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206 Paragraphs

R v STUART LEE - BC200108198

SUPREME COURT OF THE AUSTRALIAN CAPITAL TERRITORY
CRISPIN J

SCC 69 of 2000

13-22, 26 November, 4 and 12 December 2001, 21 December 2001

The Queen v **Stuart Lee** [2001] ACTSC 133

CRIMINAL LAW -- trial by judge alone -- alternative counts of recklessly inflicting grievous bodily harm and assault occasioning actual bodily harm -- accused alleged to have caused relevant injuries by shaking a baby -- case based on circumstantial evidence -- evidence injuries to brain of neonate baby caused by acceleration/deceleration mechanism -- need for care in examining bases of medical opinions -- paucity of research findings re degree of force necessary -- possibility of injuries being innocently caused -- hypotheses consistent with innocence not excluded.

COURTS -- trial by judge alone -- power to acquit at close of Crown case even if prima facie case.

EVIDENCE -- Whether evidence by medical experts that injuries caused by shaking admissible.

Supreme Court Act 1933, s68C
Evidence Act 1995 (Cth), s144, s79

R v Clarence (1888) 22 QBD 23
R v Salisbury (1976) VR 452
March v Stramare (1991) 171 CLR 506
Chappel v Hart (1998) 195 CLR 232
DPP v Smith [1961] AC 290
R v Perks (1986) 41 SASR 335
R v Coleman (1990) 19 NSWLR 467
R v Mowatt [1968] 1 QB 421
R v Lovett [1975] VR 488
R v Stokes (1990) 51 A Crim R 25
R v Savage [1992] 1 AC 699
R v Crabbe (1985) 156 CLR 464
Vann v Palmer (unreported, [2001] ACTSC 12, Crispin J, 22 February 2001)
R v Miller [1954] 2 QB 282
R v Chan-Fook (1994) 99 Cr App R 147

Chamberlain v R (No 2) (1984) 153 CLR 521
Shepherd v R (1990) 170 CLR 573
HG v R (1999) 197 CLR 414
Donyadideh v R, Fed Ct, (unreported, Wilcox, Ryan and Higgins JJ, 23 August 1995)
Holland v Jones (1917) 23 CLR 149
Australian Communist Party v Commonwealth (1951) 83 CLR
Deputy Federal Commissioner of Taxation (NSW) v W R Moran Pty Ltd (1939) 61 CLR 735
Doney (1990) 171 CLR 207
R v Rao (unreported, [1999] ACTSC 132, Crispin J, 10 December 1999)
DPP (No 2 of 1993) 70 A Crim R 323
Prasad (1979) 2 A Crim R 45
Haw Tua Tau v Public Prosecutor [1982] AC 136
May v O'Sullivan (1995) 92 CLR 654
R v Lovett (1908) 1 Cr App R 111
O'Hallorhan v Crafter [1940] SASR 29

Crispin J

[1] The accused was arraigned before me on the following counts.

a) that on or about 27 July 1999 at Canberra in the Australian Capital Territory he recklessly inflicted grievous bodily harm on Charlie Paige Billerwell; and

b) that on or about 27 July 1999 at Canberra he assaulted Charlie Paige Billerwell and thereby occasioned to her actual bodily harm.

[2] Upon his arraignment he pleaded not guilty to each count.

[3] The accused elected to be tried by judge alone and, accordingly, I am bound by the requirements of s68C of the Supreme Court Act 1933. That section is in the following terms:

(1) A judge who tries criminal proceedings without a jury may make any finding that could have been made by a jury as to the guilt of the accused person and any such finding has, for all purposes, the same effect as the verdict of the jury.

(2) The judgment in criminal proceedings tried by judge alone shall include the principles of law applied by the judge and the findings of fact on which the judge relied.

(3) In criminal proceedings tried by judge alone, if the law of the Territory would otherwise require a warning to be given to a jury in such proceedings, the judge will take the warning into account in considering his or her verdict.

[4] As in trials conducted by a jury, the accused is entitled to the presumption of innocence, the Crown bears the burden of proving each element of each charge and the standard of proof is proof beyond reasonable doubt. The verdict must be determined solely by reference to evidence properly admitted at the trial or matters of common knowledge, which may be taken into account by virtue of s144 of the Evidence Act 1995 (Cth) (the Evidence Act).

[5] To establish an offence of recklessly inflicting grievous bodily harm the Crown must prove each of three elements: first, that the accused inflicted the relevant harm; second, that the harm amounted to grievous bodily harm; and third, that the accused did so recklessly. These concepts require some brief explanation.

[6] In the present context, the requirement that the accused "inflicted" the relevant harm merely means that he must have carried out some act that was a real and effective cause of the harm. A more limited meaning seems to have been

ascribed to the term in the case of R v Clarence (1888) 22 QBD 23 in which Stephen J expressed the opinion at 42 that one could not "inflict" smallpox upon another by passing on the infection. His Honour conceded that it may be inappropriate to lay too much stress on etymology, but nonetheless observed that the word "inflict" had been derived from "infligo" which, he suggested, meant "to strike". I do not accept that the term has such a narrow meaning in contemporary English usage. In R v Salisbury (1976) VR 452 the Full Court of the Supreme Court of Victoria reviewed numerous authorities on this issue and held that grievous bodily harm may be "inflicted" either by assaulting the victim or by "doing something intentionally, which, though it is not itself a direct application of force to the body of the victim, does result in force being applied violently to the body of the victim so that he suffers grievous bodily harm" (at 461).

[7] In the quarter century since that statement, cases involving the reckless transmission of the HIV and other infectious diseases have emerged as a real risk and I am inclined to think that the concept should be extended to cases in which the accused recklessly causes the victim to suffer grievous bodily harm even without the direct application of force. The issue of causation has itself been the subject of considerable discussion in recent years with the High Court adopting a "common sense" test in cases such as March v Stramare (1991) 171 CLR 506 and Chappel v Hart (1998) 195 CLR 232. In the present case, however, the Crown alleges that the injuries were inflicted by the direct application of force in a violent assault upon Charlie, and it is not necessary for me to attempt to delineate the boundaries of the concept.

[8] The term "grievous bodily harm" has been described by the scarcely more informative term "really serious" bodily harm: DPP v Smith [1961] AC 290 per Viscount Kilmuir LC at 334. It has been suggested that it is a misdirection to use the adjective "serious" without the presumably expansive adverb "really": R v Perks (1986) 41 SASR 335 per King CJ at 337. There are numerous cases in which courts have been obliged to consider whether injuries of various kinds have been sufficiently serious to constitute grievous bodily harm, but no more clearly stated principle seems to have emerged.

[9] The concept of recklessness differs qualitatively from that of negligence or even gross negligence. In this context it requires advertence to the possibility that the relevant event might occur. It is not sufficient for the Crown to prove that an act was inherently dangerous or such that a reasonable person should have foreseen the possibility of someone being injured.

[10] In the present case the Crown submitted that it was sufficient for the accused to have foreseen the possibility of some physical harm and cited the remarks of Hunt J in R v Coleman (1990) 19 NSWLR 467 at 475 in support of the contention that advertence to the possibility of grievous bodily harm was not necessary. However, in Coleman His Honour had been concerned with the concept of malice, and the offence charged had required only the infliction of actual bodily harm rather than grievous bodily harm. It is true that in a number of cases it has been held that a person may be taken to have maliciously inflicted grievous bodily harm if the accused foresaw that "some physical harm to some person, albeit of a minor character, might result": R v Mowatt [1968] 1 QB 421 per Diplock LJ at 426. See also R v Lovett [1975] VR 488; R v Stokes (1990) 51 A Crim R 25; and R v Savage [1992] 1 AC 699. However, whilst recklessness as to the consequences of an act may establish that a person has acted maliciously, the concepts are not synonymous. There can be no doubt that a person who deliberately cuts another person, other than for some benign purpose such as to facilitate a surgical operation, has acted maliciously. Similarly, a person may act maliciously by making a slashing movement with a sharp object towards another person knowing that he or she may be cut. If the latter proves to be a haemophiliac and grievous bodily harm results, then the authorities to which I have referred suggest that the first person may be guilty of maliciously inflicting grievous bodily harm, even if he or she had been unaware of the condition and hence had not adverted to the possibility of causing really serious bodily harm. That is because the relevant act was accompanied by sufficient foresight of harm to constitute malice.

[11] When recklessness is a specific element of the offence, that element is not established merely by showing that the accused had sufficient foresight of adverse consequences to make his or her act malicious. The nature of the foresight required must depend upon the act or circumstance which the section specifies as the subject of the recklessness. Hence, if the offence is one of murder, then the accused must be shown to have adverted to the probability of causing death (or grievous bodily harm in jurisdictions where the common law definition of murder applies): R v Crabbe (1985) 156 CLR

464. Similarly, if the allegation is one of sexual intercourse without consent, then the accused must be shown to have adverted to the possibility that the alleged complainant had not consented to the relevant sexual act. Accordingly, I have previously held that if the offence is one of recklessly causing grievous bodily harm then the accused must be shown to have adverted to the possibility of causing harm sufficiently serious to properly fall within that description. As I said in Vann v Palmer (unreported, [2001] ACTSC 12, Crispin J, 22 February 2001) a person cannot be found to have been reckless as to one thing by proof that he or she adverted to the risk of another. I adhere to that view.

[12] In my opinion a person cannot be convicted of recklessly causing grievous bodily harm unless he or she adverted to the risk that really serious injury might be caused by their act. That does not means that the accused must have adverted to the possibility that his or her act may cause the precise injuries suffered by the alleged complainant, or even injuries of comparable gravity, but the requirement will not be met by evidence establishing that the accused foresaw a risk of some injury falling short of grievous bodily harm.

[13] The alternative charge of assault occasioning actual bodily harm requires proof of only two elements: that the accused assaulted the victim and that the assault occasioned to her actual bodily harm.

[14] An assault is a hostile act which causes another person to have an apprehension of the immediate application of unlawful force or violence. A battery, which is what is alleged in the present case, is an assault which involves the actual application of unlawful force or violence.

[15] The term "actual bodily harm" means no more than some bodily injury, which need be neither permanent nor serious. A small bruise, abrasion, scratch or even causing a "hysterical and nervous condition" is sufficient. See R v Miller [1954] 2 QB 282; R v Chan-Fook (1994) 99 Cr App R 147.

[16] In her opening address, the learned Crown prosecutor made it clear that the charge pleaded in the second count on the indictment was an alternative to the charge pleaded in the first, and was based upon the same injuries.

[17] The Crown alleges, in essence, that on 27 July 1999 the accused violently shook Charlie Paige Billerwell, who was then a three week old baby, and that he may have thereafter thrown her onto a soft surface. It alleged that, as a consequence, she suffered what were described as "acceleration/deceleration" brain injuries.

[18] It was not suggested that anyone saw the accused commit the acts alleged, and he has always denied intentionally harming the child. The Crown case against him is based entirely on circumstantial evidence.

[19] To prove guilt by circumstantial evidence the Crown must prove beyond reasonable doubt that there can be no rational explanation for the relevant circumstances other than the guilt of the accused. Such a conclusion obviously requires the Crown to exclude any reasonable hypothesis consistent with the innocence of the accused that might explain what happened. An inference of guilt or some intermediate factual conclusion may be drawn from a chain of reasoning in which case each link in the chain must obviously be proven beyond reasonable doubt if the ultimate conclusion is to be established to that standard. There may also be cases in which such inferences may be drawn from the combined weight of circumstances and the strength of the case is analogous not to a chain but a woven cable or bundle of sticks. See Chamberlain v R (No 2) (1984) 153 CLR 521 and Shepherd v R (1990) 170 CLR 573.

