think he stretched it completely out of the cot. She told Dr Troughton that the grandmother had lifted him from one side to the other and that he had cried. Dr Troughton then spoke to the grandmother, who told her that she thought she had hurt him, although there was no bruising. The grandmother had given the account of the incident that had occurred 2-3 weeks previously when she had transferred Daniel from the left knee to the right.
22. Dr Troughton described speaking with the father on the 15<sup>th</sup> June. He said that he visited the baby nearly every day, but that he did not look after him on his own. He described the mother as very careful in her handling of Daniel because of his poor head control, and he felt that if she had any concerns she would have brought him to the hospital.
23. Dr Troughton felt that the grandmother's account was not significant in terms of the impact on Daniel, but she noted that Daniel did cry on that occasion, which was unusual. She noted that the mother took Daniel from the grandmother and that he settled, and there was nothing of significance later. She concluded from the history that the grandmother was a significant carer.
24. Dr Troughton confirmed that Daniel was a 'floppy baby' but that he did not have very, very low tone. She noted that the grandmother had never mentioned any concern about handling Daniel. In her opinion, it was very

improbable that the account given by the grandmother explained the fractures because the pressure described by the grandmother was not significant enough to cause such an injury. She dismissed the suggestion that the grandmother could have subconsciously applied more pressure than she realised. Whilst she could not give an opinion on the likely length of any period of distress suffered by Daniel after the fracture, she noted that the mother immediately took the child and settled him and she considered that it would be unusual for a baby to settle so quickly. She did note however, that Daniel was a very placid baby and that some older children with Down's syndrome can have a high pain threshold. She was not aware whether that pertained to babies also. She concluded that in her opinion, it was "very, very, very" unlikely that the injury had been caused by the grandmother. She was concerned that the reason the baby cried was that the rib fracture was already present. In her view, non accidental injury was a probability.

25. In cross examination on behalf of the mother, Dr Troughton accepted that the grandmother's account fitted the time frame of the injury and that both the grandmother and the mother had given a consistent account throughout to medical professionals. In particular, the consistent mention of the 'click' and the consistent mention of a "particular cry" were relevant considerations, as was the floppiness of the baby.
26. Dr Troughton also agreed that anterior fractures are less indicative of non-accidental injuries than posterior fractures and that whilst anterior fractures could be caused by shaking, that was not a relevant consideration in this case. In terms of the mechanism of injury, dropping or hitting the child against a hard surface could be a cause, although she had no experience of such a finding. A squeeze or compression was the most likely cause within the literature. She agreed that a significant squeeze was the most likely cause.
27. It was put to Dr Troughton that Dr Evans had suggested Daniel may have been particularly floppy because he was premature as well as having Down's



syndrome. She said that whilst prematurity may or may not make babies more floppy, she didn't think that was the case with Daniel. She agreed that within the literature floppiness has been described as 'slipping through ones hands'. However, whilst this description may be relevant to a baby being picked up, the account by the grandmother did not involve such an action. She did agree that in moving Daniel, the grandmother's thumb would have been the pressure point for the mechanism of holding.

28. It was put to Dr Troughton that in the minutes of the experts meeting her conclusions did not appear to be as firm as her evidence to the court. The relevant extract is as follows:

Dr Troughton: “... I don't know if someone was saying is it possible that granny on transferring from one knee to another caused an injury. I mean it's very hard. I've never seen it. *I don't know if it is because you haven't seen something that makes it possible or not.* I would see and my colleagues and myself would see all the children with Down's syndrome really within our Trust area and I've been speaking to colleagues. We are only aware of one child with Down's syndrome that also had a fracture of a rib but in fact he had a significant cardiac disease and was malnourished [inaudible] on the X RAYS a totally different kettle of fish you know?... I am not aware of, certainly in my case load, of another child, you know, having sustained a rib fracture with normal handling. *So I suppose, ultimately, I can't say it's impossible that granny has inflicted this injury. It's just outside my experience...*”

29. Dr Troughton denied that she had changed her view at any time during the course of these proceedings. It was put to her that what she had said at the expert's meeting was not consistent with her evidence to the court that the

grandmother's account as an explanation was "very, very, very unlikely". Dr Troughton referred to the concluding comments in the minutes which record her view that non-accidental injury is "more probable". She said that she meant that the grandmother's account was "unlikely [to have caused the injury] but not impossible". "

30. It was also put to Dr Troughton that the discharge from hospital letter dated 28<sup>th</sup> June 2012 contradicted her evidence to the court that she had always held the view that the injury was unlikely to be accidental. The letter reads "...2 rib fractures on the chest is a significant injury. There is no accidental explanation and therefore, *non-accidental injury cannot be excluded...*" The same words were used by Dr Troughton in her report dated August 2012 to express her view. She explained that what she meant was that non accidental injury is more "probable" and she saw no contradiction.