The incident

[20] In the present case many of the relevant facts and circumstances were not in dispute and a statement of agreed facts was tendered in evidence pursuant to s191 of the Evidence Act. That document includes the following statements:

Charlie Paige Billerwell (Charlie) was born on 7 July 1999 at Calvary Hospital, Canberra.

Her mother is Kellie-Lee Billerwell and her biological father is Lee Steele. Charlie is Kellie-Lee Billerwell's third child.

Kellie-Lee Billerwell's pregnancy with Charlie was unremarkable until she was admitted to hospital on 10 June 1999 at about 33 weeks amenorrhoea with false labour. She was discharged after having had contractions for approximately 10 hours.

Kellie-Lee Billerwell presented to Calvary Hospital on 6 July 1999 with ruptured membranes. She was about 37.5 weeks amenorrhoea.

The labour lasted 8 hours and the membranes had been ruptured for 21 hours. A quick delivery did occur, with the second stage only lasting 3 minutes.

The apgar scores for both one minute and five minutes were 9.

3 minutes after her delivery Charlie turned slightly blue and oxygen was administered. She responded immediately and returned to her normal pink.

Charlie did have some facial contusion, which appeared as a swelling with a slight blueish tinge. As a consequence she was placed in a humidicrib in the special care unit but no problems eventuated.

Charlie was discharged from Calvary Hospital on 9 July 2001 [sic-1999] with her mother.

. . .

Charlie Billerwell was admitted to Calvary Hospital at 11.10 am on Tuesday 27 July 1999. She was asleep when left in the care of the accused at approximately 8.50 am on 27 July 1999.

Kellie-Lee Billerwell took Charlie to visit with her proposed family based child care worker, Thirisa McDougall, at approximately 10.30 am on 26 July 1999. Thirisa McDougall, who had been a child care worker for 17 and a half years, noted that Charlie was attentive and lively. She thought that the baby appeared to be behaving in a normal manner.

On Monday 26 July 1999 at about 12.30 pm Kellie-Lee Billerwell took Charlie to visit a former work colleague, Suzanne Harrington. Suzanne Harrington nursed Charlie and noted that she had "a bloodshot eye" but seemed content.

Charlie was more unsettled than usual in the afternoon and evening with a lot of crying, particularly after her bath.

Kellie-Lee Billerwell's friend, Karen O'Brien, visited the family premises at 121 Sommerville Crescent Florey on the evening of 26 July arriving at 6.30 pm. She did not observe any injuries on Charlie.

She woke about three times in the night but did not sleep from about 1.30 until 6.30 which was unusual. At the 6.30 feed she vomited a small amount.

At approximately 8.50 am on 27 July 1999 Kellie-Lee Billerwell left Charlie with the accused to drive her daughters to school. She returned home after dropping the two girls at school, collected some paperwork and drove to Woden to attend an appointment with her accountant leaving Charlie again in the accused's care.

Marguerite Stewart, an accountant with the Income Tax Professionals recalls that Kellie-Lee Billerwell attended for an appointment at approximately 9.30 am on 27 July 1999 and left between 10.10 am and 10.15 am.

She returned about 10.30 am and found Julie Nelson and the accused with Charlie and observed that Charlie was floppy and pale.

[21] It is clear that the accused had rung Ms Julie Nelson, Ms Billerwell's aunt, at about 10 am. He told her that something was wrong with Charlie and that she looked as if she were dead. He explained that he had just got out of the shower with Charlie and that she was not breathing. Ms Nelson asked him why Charlie had been in the shower with him

and he said that she had been crying and he hadn't wanted to leave her alone. He explained that one of the community nurses had said that it would be alright for him to do so. The fact that a nurse had given him such advice was subsequently confirmed by evidence from Ms Billerwell.

[22] Ms Nelson asked him if he was sure that Charlie had not swallowed any water and, despite his tentative assurance to the contrary, suggested that he "put her on his knee and slope her downhill a little to drain her, and try and tap her ... for a little while to see if that would shift any ... obstructive secretions or water that she may have inhaled." The conversation lasted for about twenty minutes. Ms Nelson was obviously unable to recall everything that was said but did recall that the accused sounded concerned. The sequence of events is not entirely clear. It appears that she heard him tapping Charlie at least from time to time throughout the conversation. At some stage she heard the baby make "a little whimpering sound" and the accused told her that Charlie was not breathing properly. The accused also told Ms Nelson that he had to keep patting her or she did not move.

[23] The accused ultimately told Ms Nelson that Charlie didn't seem to be improving and she went to his home. She arrived about 10.30 am, just before Ms Billerwell returned home, and found the accused standing at the end of the driveway holding Charlie in his arms. She said that Charlie was warmly dressed and that he had been holding her with great tenderness. He said "I think she's better". Ms Nelson, who is a nurse, examined Charlie with a stethoscope and told the accused to take her to hospital.

[24] The statement of agreed facts also included the following statements:

Charlie was taken to Calvary Hospital by the accused and Kellie-Lee Billerwell, arriving at approximately 11.00 am on 27 July 1999.

They approached Monica Robinson who was rostered on the triage desk in the Emergency Ward. The accused told Monica Robinson that the baby had stopped breathing properly.

Mary Beveridge, who was also on duty at Calvary Hospital Accident and Emergency Department overheard the conversation with Monica Robinson at the Triage Desk attended to Charlie. She directed Kellie-Lee Billerwell to place Charlie in the Infant Warmer Crib.

Dr Margaret Keaney is a qualified medical practitioner and as at 27 July 1999 had worked in the Australian Capital Territory for 25 years. At that time she had been a medical practitioner for 37 years and was employed as the Director of Emergency at Calvary Hospital.

Dr Margaret Keaney examined Charlie on her admission and found her pale and having breathing difficulties including very shallow breathing. Dr Keaney said that her heart rate was slow at 100 beats per minute and her body temperature was 33 degrees celcius [sic].

The baby experienced life threatening episodes during the examination and treatment by Dr Margaret Keaney.

Calvary Hospital staff conducted several tests including x-rays and the removal of blood for testing.

Mary Beveridge noticed that the baby had a darkened area on each buttock that she at first believed to be Mongolian spots. The marks were oval in shape and diffuse in nature across the buttocks.

Marie Cummins, a pastoral care worker at Calvary Hospital, comforted Kellie-Lee Billerwell and the accused. She noted that Kellie-Lee Billerwell was upset however the accused was "very distraught, he was crying and shaking. I would say he was in a state of shock".

Once Charlie's condition stabilised she was transported to Canberra Hospital in a humidicrib. Her temperature was 34 degrees celcuis [sic] and her heartrate had improved.

Dr James Keaney accompanied Charlie to Canberra Hospital. Dr James Keaney had at the time been a qualified medical practitioner for 35 years having performed duties mainly in the intensive care field including the area of paediatrics.

[25] Following Charlie's admission to Canberra Hospital she suffered severe and intractable seizures over a period of several hours but fortunately she survived.

The injuries

[26] A CT scan was carried out on 28 July 1999 and this was followed by an MRI scan two days later. She was found to have sustained a sub-dural haemorrhage and damage to the parenchyma or tissue of the brain. She was also examined by two ophthalmologists and found to have suffered bilateral retinal haemorrhages.

[27] Regrettably, some of the injuries are permanent. Dr Jones, a paediatric neurosurgeon, referred to an area of damage adjacent to the anterior aspect of the left temporal lobe and a smaller area at the right vertex as two obvious areas "in which there is frank tissue loss and there is a gaping hole, as it were, in the fabric of the brain". He said that damage to the right temporal lobe was also evident from the absence of grey/white differentiation in the scans, and that "there may be three areas of atrophy". There were other areas of damage as well. Dr Steinberg, a paediatric radiologist who had reviewed the CT and MRI scans taken on 28 and 30 July 1999 respectively, said that there had been a "constellation" of injuries. Like Dr Jones, he referred to an area of damage in the left temporal lobe in which he said the normal brain tissue had been substantially replaced by fluid and cysts. That damage was permanent and there were a number of other areas of permanent damage. Both agreed that the damage was "patchy".

[28] Despite earlier fears that the injuries may have caused blindness, it appears that Charlie's sight is now normal, and she has met all of the normal 'milestones' by which the intellectual development of such a young child may be judged. However, Dr Jones described the injuries as "very severe" and the statement of agreed facts includes the following:

A report prepared relating to an MRI examination of 2/5/01 by Dr Kevin Osborn states that the MRI "demonstrates an area of tissue loss within the anterior aspect of the left temporal lobe, corresponding in location to oedema present previously. Similarly, an area of abnormality is present at the right vertex together with a smaller area of tissue loss."

A report prepared by Dr Jyoti on 2/5/01 states that" areas of altered signal intensity are seen in the apex of the right parietal lobe and the right occipital lobe. There is a similar area in the left temporal lobe. The findings are consistent with multiple foci of gliosis/cavitation."

As a result of these episodes Charlie Billerwell has long-term gliosis/cavitation of the brain in the areas identified by Dr Osborn and Dr Jyoti.

Charlie was reviewed by Dr Crawford on 31 October 2001 when she was aged 2 years and 3 months. At this stage she is not exhibiting developmental problems but it is too early to say whether she might experience learning problems as she moves into the school years.

Her ophthalmology review by Dr David Tridgell on 18 June 2001 was quite satisfactory and he noted normal refraction and normal appearances of both retinas. He has suggested review at age five.

[29] Notwithstanding the promising signs on her most recent clinical assessments, I have no doubt that the brain damage discerned on the CT and MRI scans was sufficiently serious to constitute grievous bodily harm. Mr Collaery, who appeared for the accused, did not contend to the contrary.

The Crown case as to causation of the injuries

[30] The Crown produced extensive medical evidence in support of the contention that these injuries had been caused by a deliberate act or acts of shaking. Mr Collaery objected to much of this evidence on the ground that the opinions in

question were not based upon any established body of specialised knowledge or, alternatively, were not based upon matters falling within the expertise of the relevant witnesses. The Crown objected to some opinion evidence elicited in cross-examination on similar grounds. The issues raised by these objections are referred to later in these reasons for judgment. Subject to those objections, I have taken into account the whole of the evidence adduced by the Crown but for present purposes it may be sufficient for me to make limited references to the more significant statements of opinion.

[31] Dr Packer expressed the opinion that Charlie had sustained an "inflicted" brain injury involving sub-dural haemorrhage, damage to the parenchyma or substance of the brain and marked bilateral retinal haemorrhages.

[32] Dr Morris, who had treated Charlie upon her admission, said that in view of the intractable seizures, the limited information he had concerning the results of the CT scan, the buttock bruising and the fall in the haemoglobin level between admission and the following day, he had formed a provisional conclusion that the seizures had been due to brain haemorrhage caused by trauma. He said that he was also suspicious about retinal haemorrhages and "thought that the trauma could have been due to shaking of the baby".

[33] Dr Ryan said that the results of the CT scan were the "classic findings in a child with inflicted head trauma" caused by violent shaking or possibly a severe blow to the side of the head. He said that in circumstances of a blow to the head one commonly finds bruising to the side of the face. The scans had "the features of an acute sub-dural haematoma between the two hemispheres of the brain and damage to the brain substance itself in several areas, which may have criteria [sic] in what is seen in an infant who has been violently shaken". He ventured the opinion that Charlie had been "held tightly around the chest and ... vigorously shaken backwards and forwards for a significant period of time".

[34] Dr Jones said that the sub-dural bleeding could have been caused by a violent movement of the brain against and away from the falx. He said that such a movement could have been caused by an impact injury or shaking impact injury, and that that, and other injuries to the brain, indicated severe trauma. In the absence of any history of a severe automobile accident he believed that it had been a non-accidental injury and suggested that impact injury, severe repetitive shaking or a combination of both was in his opinion "the likely scenario". He said that retinal haemorrhages were "overwhelmingly" found in non-accidental injuries in comparison with motor vehicle accidents. He conceded that there were other possible explanations for some of the injuries to Charlie's brain, but did not think that there were other alternatives to trauma as a cause of this "constellation of symptoms and signs".

[35] Dr Donald said that the only mechanism that he would consider as a possible explanation for the injuries in Charlie's brain was an acceleration/deceleration injury. When asked what might have caused such an injury he said "there's nothing in the history that explains it, therefore I would presume that it was some assault, most likely shaking, but I've got nothing - no history of that; that's speculation on my part. But that is what, without an explanation, would otherwise account for it; it would be most likely to produce these changes in a baby of her age".

[36] Dr Dickson, an ophthalmologist, referred to an article by Professor Levan in which the opinion was apparently expressed that haemorrhages that are seen in shaken babies are not the result of mild trauma. He said that he had thought about what Professor Levan would have made of the retinal haemorrhages and said that his feeling was that he would have looked at the baby's eyes and concluded that he was very suspicious that the child was shaken, but would not have concluded from the retinal haemorrhages alone that he could have affirmatively stated that it was a case of shaken baby syndrome. However, he thought that if the Professor had been informed that the child also had sub-dural haemorrhages the Professor would have had no doubt in his mind that the child had been shaken, and that the only question to be answered was who had done so.

[37] Dr Steinberg, an expert paediatric radiologist who had reviewed the CT and MRI scans gave evidence that the primary brain injury was the direct result of an initial traumatic force which included damage to the blood vessels and shearing injuries to the white matter fibres of the brain. He said that shearing injuries were most commonly seen in rapid acceleration/deceleration injuries. He explained that the images available on CT and MRI scans can give a very

accurate idea of how a radiologist believed the injury had been caused. He said the injury could have been caused by vigorous motion of the head to and fro suddenly coming to a stop against either a hard or soft object, but that the clinical history was also very important. When asked about the significance of there being no external injury he said that that was "classical of the shaken baby or shearing type of injury" and that what often happens is that "the head is vigorously shaken from side to side and then thrust against a soft object ... and comes abruptly to a stop". He said that in his opinion, and those of his senior colleagues, it was "not the sort of injury that would occur from patting, hugging or that form of interaction with a baby or child".

[38] There was other evidence to like effect.

Issues relating to the expert evidence

[39] During the course of the trial there was considerable debate as to whether the expression of various opinions fell within the expertise of the relevant witnesses. As I have mentioned, these objections were noted but not resolved because any attempt to have done so would have generated lengthy arguments, and it was desirable to limit the amount of time which each of the medical experts was obliged to spend in court to avoid undue inconvenience to them and adverse consequences for their patients.

[40] The relevant principles may be briefly stated. S79 of the Evidence Act provides that if "a person has specialised knowledge based on the person's training, study or experience, the opinion rule (which generally excludes evidence of opinion) does not apply to evidence of an opinion that is wholly or substantially based on that knowledge." In HG v R (1999) 197 CLR 414 the High Court of Australia stressed that the opinions of expert witnesses must be confined, in accordance with the requirements of this section, to opinions substantially based on their specialised knowledge.

[41] For present purposes it is unnecessary to resolve all of those objections. Indeed, some of the evidence elicited in the cross-examination of Dr Packer and admitted subject to objection by the Crown was not pressed by Mr Collaery in his submissions, and it is common ground that it must be excluded. Furthermore, in most cases the objections related to all of the evidence of a particular nature and it is unnecessary to go through the transcript and deal with them on a sentence by sentence basis.

[42] Some objections are readily resolved. It is difficult to envisage any circumstances in which a medical expert would be entitled to express an opinion that the injuries must have been inflicted deliberately because divining the state of mind of an unknown person would not fall within his or her field of specialised knowledge. In the present case such assertions seemed to have been based largely upon supposition and reflected some measure of unrecognised inconsistency. For example, injuries said to have been non-accidental were said to have been similar to those sustained in motor vehicle accidents and Dr Sternberg also said that they were of the kind that one would expect to see if children were knocked from bicycles or otherwise struck by cars. The evidence before me did not suggest that there was any way in which acceleration/deceleration injuries caused by an intentional infliction of force could be differentiated from acceleration/deceleration injuries caused by the accidental application of force.

[43] For the same reason, expressions of opinion as to what such a person must have intended, realised or understood would also be inadmissible.

[44] Of course there may be circumstances in which a psychiatrist who has interviewed a particular person might be able to express an expert opinion as to that person's level of understanding, whether he or she would have been likely to have had sufficient cognitive ability to understand certain matters or even perhaps, to deduce certain matters from circumstances proven in evidence. It is unnecessary for me to offer any opinion as to the likely boundaries of such evidence because issues of that kind do not arise in the present case.

[45] Particular difficulties may arise when an expert has ventured an opinion which is partially dependant upon views derived from his or her field of expertise, and partially dependent upon other matters. Such a situation may require the resolution of difficult questions of fact on a voir dire to determine whether the opinion is really based substantially on

his or her specialised knowledge. In the present case issues were raised as to whether certain witnesses were expert in the resolution of issues as to whether or not injuries had been caused to babies and/or young children by shaking. Such claims of expertise seem to have assumed some credibility within the medical profession, and at least one witness said that he would defer to baby shaking experts on some matters. However, that does not absolve the Court of the need to critically examine the relevant issues.

[46] The evidence revealed a paucity of empirical research on potentially critical issues.

[47] Several of the medical experts referred to a paper apparently written in 1990 based upon interviews with people who had admittedly shaken babies. It was suggested that this study provided a basis by which the type of injuries caused by such actions could be determined. Some witnesses referred to the "classic" pattern of injuries sustained in that manner and sought to draw, or at least support, conclusions as to the degree of force required to cause them from the descriptions given by the admitted perpetrators.

[48] Despite the reliance on this paper by several well qualified medical experts I have substantial reservations as to what, if any, conclusions could safely be drawn from it in a criminal trial. One can understand medical practitioners relying upon studies of that kind because, as Dr Packer pointed out, "it is the best range of indications we can get". Medical practitioners are called upon to treat patients in potentially life threatening situations, and if the information available to them is not wholly reliable they must nonetheless do the best they can in the circumstances. The exigencies of the moment may sometimes make it impracticable to wait for further confirmation even if there is some potential means of obtaining it. However, that approach cannot be transplanted into a criminal trial. The fact that it may be difficult to ascertain the truth does not relieve the Crown of the need to prove the defendant's guilt beyond reasonable doubt, nor does it permit the Court to act upon some lesser standard determined by reference to the quality of evidence available.

[49] It was submitted that since the participants of the study had already been convicted of causing injury to babies, they had no reason to lie. That is obviously a valid consideration but it does not, of itself, warrant a conclusion that the information conveyed would have been entirely accurate. The participants would have been attempting to recount how they acted months or years earlier, at a time of acute stress and anger, and their memories of the incidents may have been influenced by a range of emotional responses to their behaviour. Dr Jones, who was generally an impressive expert witness and was obviously familiar with the survey, conceded that the results were not "completely reliable". The common threads drawn from it may offer guidance to those seeking to investigate possible causes of brain injuries in babies, but it is difficult to accept that the anecdotes of an unknown group of people who admittedly injured young children by shaking them provides a wholly satisfactory basis for conclusions upon which the Crown relies to establish the guilt of the accused.

[50] Any assessment of the extent to which the survey might have provided a basis for expert opinions was also limited by the paucity of information as to what actually occurred in the compilation of the study, and what information was actually elicited from the participants. I was not told how many people participated, what procedure was employed in questioning them, how recent were the incidents that were recounted, how consistent were the descriptions of what occurred or how many participants claimed to have shaken neonate babies.

[51] In any event, evidence that injuries have been caused in a certain manner could not, of itself, prove that similar injuries cannot be caused by some other mechanism. The survey could, at most, have provided some basis for concluding that the injuries suffered by Charlie could have been caused by shaking. It could have provided no basis for concluding that they could *only* have been caused in that manner, nor for assuming that the accused must have acted in the same manner as the participants in the survey.

[52] I was satisfied that evidence was admissible as to the opinions of each of the relevant experts that the injuries could have been caused by either a blow or by the baby being vigorously shaken. On the other hand, I find that the evidence was not admissible to the effect that the injuries were caused in that manner, whether by the accused or otherwise, or

that they could only have been caused in that manner. The evidence suggests that such opinions would not be based wholly or even substantially on the expert's specialised body of knowledge as a paediatrician but, as in HG v R, on a combination of speculation, inference, and a process of reasoning beyond the relevant field of expertise.

[53] Further issues were raised in relation to the admissibility of expert opinion as to the degree of force that may have been required to cause such an injury. Such an opinion could obviously be expressed if based upon the expertise of the relevant witness. For example, an orthopaedic surgeon could express the opinion that considerable force would be required to fracture the tibia of a normal adult. However there is no law of human nature that decrees that expert witnesses are immune from the temptation to leap to unwarranted conclusions, engage in unsubstantiated speculation or act upon hearsay or rumour. Hence, despite the Crown's submission that the source of an expert's expertise becomes a dead issue under s79, it will sometimes be necessary to explore the basis for the opinion before determining whether it is properly admissible.

[54] A number of witnesses attempted to address the issue of how much force would have been required to cause the constellation of injuries that Charlie sustained. Dr Packer said that "very considerable" force would have been involved, and rejected the suggestion that the force would have been within the capability of an eight year old child or even perhaps a Rottweiler. Dr Ryan said that the type of force was similar to the type of forces that would be generated in a high speed motor vehicle accident and later added "particularly where a child would be unrestrained and thrown around in the car, or thrown out of the car as a result of the accident".

[55] Dr Dickson also thought that severe force would have been required but prefaced his expression of opinion with the statement that he was not fully qualified to answer the question and had not researched the area. I formed the impression that this evidence was outside the area of his expertise and therefore inadmissible.

[56] When asked what force could cause the disruption of the grey and white matter of the brain Dr Jones replied:

Injuries to cause this amount of disruption as I say have to be severe. To quantitate it is difficult, one however can give examples of the type of automobile accidents that will give rise to retinal haemorrhages and this type of damage to the brain. And this is of the order of an impact of eighty to ninety kph, fifty mph, to a girl strapped into the back seat of a car the door of which was impacted. And she was - she presented with retinal haemorrhages, a severe head injury, and died. This is the - as it were, the magnitude of injury. The type of injury can be - is debated. Can be an impact injury such as would happen in an automobile accident, it can be - it's postulated that it can be due to a shaking injury as well because we do not have - the problem is we do not have good experimental animals to use, and one cannot use children to demonstrate the type of injury that occurs.

[57] Dr Jones conceded that the evidence that it requires hard shaking to produce the injuries was imperfect. He adhered to the view that it required a severe injury and said that this view was based upon the clinical experience of having seen a lot of children who had been dropped and had sustained only relatively minor head injury.

[58] Dr Steinberg said that "shearing injuries were most commonly seen in rapid acceleration/deceleration injuries" and cited examples of "children being thrown through the windscreen of a car, ... being knocked over in the street on a bicycle or skateboard . . .or being dragged behind a car". He also said that it was seen in babies who had suffered shaking injuries and that it was "not the sort of injury that would occur by vigorous cuddling or patting".