(emphasis added )

31. Dr Troughton agreed that the family had been totally co-operative and that apart from this injury she had no other concerns. No previous concerns had been noted by health professionals in respect of either child. David, the elder child, was doing very well with his milestones "even probably a bit advanced."
32. Dr Troughton concluded that it was more likely that the fracture was already present when the grandmother moved Daniel and that her handling of him caused pressure to be applied to the affected area causing him to cry out in pain. She said that the fact that he had not cried previously may have been because of the remarkable tolerance young children have to rib fractures. However, it was pointed out that Daniel had had a paediatric physiotherapy assessment on 31<sup>st</sup> May, nearly two weeks before his admission to hospital, and records of the assessment reveal no evidence of discomfort or distress. It is specifically recorded that Daniel displayed "no restriction of movement", which is an indication of the extensive nature of the assessment.

33. Dr Evans, Consultant Paediatrician differed from Dr Troughton in his conclusions. He considered that the account given by the grandmother was a legitimate and valid explanation for the fractures. He agreed that rib fractures in children are always suspicious, particularly in infants and if no clear explanation is given. In his experience, which spans more than thirty years, this is the only case that he can recall in which he is satisfied the child was not subjected to abuse.
34. Dr Evans explained that rib fractures are often associated with other injuries and have often occurred on multiple occasions. Whilst posterior fractures are even more suggestive of non-accidental injury, anterior fractures are also suspicious.
35. Dr Evans met with the family before preparing his report. He pointed to the 'click' and the loud cry - a 'panicked' cry as reported by the grandmother and the fact that she had not heard him cry before. He considered the consistency of the grandmother's account to be a relevant factor. Dr Evans pointed out that floppiness is a feature in premature babies as well as in babies with Down's syndrome. In terms of the degree of floppiness, Dr Evans pointed to the fact that Daniel is now 13 months old and is still unable to sit up on his own. In his view that demonstrated a high degree of hypotonia.
36. Dr Evans did not agree that the rib fractures were likely to have been caused prior to the incident described by the grandmother. If this had been the case, Daniel would have shown signs of pain and discomfort previously. Because the 'panicked' cry was described on only one occasion, Dr Evans concluded that it was more likely that that was the occasion on which the fractures were caused. He pointed out that it is normal for babies with fractured ribs to settle quickly and this is the reason they are usually undetected in the absence of X RAY.
37. Dr Evans explained that the history given by the carers is essential in making a correct determination of non-accidental injury. He considered it significant

that the grandmother is right handed which would explain why the baby sustained fractures to his left side when she moved him from her left knee to her right. He also considered it relevant that the grandmother was trying to protect the baby from the other children running in and out of the room and could have been distracted. Earlier she had told the court that what she remembered was the 'click' and the cry but couldn't remember much else about the way in which she had moved him. Dr Evans took into account the difficulties in handling a floppy baby, and the fact that the grandmother was not the main carer. He said that he would not expect the grandmother to know that she had held Daniel with too much force.

### **The legal framework**

38. In accordance with Article 50 of the Children (NI) Order 1995, it is open to the court to make a care order only if satisfied of two matters. The first is that David and Daniel are suffering, or are likely to suffer significant harm. The second is that the harm, or likelihood of harm, is attributable to the care given to the children, or likely to be given, if the order were not made, such care not being what it would be reasonable to expect a parent to give to the children. This constitutes the statutory threshold for intervention by the court. This must be considered in the context of the "threshold criteria" in this particular case. If satisfied that the statutory threshold is met, the court will then consider whether it is appropriate to make an order, giving effect to the welfare and non-intervention principles enshrined in Article 3 of the 1995 Order. In making its determination, the court must be alert to its duty as a public authority under section 6 of the Human Rights Act 1998 and, in this context, the right to family life, guaranteed by Article 8 ECHR. At the heart of the legislation is a determination of what is in the children's best interests, which must be the court's paramount consideration.
39. I have been referred to the following authorities relating to non-accidental injury cases which I have taken into account; *Re M (children)* (fact finding

hearing: injuries to skull) [2012] EWCA Civ 1710 and Re R (a child) [2011] EWHC 1715 (Fam). These cases are, however, fact-specific and merely serve to emphasise the importance of correctly analysing the expert medical evidence before reaching findings of fact. I have also taken into account the observation of Dame Elizabeth Butler-Sloss in Re T [2004] EWCA Civ 558 that *“evidence cannot be evaluated and assessed in separate compartments. A Judge in these difficult cases must have regard to the relevance of each piece of evidence to other evidence and to exercise an overview of the totality of the evidence in order to come to the conclusion whether the case put forward by the local authority has been made out to the appropriate standard of proof”*.