[59] Dr Donald recounted having asked two men, who admitted to shaking babies, whether they were able to rate the degree of force they had employed on a scale from zero to ten with ten being the most vigorous shaking of which the person was capable if his life had depended upon it. He said that one had rated the degree of force employed at seven and the other at eight. There is no suggestion that this was part of a controlled survey or that it clothed Dr Donald with any particular expertise. Furthermore, the mere fact that the men in question may have used a considerable amount of force on children of unspecified ages did not prove that a comparable amount of force was required to cause similar injuries in a neonate baby. The evidence was, in my opinion, inadmissible as hearsay but, even if admissible, added

little weight to the Crown case.

[60] The validity of these opinions was the subject of considerable debate.

[61] Dr Jones conceded that there was very little experimental evidence of the force required to cause injuries of this kind. One investigation that had been undertaken was based upon experiments performed in 1962 whereby adult monkeys were put into what was described as an "accelerometer", held in an upright position and accelerated into a wall. The data so obtained was examined in order to gain some idea of the forces involved. Extrapolations from those experiments to models had produced theories as to the amount of force required to cause injuries in human infants. The degree of force so "theorised" was such that most people would find "unbelievable".

[62] Dr Jones said, with some understatement, that the evidence for this was "imperfect". The results were disputed because they were "just an approximation" and it was very hard to translate the results of experiments on a small monkey's brain to a large infant's brain. He accepted that there were other significant differences. In particular, a monkey had good neck muscle tone. He agreed that there had been criticism that the studies with monkeys may have resulted in a conception of the need for very powerful forces that may not be realistic when applied to a neonate baby's neck, which has almost no muscle tone whatever to deal with rotational forces. When Mr Collaery put to Dr Jones suggestions that very little force was required to "rip a neonates neck around" and thus damage its brain, he replied that this was a matter for argument. He added "It is postulated, I think reasonably, that (a) the force is quite significant and (b) it is repeated. But the exact degree of force and the exact number of repetitions is not worked out".

[63] Whilst I would have hoped that some good would have come of these brutal experiments, I am not satisfied that they offered any reliable guide to the degree of force that would have been required to cause Charlie's injuries. There are obviously profound differences between the physiology of an adult monkey and a neonate human infant and, equally obviously, profound differences between the geometry of forces involved when a monkey being held upright is slammed forcefully into a wall and those involved in attempting to resuscitate an infant by striking her on the buttocks as she lies on a man's knees and is angled downwards.

[64] Dr Donald said that there had been a "fluid percussion study" on the brains of cats which involved removing part of the cranium, direct percussion to the dura and subsequent post-mortem examination to determine the presence of axonal injury. However, no attempt was made to explain the extent, if any, to which this research may have supported the opinions expressed. It was not suggested that there was any direct percussion to Charlie's brain. The correlation, if any, between the force employed in causing injury in that manner, and the force necessary to cause brain injuries by an acceleration/deceleration mechanism was not explained. Nor was there any attempt to explain the potential significance of the obvious difference in physiology between cats and neonate human infants.

[65] Dr Donald also mentioned that some research had been carried out on pigs but the nature of that research was not explained and it was not contended that it provided any significant support for the opinions upon which the Crown relied in the present case.

[66] Despite these difficulties it is clear that at least some of the expert witnesses who gave evidence in the Crown case placed significant weight on these studies. Most notably, Dr Ryan said that the degree of force necessary to generate the injuries seen in Charlie would have been comparable to that generated in a high speed motor vehicle accident. He asserted that Charlie would have been held tightly around the chest and vigorously shaken backwards and forwards for a significant period of time and proceeded to demonstrate this mechanism with a doll handed to him for the purpose. He added that the baby had been thrown back into its cot and that that had also produced severe deceleration injuries. When asked how he was able to say that that was the type of force that was required, he said, "it's the result of people who have been convicted of shaking their baby and who have described ... how they have shaken the child". He then confirmed that his opinions had been formed "purely on that basis".

[67] Whilst I am sure that he believed that Charlie was injured in this manner, the survey plainly provided no basis for

assuming that the injuries suffered by Charlie would have required the application of a similar mechanism and/or level of force to that which had been used by the participants of the survey when they injured children. It obviously cannot be assumed that people acting in an angry and violent manner employ the minimum degree of force required to cause injury.

[68] Indeed, Dr Donald suggested that often the force actually used is "probably four, five, ten times" that necessary to produce the injury suffered, and agreed that there was no empirical research that really established just how much force was required.

[69] The Crown also placed great reliance upon the experience of the medical practitioners concerned. All had extensive experience in their areas of specialist medical practice. However, medical practitioners are normally involved in the diagnosis and treatment of medical conditions and the extent, if any, to which their experience may have provided them with specialised knowledge as to the degree of force necessary to cause injuries of certain kinds was not readily apparent. Paediatricians, neurologists and other specialists involved in the care and treatment of children obviously possess great expertise, but I do not think that it can be simply assumed that their expertise extends to specialised knowledge of this kind. Indeed, it was by no means clear that there was a body of specialised knowledge concerning this issue at all. It would plainly be possible for a medical practitioner to read an account of injuries caused by people who admitted shaking their babies and to assume that any subsequent cases of similar injuries which he or she encountered during the course of his or her medical career had been similarly caused. In such circumstances a medical practitioner might later be able to assert that he or she had never seen a case in which injuries of that nature had been caused in any other manner,. However, the conclusion would have been based upon circulatory reasoning and the accretion of experience would not have lent validity to it. I do not, of course, suggest that the evidence of the medical witnesses in this case should be presumed to be based upon such a simplistic exercise in circular logic. On the contrary, I think that in adverting to their experience the witnesses were indicating that they were drawing upon their overall experience in diagnosing and treating injuries and other medical conditions.

[70] Nonetheless, it is difficult to see how such experience would provide a substantial basis for evaluating the degree of force required to cause injuries of this kind. It was not suggested that the need for great force would be deduced from the robust nature of the anatomy, as might be the case with a fractured bone. In the context of the delicate physiology of a neonate infant that seems most unlikely. Nor was it suggested that any of the medical witnesses had actually seen the injuries of the relevant kind inflicted in the manner suggested. Indeed, none of the witnesses sought to support their opinions by reference to their experience save in relation to cases in which someone had told them what had occurred. Whilst such anecdotes might, perhaps, provide some corroboration of information derived from the earlier survey, they would raise similar issues as to the reliability of the accounts.

[71] Furthermore, it is difficult to see how it could have assisted them to form any sound, professional opinion that a lesser degree of force would not have caused similar injuries. Obviously, none reported having had the opportunity to interview parents whose children were uninjured but who had called into a hospital to inform a paediatrician that they had been able to strike or shake their children with a moderate degree of force without causing serious harm. It is also true that none referred to cases in which people claimed to have administered only mild to moderate force to a child suffering serious brain injuries. However, it seems overwhelmingly likely that any such claims would have been treated with considerable scepticism.

[72] Comparisons with motor vehicle accidents also seem unlikely to provide little reliable indication as to the degree of force that may have been required to cause Charlie's injuries. Medical practitioners treating children injured in such accidents are likely to derive their information from limited and one-sided versions of the relevant events. Whilst some drivers might have a good idea of how fast they were travelling before becoming aware of an imminent danger of a collision, I suspect that few would know precisely how fast they were travelling at the point of impact and that even fewer would be able to accurately assess the speed of any other vehicle involved in the accident at that point. Furthermore, the nature and extent of the force actually applied to the body of an occupant of a car is dependent not only upon the speed but the precise geometry of the forces generated by the nature of the accident. Hence, people may

be killed in an accident at a suburban intersection whilst travelling at a relatively low speed whereas a racing car driver may emerge unscathed from a very high speed accident. I have no doubt that children suffer brain damage as a result of being thrown around inside a car, thrown out onto the roadway or knocked down whilst a pedestrian or cyclist, but it is difficult to see how descriptions of such incidents, even if accurate, could have equip a medical practitioner to determine the minimum degree of force that would have been required to cause Charlie's injuries.

[73] Similar problems arise in relation to the assertion that shaking must have gone on for some period of time. Dr Ryan asserted Charlie must have been "vigorously shaken backwards and forwards for a significant period of time". Dr Packer suggested that "three shakes per second for one to three minutes is probably enough to cause this damage", whilst Dr Jones said that it had been postulated that the force would need to be quite significant and repeated, but that the exact degree of force and number of repetitions had not been worked out.

[74] Many of the opinions were expressed in relation to children or babies in general. None of the witnesses were able to point to an established body of specialised knowledge as to how much force is required to cause injuries in the brain of a neonate baby or identified any adequate basis by which that level of force could be assessed.

[75] Charlie was only twenty days old when admitted to hospital. The cranial and inter-cranial physiology of neonate babies is still in a state of formation at that age. At the time she sustained these injuries Charlie's fontanelle would not have been fully formed, and her brain would not have been fully myelonated. Myelonation is the process by which of the fatty tissue that provides insulation around the nerve fibre course of the brain develops. In a neonate infant the fluid around the brain is much more watery than in an adult. In addition, the fluid spaces inside and around the brain are much greater, and there is a greater propensity for the brain to move within the cranium as a consequence of head motion. Furthermore, because the insulating fibres are not as well formed in an unmyelonated neonatal brain, the potential for injury is further increased. Myelonation is usually completed at about two years of age and, as Dr Steinberg confirmed, the risk of injury prior to that time is very different to that which exists in relation to an older child. The process of myelonation apparently occurs progressively throughout that period, and the level of vulnerability to injury presumably varies if not in direct proportion to the extent of the myelonation then at least in a manner which is related to that process.

[76] Furthermore, it appears there are various physical conditions, some permanent and some transient, that can increase a child's susceptibility to injury. Dr Donald said that the most important one was probably the difference between the inner surface of the skull and the surface of the brain, which was sometimes widened, and that this would put veins under slightly higher pressure. In that circumstance the force required to cause injury may be significantly less. Dr Donald mentioned other conditions such as a disturbance to the baby's clotting mechanism, and said that he was sure that other causes of susceptibility would be identified in time.

[77] In this context it would seem unlikely that the degree of force necessary to cause brain injuries would vary not only according to the nature, extent and location of the injuries but the age and individual physiology of the child.

[78] Some of the opinions seemed to have been based upon, or at least influenced by, dubious extrapolations from experiments from other species, accounts of how other people had shaken other children of indeterminate ages on other occasions, and second or third hand accounts of car accidents. Whilst I understand that evidence of this nature may have been all that had been available, I cannot be satisfied that upon the degree of force required to cause injuries to the brain of a two day old baby could have been assessed with any degree of precision.

[79] Having carefully considered the evidence, I am satisfied that each of the relevant witnesses possess the necessary expertise to express the opinion that the injuries discerned on the CT scan and the MRI scan could have been caused by rapid acceleration and deceleration of the baby's head. Furthermore, despite my misgivings as to the reliability of conclusions drawn from a survey conducted, apparently, in 1990 of an unspecified number of people who admitted shaking children of unspecified ages, I am also inclined to accept that each was qualified to express an opinion that the injuries discerned on the scan could have been caused by the baby being shaken.

[80] I accept Dr Steinberg's evidence that one would not expect to see injuries of this nature as a result of even vigorous cuddling or patting.

[81] I exclude that portion of the evidence involving assertions that the injuries were non-accidental and/or evidence suggesting that anyone whose actions caused them must have realised the risk of injury.

[82] I am satisfied that a basic understanding of the physiology of small children, including neonate babies, together with experience that dealing with newborn babies in a normal caring manner does not produce brain damage would have provided a sufficient basis for the relevant medical experts in this case to have expressed the view that reasonably substantial force would have been required to have caused some or all of the injuries in question. However I do not accept that there is any adequate body of expertise extending to the degree of force required to cause particular injury or injuries beyond that basic proposition, and I reject the evidence suggesting that a greater degree of force would be required.

[83] If I had ruled that any of the evidence I have disallowed was admissible I would nonetheless have excluded it in reliance upon s135 and s137 of the Evidence Act because in my view any probative value that it may have had would have been substantially outweighed by the danger that it might have been unfairly prejudicial to the accused, misleading or confusing, or caused or resulted in an undue waste of time.

[84] I would certainly have excluded comparisons with the degree of force involved in motor vehicle accidents at stated speeds. Whilst I understand the suggestion that the forces applied to a baby's brain in a shaking incident may be similar to those applied to the brain of a baby who was a passenger in such an accident, such examples are melodramatic and seem more likely to confuse than enlighten. As I have mentioned, the degree of force in fact applied to any part of the body and any occupant of such a vehicle will necessarily depend upon the geometry of the forces generated by the collision which may vary so greatly that any comparison of this kind is meaningless.

Alternative hypotheses as to causation

[85] Mr Collaery submitted rather that the evidence did not prove beyond reasonable doubt that Charlie's injuries had been caused by violence rather than illness or some spontaneously occurring cerebral event. He pointed out that the child had been unsettled during the day before this incident, that she had uncharacteristically cried during her bath and that she had not accepted her normal feed. There was no reason to doubt the account that the accused had given Ms Nelson of Charlie becoming limp and stopping breathing whilst in the shower, and there were a number of conditions that might have caused her to do so. She may have lost consciousness as a result of inter-cranial bleeding due to antecedent condition such as an aterio venous malformation or birth trauma, or as a result of some further event in the shower, such as a laryngeal spasm or hypothermia. Whatever the cause, the accused had then been presented with a medical emergency. He had acted responsibly by contacting Ms Nelson and seeking her advice. The nature of his conversation with her revealed that he had been extremely concerned about the baby's welfare and anxious to know how to revive her. Ms Nelson's evidence of hearing the sounds of him "tapping" the baby and the terms of the conversation make it clear that he had attempted to resuscitate the baby, and the bruising later found on her buttocks strongly suggests that he used considerable force in doing so. It is possible that a young man in the grip of panic inadvertently caused injury in this manner. Either rapid re-warming after hypothermia or the prolonged series of seizures she suffered in hospital could also have caused injury.

[86] Mr Collaery also argued that there was no reason to suppose that all of the injuries were directly attributable to the one cause. There may have been an accumulation of injuries from two or more sources.

[87] As previously mentioned, it is incumbent upon the Crown to prove beyond reasonable doubt that there is no hypothesis consistent with the innocence of the accused that could account for the injuries which Charlie Billerwell suffered. Indeed, in Donyadideh v R (unreported, Wilcox, Ryan and Higgins JJ, 23 August 1995), the Full Court of the Federal Court of Australia held that the "possibility" that the appellant had been in a state of automatism at the time of

the alleged offence had been inconsistent with proof beyond reasonable doubt that he had intended to perform the relevant acts

[88] Accordingly, it is necessary to consider each of the hypotheses to which Mr Collaery referred.

The possibility of an arterio venous malformation

[89] Mr Colleary relied upon a history of serious illness and untimely death in the family of Charlie's biological father, and suggested that the Charlie may have suffered from an hereditary form of arterio venous malformation ("AVM") known as haemorrhagic telangiectasia which either caused inter-cranial bleeding, or at least made the relevant blood vessels more vulnerable to injury than those of a normal infant.

[90] The statement of agreed facts also included the following information:

Charlie Paige Billerwell is the third daughter of Kellie-Lee Billerwell. The two other children are Jamie-Lee Billerwell who was born on 13 December 1991 and Kayla Billerwell who was born on 11 October 1993. The father of these girls is Taren Savage, with whom Kellie-Lee Billerwell resided for 6 years.

12 months after her separation from Taren Savage, Kellie-Lee Billerwell moved to Queensland with her two daughters and met an old school friend, Lee Steele and commenced a relationship with him. They had an "on again off again" type of relationship over a period of 18 months and in October 1998 they decided to separate. They had sexual intercourse on a number of occasions, including Lee Steele's birthday on 16 October 1998.

Kellie-Lee Billerwell met the accused in October 1998, approximately two weeks after her final separation from Lee Steele.

Kellie-Lee Billerwell states that Lee Steele is the natural father of Charlie.

The accused and Kellie-Lee Billerwell began a serious relationship when it became clear that Lee Steele and Kellie-Lee Billerwell could not reconcile their relationship. The accused commenced a de-facto relationship in March 1999.

Lee Steele, born on 16 October 1974 is the son of Lorraine Sandra Woods. He has a sister, Aleisha Micheal Steele who was born on 27 April 1985.

Dr Henry Berenson treated Lee Steele and his grandmother for many years.

When Lee Steele was 13 years old investigations were carried out to determine a cause of headaches and dizziness that he was suffering from. A skull x-ray indicated a lytic lesion and this was investigated and a diagnosis of a vascular abnormality was made. Lee Steele is now 27 years of age and has received no treatment for this abnormality.

Lee Steele's maternal grandmother has a venous angiolipoma in her cervical spine and a vascular malformation in the right temple.

Aleisha Steele was born at 37 weeks gestation and did have mild respiratory distress at birth. When she was slow to walk, her treating specialist, Dr Anthony Crawford arranged for her to have a CT Scan of her brain and her upper cervical spine when she was 14 months old. Those scans were carried out on 2 June 1986. There were no contrast CT scans and MRI scans performed on Aleisha Steele.

Contrast enhanced CT scans and MRI scans performed on Charlie in July 1999 and May 2001 demonstrate no abnormal vascularity to suggest a vascular malformation.

[91] There was some other evidence of a history of death and illness in the family of Charlie's biological father. An entry in the Canberra Hospital notes records that a relative rang to indicate that two babies had died from abortic valve

problems, the baby's paternal grandfather had died at the age of thirty-five from cardiomyopathy and three babies had been born with "exonphalus". One baby had survived with surgery and the other two had died. Another entry records that Ms Billerwell had said that Charlie's biological father and his grandmother had both had aneurisms and bleeds into the brain as babies. His sister had been born eight weeks prematurely, had suffered " a bleed" and has cerebral palsy. However, apart from a report from Dr Berenson confirming the information in the statement of agreed facts, there was no real medical evidence to confirm the accuracy of this history.

[92] What information is available concerning the biological father's family history is disturbing and I am somewhat concerned at the apparent absence of any adequate medical investigation. Nonetheless, there is no real evidence that Charlie suffers from haemorrhagic telangiectasia and Dr Steinberg and other medical witnesses have given evidence that the MRI scan did not reveal any sign of AVM. There was also evidence that an AVM usually causes localised bleeding at the site of a single rupture and that such a condition could not explain the diffuse injuries to different areas of the brain.

[93] However, the evidence does not enable me to wholly dismiss Mr Colleary's alternative hypothesis that an undiagnosed and perhaps incipient condition of this kind may have made relevant blood vessels more vulnerable to rupture when exposed to force, though there is again no evidence to support such an hypothesis. Mr Collaery suggested that such forces could have been generated by hypothermia, hypoxia due to a laryngeal spasm or a valsalva response, or by the seizures suffered in hospital.

[94] At this stage of the trial a judge must remain open to the possibility that even an apparently compelling Crown case may met by cogent evidence in the defence case, but if the evidence adduced by the Crown on this issue were to be left unanswered I would be satisfied beyond reasonable doubt that at least the bulk of the injuries had not been caused by spontaneous bleeding due to AVM.

The possibility that injuries were sustained in utero

[95] Mr Collaery also argued that some or all of the injuries could be explained by trauma to the baby occasioned during the course of a false labour on 10 June 1999 or associated with her birth on 6 July 1999, which involved a second stage of labour lasting only three minutes. Such a rapid birth plainly involved the application of considerable cranial pressure and a photograph of Charlie taken shortly after her birth reveals extensive facial bruising.

[96] The Crown case on this issue was formidable. Dr Morris expressed the view that any bleeding from a uterine event would have been reabsorbed prior to Charlie's admission to hospital on 27 July 1999. Dr Dickson said that the retinal haemorrhages were not typical of a birth injury as they extended beyond the posterior pole of the eye. Doctors Jones, Donald and Steinberg were all of the opinion that the bleeding had commenced too recently to have been accounted for in that manner. Dr Steinberg also said that birth trauma would not have produced the shearing injuries or the type of brain swelling evident on the CT scan.

[97] Mr Collaery argued that Dr Dickson's view that the retinal haemorrhages were not typical of birth injuries did not prove that they had not been caused in that manner and noted that both he and Dr Tridgell had said that it is not possible to accurately date the age of a retinal bleed by opthalmascope. The haemorrhages usually healed within three to six weeks of birth and since Charlie was born on 7 July 1999, and the retinal blood had largely cleared when she was examined on 20 August 1999, the possibility that the haemorrhages had been caused in this manner could not be excluded.

[98] So far as the other injuries were concerned, Mr Collaery pointed out that few, if any of the medical experts called by the Crown, had been informed of the episode of false labour and submitted that their opinions had been formulated without full knowledge of this potentially relevant fact. I must say that this proposition did not seem to provide any valid basis for undermining Dr Morris' view that any bleeding caused by an intra-uterine event would have been re-absorbed by the time of her admission to hospital or the views of Doctors Jones, Donald and Steinberg that the

bleeding discerned on the CT and MRI scans had commenced too recently.

The possibility of further bleeding from an earlier injury

[99] Undaunted by this difficulty, Mr Collaery also submitted that the apparent recency of the bleeding might be explained on the basis that trauma occurring during the course of either the false labour or the subsequent birth may have caused a sub-dural haemorrhage that had healed but left the relevant blood vessel in a state of some vulnerability so that re-bleeding subsequently occurred either spontaneously or as a result of some event which might not otherwise have caused a haemorrhage.

[100] As the Crown pointed out in answer to this contention, there was impressive expert evidence to the contrary. Dr Jones said that the sub-dural haemorrhage evident in Charlie's brain "did not have the appearance of a re-bleed into an old haemorrhage". Dr Donald said that whilst such a phenomenon can occur the need to clarify the situation had not arisen because of the homogeneity of the appearance of the haemorrhage on the CT scan. Dr Steinberg, whilst also acknowledging that re-bleeding can occur said that in the present case there had been no evidence of re-bleeding and the CT and MRI scans had revealed only one haemorrhage.

[101] In view of this evidence, I am inclined to think it improbable that the findings of recent haemorrhages can be explained by re-bleeding. However, it must be remembered that none of the witnesses in this case had the opportunity to actually see the blood from the sub-dural haemorrhage and the relevant findings are based upon the viewing and interpretation of CT and MRI scans. I accept that Dr Steinberg in particular is an expert in the interpretation of such scans and he impressed me as a competent and fair-minded specialist. Nonetheless, I am unable to be satisfied that the possibility of at least some re-bleeding has been excluded.