40. In this case, the Trust submits that threshold is met by reason of the following alleged facts:

- On 13<sup>th</sup> June 2012, Daniel (aged 13 weeks and 5 days) presented at A&E with pneumonia. In the course of a chest x-ray that day, he was noted to have two healing fractures of the anterior 7<sup>th</sup> and 8<sup>th</sup> left side of ribs. The date of these fractures is put by experts as between 21<sup>st</sup> May and 31<sup>st</sup> May 2012.
- At all material times Daniel was in the primary care of either the mother, father or both of them.
- The Trust assert that the fractures noted were caused by either a hard blow or compression/squeezing by an adult to the child’s chest area and would not have been caused by normal handling of the child. An appropriate carer would be aware of having used this level of force on a young baby.
- No account has been provided which would adequately explain the causation of Daniel’s injuries in this case. The Trust asserts that on the

balance of probabilities, the injuries to Daniel were non-accidental in nature and he has suffered significant harm.

### Conclusion

41. It is for the Trust to prove on a balance of probabilities that Daniel sustained non-accidental injuries whilst in the care of his parents. In essence, the issue for the court is whether the account given by the grandmother provides a legitimate explanation for Daniel's injuries. The Trust submits that it does not do so, and that the injuries were more likely to have been sustained on an earlier occasion.
42. It is clear that all of the evidence has to be considered in determining this issue. This is a family in respect of whom there have never been any childcare concerns. David, the elder child, is clearly thriving. Indeed, if anything he is advanced for his age. No concerns were noted prior to Daniel's admission to hospital with pneumonia. This family has given a consistent explanation throughout its involvement with health professionals. All of the experts agree that the distressed cry and the 'click' are significant factors. Either the fractures were caused at that moment or the grandmother accidentally applied pressure to an area that was already injured.
43. There is no dispute that the fractures are likely to have occurred on the same occasion and there is no evidence of any other injury to this child. As Dr Evans explained, rib fractures which are non-accidental in nature are often sustained on separate occasions and are often accompanied by other injuries.
44. If the fractures had been sustained on an earlier occasion, it is likely that evidence of the child's distress would have been apparent before he was handled by the grandmother. The evidence that the child had never cried in this way before is therefore highly significant. Daniel, like many babies with Down's syndrome, was very docile and did not cry in the same way as other babies. The grandmother was shocked to hear him cry out and she knew that

she had hurt him. The evidence of the mother that Daniel settled quickly after being soothed is consistent with the medical evidence that infants have a remarkable tolerance to rib fracture.

45. It is also significant that Daniel did not exhibit distress on any subsequent occasion, even in the course of a comprehensive physiotherapy assessment on the 31<sup>st</sup> May, two weeks before the fractures were discovered. The only evidence of his distress occurred on the day he was handled by his grandmother, which is within the timescale that Dr Fairhurst identified for the injuries.
46. Daniel was a baby who needed to be handled differently from other babies because of his hypotonia. Whilst I am satisfied that normal handling would not be expected to cause a rib fracture, the circumstances in which the grandmother moved the child must be taken into account. She was trying to protect Daniel from his young cousins who were running in and out of the garden armed with toys and may well have been distracted. No doubt she gripped him very firmly because of his hypotonia - which has been described as causing a sensation akin to “slipping through one’s hands” - when she moved him from one knee to the other. Whilst she could not recall the degree of force used, she was immediately alerted by the abnormal cry. The position of the fractures is consistent with pressure applied by the grandmother’s right hand as she moved him.
47. This is an unusual case as the experienced experts in this case have acknowledged. Taking all of the evidence into account, I am not satisfied on a balance of probabilities that the rib fractures were non-accidental. I am satisfied from Dr Evans’ evidence in particular, that this case falls within the 10% of cases where the cause of injury is accidental.
48. In view of that finding, I am not satisfied that the threshold criteria have been met for a care order and the Trust’s application is dismissed.