The possibility that the injuries were caused by hypothermia and/or rapid re-warming

[102] The accused's account of the baby stopping breathing and becoming limp in the shower has not been shown to be false by any of the evidence adduced by the Crown. On the contrary, there is evidence that such a loss of consciousness could have been caused by several conditions including hypothermia. Young babies are apparently prone to hypothermia and Charlie had been undressed for the purpose of being taken into the shower in an unheated house during a Canberra winter. Furthermore she had actually been found to be hypothermic when admitted to hospital at about 11 am. Ms Nelson confirmed that the baby had been dressed warmly when she arrived at the house at about 10.30 am and the hypothermia must have been caused prior to that time.

[103] The Crown pointed out that the only evidence of the temperature inside the house on the morning in question was derived from a note made by Dr Crawford in the hospital records that the house was cold. The issue was not raised with any of the relevant witnesses and there is no evidence that the accused took Charlie outside until she was warmly dressed in the manner described by Ms Nelson. Whilst that is true, no burden of proof rests upon the accused. It is incumbent upon the Crown to exclude any hypothesis reasonably consistent with his innocence. As I have mentioned, the incident occurred during the morning of a Canberra winter. There was admissible evidence, albeit of a hearsay nature, of the child being undressed and taken into the shower and it is common ground that upon her admission to hospital shortly afterwards she was found to be hypothermic. That evidence is plainly sufficient to raise the issue and it is for the Crown to include any hypothesis involving the possibility that hypothermia played some part in the causation of Charlie's injuries.

[104] Dr Morris was asked whether, in his experience, neonates become hypothermic due to cerebro vascular distress and said "not in general, no". The Crown argued that the question related only to cerebro vascular distress rather than the severe injuries to the brain referred to in the evidence and cited Dr Donald's opinion that hypothermia was a well documented and expected complication of cerebral disturbance. It is unnecessary to resolve this issue because, even if I were to accept Dr Donald's view that hypothermia can be occasioned in the manner he suggested, that would not exclude the possibility that it may have been caused by the baby simply becoming cold and wet. Furthermore, Drs

Morris and Crawford confirmed that, in the circumstances mentioned, hypothermia could have caused the baby to collapse or go limp in the shower.

[105] In my view the Crown has not excluded the possibility that the baby may have become hypothermic when she was undressed in a cold house and exposed to water from the shower and that the hypothermia may have precipitated her collapse in the manner the accused described to Ms Nelson.

[106] The Crown submitted that the hypothermia could not have caused the constellation of injuries which Charlie had sustained. Dr Tridgell agreed that the literature included at least one case in which a child with hypothermia had been found to have retinal haemorrhages but said that it was "a long bow to go from a single case report of a child with retinal haemorrhages to say that the hypothermia causes it". Dr Morris also said that rapid re-warming can induce apnoeic episodes and that the textbooks suggest that it can cause problems relating to the coagulation of blood and bleeding problems.

[107] Nonetheless, I am inclined to accept that such a phenomenon could not have caused all of the injuries discerned on the CT and MRI scans but it may have accounted or the cessation of breathing and apparent loss of consciousness.

The possibility that the injuries were caused by a laryngeal spasm

[108] The Crown did not dispute that a laryngeal spasm might cause a cessation of breathing and unconsciousness, but maintained that such a spasm was an acute and transient phenomenon from which a child could be expected to recover without suffering injuries to the brain.

[109] Dr Donald said that it could sometimes cause a child to suffer a seizure but the nature and extent of any seizures caused in that manner would not produce injuries to the brain. Dr Morris and Dr Jones both said that they could not envisage any means by which a laryngeal spasm could have fully accounted for the injuries seen in Charlie's brain. Dr Jones explained that obstructions to the airway cause a shortage of oxygen to the brain and this in turn causes either watershed anoxic injuries or global anoxic injuries. The injury to the brain in such circumstances is diffuse whilst the MRI images demonstrated that the injuries to Charlie's brain had been patchy. Dr Steinberg also rejected the proposition that a laryngeal spasm could have been responsible for all of Charlie's injuries though on somewhat different bases. He said that laryngeal spasms did not produce shearing injuries and that whilst laryngeal spasms may cause swelling of the brain, the deeper nuclei in the brain were usually effected and the whole brain becomes swollen not merely parts of it.

[110] Again, I am inclined to accept that such a phenomenon could not have caused all of the injuries discerned on the CT and MRI scans but it may have accounted or the cessation of breathing and apparent loss of consciousness.

The possibility that the injuries were caused by attempts to resuscitate

[111] The accused's claim that he had contacted Ms Nelson was amply verified by telephone records and by sworn evidence by Ms Nelson. When asked if she remembered giving him any instructions Ms Nelson said:

I told him to, just on the chance that she possibly did inhale some water, perhaps he should try and, you know, tip her a little bit to drain any secretions that may be in there that are obstructing her breathing so I told him to put her on his knee and slope her downhill a little to drain her, and try and tap her - tap her for a little while to see if that would shift any - shift any maybe obstructive secretions or water that she may have inhaled.

[112] As Ms Nelson pointed out, given those instructions he could only have tapped the baby's back or bottom. She said that she heard the tapping over the telephone and while it wasn't "loud, thunderous" tapping, it was vigorous. She had not given him any instructions as to how to hold his hand whilst tapping the baby just told him to "put Charlie down his leg and support her and tap, tap her". Nor did she tell him to use only his fingers. Terms such as "tapping" or "patting" tend to imply gentle movements and even the addition of adverbs such as "vigorously" do not wholly dispel that impression. However, in her report of 2 August 1999 Dr Packer records the fact that Ms Nelson thought that the accused

might have been patting the baby too hard because she could hear the slaps on the phone. Furthermore, at least in hindsight, Ms Nelson obviously thought that the sounds she heard were consistent with sufficiently vigorous actions to account for the bruising which was subsequently discovered on Charlie's buttocks. She said that she told the accused that the bruising could well have been from his tapping, and in Court expressed the opinion that if the bruises had been caused by him it was probably from that action.

[113] Ms Nelson impressed me as a truthful and reliable witness. She had extensive nursing experience including training in midwifery and at the time of giving evidence was employed primarily in the maternity ward at Calvary Hospital. I am satisfied that she would have been particularly sensitive to Charlie's physical condition and needs and that her account of the incident should be accepted without reservation.

[114] It is clear from Ms Nelson's evidence that Charlie was repeatedly struck by the accused in an apparent attempt to resuscitate her in accordance with Ms Nelson's instructions. Whilst she described this process as "tapping", presumably because that was the word that she had used when telling the accused what to do, and it had plainly been carried out with a view to saving the child's life, it seems overwhelmingly likely that the bruising to her buttocks was occasioned in this manner.

[115] Accordingly, the Crown case must be approached in the context of evidence which, in my view, clearly establishes that the baby had been subjected to quite vigorous applications of force in an attempt to resuscitate her after she had stopped breathing and become limp. The case must also be considered in the context of an explanation that might have accounted for her becoming limp without any act calculated to harm her or other criminal conduct on the part of the accused taking place. In this context the Crown case that there must have been earlier acts of violence by the accused which no-one saw and which apparently left no external bruising is difficult to sustain.

[116] However, the Crown pointed to an extensive body of medical opinion to support this suggestion.

[117] Dr Packer was asked whether the ocular haemorrhages could not have been caused by the attempts to resuscitate the baby whilst the accused was kneeling, her head was sloped down towards the floor and she was being slapped or tapped on the bottom. She rejected that proposition for two reasons. First, she said that in the position described "you've got a relatively well supported head" and, second the "shaking" necessary to cause retinal cerebral injuries was "far beyond the slight bumping you might get from that type of resuscitation".

[118] Neither of these propositions were wholly persuasive. I think it is quite impossible to be confident that the baby's head would have been relatively well supported throughout the twenty minute period during which a probably frantic young man was attempting to resuscitate her. I also think that neither the degree of force necessary to cause the retinal injuries nor the force in fact employed by the accused in attempting to resuscitate the child can be determined with any real precision or confidence. Similarly the suggestion that only a "slight bumping" would have been derived from that type of resuscitation might, perhaps, have been understandable given the form of the question that could not be accepted in the light of all the evidence. It is also unclear whether the baby's buttocks were covered with a towel at the time when the bruising was inflicted and this uncertainty makes it even more difficult to determine the degree of force that would have been required to cause it.

[119] The resuscitation scenario was put to Dr Morris in somewhat similar terms and he agreed that if it were to involve very vigorous acceleration and deceleration of the brain this could cause shearing injury to the vessels and a sub-dural bleed. He said however, that the hypothesis presupposed that there had been some initial event which had resulted in multiple areas of ischaemia in the brain and that any hypothesis would have to account for that as well.

[120] His attention was subsequently drawn to the history of seizures following the baby's admission to hospital and agreed that some of the injuries ultimately detected in the cat scan and MRI procedure subsequent to those seizures may have occurred at that time. He explained that the effect of uncontrolled seizures was usually generalised oedema or possibly focal oedema. He also agreed that ischaemia is local tissue injury due to obstruction of the inflow of arterial

blood due to spasm, disease or trauma and said that a global sort of ischaemia was generally cause by fitting but that he believed that focal ischaemia was also possible.

[121] In short, his evidence acknowledged the possibility that the shearing injury to the brain and sub-dural bleeding could have been caused by vigorous attempts at resuscitation and that the areas of ischaemia could have been caused by the subsequent seizures. His acknowledgment of these possibilities clearly provides at least some evidence that the brain injuries could have been sustained without any antecedent incident in which Charlie was shaken.

[122] Dr Morris is a specialist neonatologist who was in charge of the neonatal intensive care unit at Canberra Hospital when Charlie Billerwell was admitted. His particular expertise lay in the treatment of neonatal infants and he impressed me as a competent and experienced medical specialist and as a careful witness. There is no reason to reject his evidence.

[123] Dr Ryan said that the head traumas discerned in the CT and MRI scan and retinal haemorrhages could not have been caused by hitting the baby's bottom because the force involved would not have been "translated to the head and the injuries seen on the CT and MRI scans [were] the classical injuries that are seen with violent shaking". Neither of these propositions was convincing. The question contained little information and Dr Ryan may have assumed that the baby was simply lying face down in the horizontal position with the force applied perpendicular to the baby's spine. Even if she had been in that position it would be difficult to accept that no force would have been translated to the head. If she had been "sloped downhill" as Ms Nelson had told the accused to positions her, it would be impossible to accept such a proposition. The second proposition again seems to have involved the spurious assumption that if other injuries of this kind had been caused by shaking then these injuries must also have been caused in that manner.

[124] The issue was put to Dr Jones in a somewhat different manner. He was asked to assume that the baby had been taken to the shower and had experienced a laryngeal spasm and had then been taken from the show and resuscitated by being patted on the bottom with some degree of force whilst lying on a prone position on an angle down the man's knees. When asked whether that scenario might have caused the injuries that he had observed Dr Jones replied "no, I don't think so". So far as the question of resuscitation was concerned, he said simply that "with an impact of a baby's buttocks just lying as you say head down, I could not envisage this injury to this brain occurring". Whatever the range of forces that may have been transmitted to Charlie during the twenty minute period in which the accused was attempting to resuscitate her, it does not seem to me that the scenario was adequately conveyed to Dr Jones or that his answer had been intended to address such a situation.

[125] Neither of the two ophthalmologists expressed any substantial expertise in relation to the mechanisms required to cause retinal haemorrhages. Dr Dickson said that having regard to "the literature" he was of the opinion that they could not have been caused by attempts to resuscitate the baby and Dr Tridgell, who was also reliant upon the medical literature, expressed the opinion that it was unlikely that they could have been caused that way, though resuscitation attempts had been known to cause some haemorrhaging.

[126] The literature to which they adverted was neither tendered in evidence nor identified and while both doctors were obviously competent medical specialists whose opinions on matters falling within their areas of expertise should, and were, given great weight, I was not able to accept the opinions that they tentatively ventured on the basis of conclusions or findings put forward in unspecified literature. The medical literature which featured most prominently in the evidence was that relating to the survey of people who had admittedly shaken babies and experiments in relation to animals, and for the reasons given I thought that the conclusions drawn from those studies were of dubious validity. Some other articles including most notably, one by Professor Levan, were referred to by Mr Collaery during the course of his cross-examination of various witnesses. Dr Tridgell also referred to the article by Dr Levan as the basis for his statement that children being resuscitated may sustain "isolated haemorrhages in small numbers".

[127] Later in his evidence Dr Tridgell was asked more specifically whether the haemorrhages could have been caused by the baby lying in a prone position down an adult's leg with its head facing down and being patted on the bottom with some force he replied "I would say not" and proceeded to explain that he had seen children that had had "the CPR type

resuscitation and things" and that he had also seen children who had "probably swung upside down on the weekend" and had not seen haemorrhages in either case. Again, it does not seem to me that these incidents provide a necessary parallel to what may have occurred during attempts to resuscitate Charlie Billerwell.

[128] The most impressive evidence in support of the Crown case on this issue came from Dr Donald. Dr Donald was a paediatrician with extensive experience in investigating the cause of injury to young children and he impressed me as a fair and objective expert witness. He gave the following evidence.

HIS HONOUR: Could I just ask two things about that. I suppose firstly one has the problem with someone who may be in a state of panic, and the question of whether the mechanism was entirely and accurately described. Is there room for some sort of intermediate situation in which the actions may have been more vigorous than reported but not amounting to a completely different scenario? Your Honour I can't get away from the need to generate a high acceleration/deceleration force. And I can't - that's why I'm troubled by this, because I can't think of a mechanism that would do that without what normally happens or what we know happens sometimes when we presume happens others, which is insertion of the chest and stuff like that, I mean I don't want to give the impression that I don't believe that carers of young babies who panic and shake them in that way don't cause injuries sometimes, I think they do. I don't think they cause the extent of injury we saw in this case because of the difference between the sub-dural haematoma and actual brain injury. So I do think people panic and do that. But I can't for the life of me work out a mechanism that could result in this situation.

...

But there are all sorts of differing physiological capabilities and resiliencies and so forth. Does that play any part in the causation of these things? - Yes, you have to - in the genesis of the sub-dural haematoma it's critical to ensure that there is no evidence of increased susceptibility. Now there are various conditions, some permanent, some transient that can increase a child's susceptibility. And probably one of the most important ones is the distance between the inner surface of the skull and the surface of the brain, which is sometimes widened and which therefore already put veins that we have talked about bleeding under slightly higher pressure and that's a very difficult diagnostic dilemma. Because the force in those situations is significantly less. Similarly it's critical to establish that the baby has no disturbance in its clotting because particularly with very young infants there can be a transient clotting disturbance, particularly if they haven't been given vitamin K or they've been given oral vitamin K at birth . . .

[129] Dr Donald said that he was sure that further susceptibilities would be discovered. He also said that shearing injuries involved different thickness of tissue and different maturity in particular babies. He also offered the following explanation:

. . . Perhaps another way of putting it is we are not seeing babies who have just had enough force to produce this, generally the force is probably 4, 5, 10 times what's necessary to produce the injury. So that means that we have a group of babies that could suffer this kind of injury with much less force, but even that force is quite pronounced in our experience and theoretically its - its kind of extreme but - from an experience point of view it's extreme, but it would be much less in a baby with a more immature brain, particularly a baby that was born prematurely. But it would still be beyond what you'd normally - what would happen normally in a normal situation of care.

. . .

I take it there is no empirical research that really establishes with any confidence just how much force is required? - Answer - No.

[130] In re-examination however, Dr Donald was shown photographs of the bruising to Charlie's buttocks and expressed the opinion that the bruising evident in the photographs would have been produced by "very heavy hitting of the baby's bottom". He then gave the following evidence:

Does that mean that you're concerned about the absence of a mechanism to explain the acceleration/deceleration injury in the mechanism described to you by Mr Colleary was not based on the degree of force but on the angle of the child, and/or the angle of the force?-- Yes. Yes. Because it - what I was grappling with is if the baby is on the person's knee, and every time the person hits the baby's bottom the baby moves, the baby moves as a - as a mass, not as a bit here and a bit there. Now I - I tried to think is there a way that the baby could move as a bit here, and a bit there, but I can't see how that could happen sufficiently to cause the head to transmit sufficient forces to the brain to cause the bleeding, which is what the question was about.

[131] In some circumstances one would be extremely sceptical of an expert witness who had based his opinion on one ground but when confronted by further evidence, abandoned it and embraced different grounds to support the same opinions. In the present case, however, I formed the impression that Dr Donald had been attempting to grapple with the evidence available to him in a fair and objective manner. Nonetheless, the change in approach meant that his evidence was a "two edged sword" so far as the Crown case was concerned. His comments as to the degree of force that would have been required to cause the bruising and subsequent abandonment of any reliance upon insufficiency of force to explain the injuries caused to Charlie's brain clearly implied that he was of the opinion that the force may have been sufficient. In that he was at odds with some of the other witnesses whose evidence was relied upon by the Crown.

[132] I accept that Dr Donald has validly raised concerns about the angle of force and the precise mechanism which may have caused sufficient force to be transmitted to the head to cause the bleeding in the brain. However, I am unable to accept that his inability to envisage such a mechanism is sufficient to prove that the accused acted in the manner alleged. Dr Donald's opinion again seemed to be predicated upon the assumption that the whole "constellation" of injuries, other than perhaps the bruising, must have been caused at the same time, and that assumption might be quite erroneous. Furthermore, it does not seem to me to be possible to envisage precisely what angles of force may have been involved in the blows administered to Charlie's buttocks over a period of some twenty minutes in an attempt to resuscitate her.

The possibility that the injuries were caused by seizures

[133] There is also undisputed evidence that fitting or seizures can cause brain damage including ischaemia. As previously mentioned, after Charlie was admitted to hospital but before either the CT scan or MRI scans were conducted to ascertain the nature and extent of her injuries, she experienced a prolonged period of intractable seizures which Dr Morris said were "very, very bad" and required the administration of three different sorts of anti-convulsants.

[134] The Crown submitted that the seizures which had been a product of the brain injuries rather than a cause of them. Dr Jones said that the seizures would not have caused the diffuse injury to Charlie's brain and Dr Donald went so far as to assert that one did not see signs of trauma from seizures. However, he seemed to have been speaking of the form of seizure produced by a laryngeal spasm which he pointed out was an acute transient phenomenon, rather than one involving a pattern of severe intractable seizures over an extended period. The predominant view seems to be that the seizures might account for some of the cerebral injuries but not all of them. Dr Jones was certainly of the opinion that uncontrolled fitting could not have caused all of the diffuse injuries to Charlie's brain. Dr Steinberg said that uncontrolled fitting could have produced some of the infarction injuries he had seen, and that also seems to have been the view of Dr Morris.

[135] Dr Dickson said that, whilst it was extremely rare, fits or seizures had reportedly given rise to retinal haemorrhages. Dr Tridgell stated that he had seen a number of children who had suffered continuous fitting but who had not had retinal haemorrhages. However, the mere fact that a relatively small number of children did not suffered retinal haemorrhages after seizures does not, in my view, prove that Charlie Billerwell could not have sustained retinal haemorrhages as a consequence of the unusually severe and intractable seizures which she suffered. It seems probable that much would depend upon the age and physiological state of the child and, of course, the severity of the seizures. Furthermore, the evidence did not provide me with any basis for assuming that Dr Tridgell's experience with children of unspecified ages provided any real guide to the possibility of retinal haemorrhages being caused by severe seizures in a

neonate baby.

[136] In my view the evidence does not exclude the real possibility that at least some of the cerebral injuries and/or retinal haemorrhages may have been sustained in this manner.

The concept of a "constellation" of injuries

[137] The proposition that there is only one explanation for a constellation of injuries is obviously significant only if all of the injuries were caused in the same manner or, to put it another way, that all of the stars belong in that constellation. Yet many, if not all, of the medical opinions relied upon to exclude competing hypotheses seemed to betray an assumption that the injuries which Charlie had suffered must have been caused by shaking unless there was some other single cause capable of accounting for the whole constellation. Such an approach could obviously be justified only if the injuries had all been inflicted at the same time, or at least as a consequence of the one mechanism. However that assumption is not necessarily, or in my opinion even probably, valid.

[138] Whilst there were some assertions that the injuries had been caused simultaneously, those opinions seemed to have been based upon nothing more substantial than the similarity of their overall pattern to the pattern of injuries seen in known cases of baby shaking. Whilst Dr Packer initially suggested that the injuries must have occurred simultaneously she later said that none of the tests had excluded the possibility of more than one episode of shaking, and that it was possible that not all of the injuries had been caused simultaneously. She adamantly agreed that "one just doesn't know". Dr Morris agreed that they need not have occurred simultaneously but suggested that they would have all occurred "within hours or days"

[139] Similarly, the evidence did not establish that all of the injuries in the "constellation" could only have been caused by the same mechanism. In providing her description of the constellation Dr Packer mentioned four factors, the first of which was the bruising on the buttocks. For the reasons already given, I think that that bruising was most probably caused by the accused's attempt to resuscitate Charlie. As I have already mentioned, Dr Steinberg said that the course of severe seizures could have produced some of the injuries, though not all of them. When asked whether infarctions could have been a sequelae of birth trauma, Dr Jones said "that degree of atrophy", presumably in Charlie's brain "well its problematical, could have been due to other things, but we have a haematoma in that region which post-dates birth and when you have one proven cause it's not usual to be - it's not usually felt necessary to postulate another cause for the same lesion".

[140] In response to my question Dr Jones agreed that this was because of the application of Occam's Razor. This principle, which is attributed to the Fourteenth Century philosopher and theologian, Willam of Occam, is based upon the Aristotelian principle that entities should not be multiplied beyond what is necessary, and is interpreted to mean both that the simplest of two or more competing theories should be preferred and that an explanation for unknown phenomena should first be attempted in terms of what is already known. Sir Isaac Newton is said to have reformulated the rule to provide that no more causes of natural things should be admitted than such as are both true and sufficient to explain their appearances. One can readily understand the relevance of such a principle in many areas of scientific and philosophical discourse. However, it is essentially antithetical to the legal principle governing proof by circumstantial evidence. Occam's Razor enjoins its adherents to embrace the simplest or most obvious explanation for the events in question and offers a guide as to how to proceed in the face of doubt or uncertainty. Proof by circumstantial evidence requires the Crown to establish beyond reasonable doubt the absence of any reasonable alternative hypothesis consistent with the innocence of the accused.

[141] One such hypothesis was that Charlie might have sustained injuries from multiple causes or that a single incident such as a laryngeal spasm in the shower may have given rise to a chain of events including attempts at resuscitation and seizures, in which further injuries were sustained at each stage. Whilst I am inclined to accept that the injuries must all have been sustained within the space of about two or three days, I do not accept that the possibility of multiple causes can be so readily dismissed.

The allegation of insufficient force

[142] The Crown case is also beset by insoluble problems due to uncertainty as to the nature and extent of the forces required to cause relevant injuries in the brain of a neonate baby and, on the other hand, uncertainty as to the nature and extent of the forces that might have been employed in any resuscitation attempt by the accused.

[143] For the reasons I have already given I was not satisfied that opinions suggesting the need for very severe or extreme force were adequately based upon the specialised expertise of the relevant witnesses. In my opinion the evidence was sufficient to prove only that reasonably substantial force was required. The precise degree of force would vary with the age and physical condition of the child but would be more than the force normally employed in holding, cuddling and generally caring for a baby. However, that conclusion is insufficient to exclude the alternative hypotheses to which I have referred.

[144] It seems to me to be quite impossible to know the nature and extent of the forces that might have been applied to Charlie by an inexperienced and perhaps frantic young man attempting to resuscitate her after she had stopped breathing and become limp, or by any of the other scenarios mentioned.

[145] During the course of his telephone call with Ms Nelson he told her that the accused had to keep patting the baby or she didn't move and that she was not breathing properly. Whilst she heard the sound of him "tapping", her ability to assess the degree of force by reference to the sound transmitted by telephone was obviously extremely limited.

[146] When interviewed by the police the accused said that he had no idea of how hard he was tapping her and added "well, I mean, you're holding a three week old baby who is frightened to breath, you know, it's not something you would want to go through. He also added " . . .I didn't know what to do, you know. I was just doing what Jules was telling me to do. I was doing what Jule said, you know, I was just scared".

[147] Much of the evidence elicited from Crown witnesses in an attempt to exclude the possibility that some or all of the injuries may have been caused in this manner was responsive to questions which sought to encapsulate all of the movements by the accused during the period of twenty minutes in which he attempted to resuscitate the baby in accordance with Ms Nelson's directions. However, there may have been an inevitable measure of oversimplification in such an exercise. For example, it seems highly unlikely that the child was held in the one position for the whole time or that the nature, angle and extent of the range of forces that may have been applied during that period could have been adequately deduced and conveyed by such questions.

[148] Until Charlie's birth less than three weeks earlier, the accused had apparently had no experience in caring for babies and it is understandable that he would have become very frightened if she had become limp as he asserted. The baby's condition may have fluctuated. He initially told Ms Nelson that Charlie was not breathing and that it looked as if she were dead. At some other stage during the course of the conversation he apparently said "She looks like she's dead, listen to her crying?" At that point Ms Nelson said that she could hear a little whimpering sound and it must have been obvious that the child was not dead. The combination of these mutually contradictory statements may have reflected the level of the accused's distress and anxiety. However, the conversation occurred more than two years before Ms Nelson gave evidence and she did not claim to be able to remember everything that was said. It seems reasonable to assume that in the circumstances posited the accused might have been inclined to panic and his desperation may have overcome the natural inclination to treat a baby with restraint.

[149] Dr Packer said "I believe the bruising could have come if the buttocks were slapped with a degree of panic which caused far greater force than you would normally use to deal with a baby who might have choked or spluttered or be in any way giving rise to concern of a far greater force than was used which suggests a high degree of stress". When the danger is past and one can look back with the comforting wisdom of hindsight it is always possible to speculate about the nature and extent of the force that should have been applied when dealing with an urgent situation but when a baby appears to be dead or in imminent danger of death panic is an understandable human response.

[150] It may be true, as Dr Packer suggested, that even if there had been no other injuries, the extent of the bruising would have suggested an excessive use of force and, perhaps, an ability for the accused to inadequately measure his actions. However, as I have mentioned, the accused was a young man who apparently had no previous experience in caring for babies. He was not told to use only his fingers in tapping the child, nor apparently taken to task by Ms Nelson as the result of anything she heard over the telephone. There is no reason to suppose that he would have known what was the appropriate measure of force.

[151] Furthermore, criticisms of that kind tend to presuppose that the application of the suggested appropriate force would have been sufficient to revive the child. However there is no way of knowing whether such a pre-supposition was well founded, or, indeed whether the accused did initially employ only a moderate degree of force but found that the baby did not respond to it. I think it has to be accepted that desperate straights call for desperate measures and that in times of extremis the amount of force applied by a would-be rescuer attempting to resuscitate a person who is not breathing cannot be weighed on golden scales.

[152] In the circumstances I think it is impossible to know just how hard the accused may have hit the baby in an attempt to resuscitate her, what movements she may have been subjected to and, perhaps most relevantly, to what extent her head may have been jolted about during the course of the exercise. Even the accused may be unable to say precisely what he did or what impact it may have had upon Charlie.

Conclusions

[153] Notwithstanding the concerns I have expressed about the lack of empirical evidence, I am satisfied on the whole of the evidence that the injuries sustained by the baby could have been caused by shaking. However, the mere fact that injuries are consistent with the application of force in a certain manner does not prove that they were so occasioned. As previously mentioned, it is incumbent upon the Crown to prove beyond reasonable doubt that the injuries could not have been caused in a manner consistent with the innocence of the accused.

[154] Despite the impressive body of medical evidence called by the Crown, I remain unconvinced that the baby was shaken by the accused as the Crown alleges. In my opinion the Crown has not excluded a number of hypotheses consistent with the innocence of the accused.

[155] There is no reason to disbelieve the account that the accused gave Ms Nelson of the baby becoming limp and ceasing to breathe whilst in the shower. On the contrary, his account is entirely consistent with the child having suffered a laryngeal spasm or hypothermia. I do not accept that there is any compelling reason to conclude that the collapse could only have been attributable to brain damage caused by an antecedent assault involving shaking.

[156] There is no reason to doubt that the accused then attempted to resuscitate the baby. The Crown argued that whilst laryngeal spasm may have caused a temporary loss of breathing or even consciousness, the baby would have quickly recovered spontaneously and that resuscitation would have been unnecessary. However, whilst laryngeal spasms are a temporary phenomena and breathing usually recurs spontaneously, there is no reason to suppose that there is never any delay in the recurrence of breathing or difficulty in ensuring that any such recurrence is maintained. I must say, however, that hypothermia was a more likely explanation for any difficulties of the kind described by the accused in his conversation with Ms Nelson. In any event, it cannot sensibly be disputed that he rang Ms Nelson, expressed concern at the baby's plight, and tried to resuscitate her.

[157] I am not satisfied that the attempts to resuscitate Charlie and/or subsequent seizures would not have involved the transmission of sufficient force to her head to cause a sub-dural haemorrhage and other injuries. Having regard to her age and the succession of traumatic events, it seems to me to be impossible to know just how much force would have been required to cause the injuries. It seems equally impossible to know what force would have been exerted by such mechanisms. I also note that Dr Dickson, expressed the opinion that the retinal haemorrhages evident in this case seemed less florid than those in the cases referred to in the literature and the other cases of baby shaking in which he

had been asked for his medical opinion.

[158] So far as the angle of force is concerned, what evidence is available suggests that the baby had been held on the accused's knee with the head and torso pointing at an oblique angle downwards, whilst the accused struck the baby on the buttocks repeatedly in an attempt to dislodge any water in her throat and/or cause her to recommence breathing. The force of the blows had been sufficient to cause bruising to the buttocks. It is I think, unclear just how well the child's head might have been supported if at all. None of the studies cited in evidence before me seem to have addressed the possibility of a child being injured in that manner, and whilst a number of medical practitioners have expressed the view that the level of injury was unlikely to have been so occasioned I was not wholly satisfied that there was adequate basis for those opinions. In particular, it seemed to me to be quite impossible to be able to recreate just how the accused might have responded to such an emergency. He had no previous experiences dealing with babies and would no doubt have been extremely concerned if not panic-stricken.

[159] The fact that Charlie suffered severe and intractable seizures over a period of many hours is not disputed.

[160] The preponderance of medical evidence establishes that some brain injuries could have been sustained by Charlie during all or any of these stages.

[161] When it is relatively clear that at least three events capable of causing brain injuries have occurred it is obviously incumbent upon the Crown to prove that the constellation of injuries could not have been so caused. In my opinion, the evidence has not excluded that possibility.

[162] I accept that the medical witnesses have generally expressed scepticism about the possibility of the constellation of injuries occurring without a blow to the head or an episode of shaking. However, I am not satisfied that such scepticism is warranted. The mere fact that a number of people, even a number of experts, believe something does not warrant the conclusion that it must be true. The need for great force has not been demonstrated by empirical research, and for the reasons already given, I am not satisfied that it has been otherwise established.

[163] No person of decency and compassion could fail to be moved by the plight of children who have been gravely injured and perhaps permanently disabled whilst still babies. Those who devote their lives to treating and caring for them will almost inevitably be influenced by sympathy for them. However, sympathy and other strong emotions have the capacity to mislead. Concern to ensure that those who have hurt them be prosecuted and that other defenceless children be protected may subtly erode objectivity. Repeated contact with children who have been violently assaulted and parents who accept little if any responsibility for their conduct may lead one to more readily dismiss protestations of innocence or the possibility of innocent explanation. There may also be a tendency to assume the worst. I have no doubt that the suspicions that the accused had subjected Charlie to a violent assault were both genuine and understandable but I am unable to be satisfied that they have been substantiated.

[164] It is possible that the injuries were inflicted in the manner suggested by the Crown but the evidence does not establish that. On the contrary, I think it is entirely possible that they occurred as a consequence of the concatenation of events to which I have referred.

[165] Furthermore, even if the injuries were caused by the application of forces which included some measure of shaking would involve, that would not necessarily prove that the accused had lost his temper and violently assaulted Charlie as the Crown has alleged. It is entirely possible that a young and inexperienced man may have panicked when the baby stopped breathing and reached a point at which he shook her in desperation. It is true that there is no more evidence of this hypothesis than the one suggested by the Crown, but I am obliged to consider whether the Crown has excluded any hypothesis consistent with innocence whether raised by the accused or not.

[166] As Dr Donald confirmed carers sometimes shake babies in panic and cause injuries of this kind and, in the light of the evidence of the accused's affection for and gentleness towards the child and the conversation with Ms Nelson about her becoming limp in the shower, that would be a more likely explanation than the speculative scenario of an earlier

incident of unexplained rage.

Evidence as to the identity of any offender

[167] It was incumbent upon the Crown to prove not only that the baby had suffered injuries due to a violent assault but also that the accused had been the assailant. The Crown case on this issue was again dependent upon circumstantial evidence. For present purposes it is unnecessary and perhaps undesirable for me to embark upon any discussion of competing possibilities. However, I do not accept that, if the baby was shaken in the manner alleged, the accused was the only person who could have done so.

Other factors

[168] There is certainly no support for the Crown case in what one witness described as the psycho social considerations. Whilst the accused is not Charlie's biological father the evidence established that he was present at her birth and almost instantly became what her grandmother described as "a doting Dad". She described watching him holding her with his big hands, with one hand under her head and one at her back and that he was very gentle with her. Ms Nelson also confirmed that he had been very gentle with her. Ms Billerwell said that he used to bath her and help change her, in fact, prior to her admission to hospital on 27 July, it had been the accused who had bathed her most of the time. There is not the slightest suggestion of any resentment or animosity towards the child nor of any impatience with her. It is true that she had been unsettled during the previous afternoon and crying during her bath but there had been no suggestion of any irritation on the accused's behalf as a result of that behaviour.

Recklessness

[169] The Crown submitted that I could find that the accused must have acted recklessly if he had shaken the baby as alleged. The primary contention was that the dangers involved in shaking a three week old baby were so well known that they should be taken to be within the knowledge of all reasonably well informed members of the community. Hence, it was argued, I could take judicial notice of the fact. I am unable to accept this submission.

[170] The mere fact that something may be within the knowledge of reasonably well informed members of the community may justify a court taking judicial notice of it but it will not, of itself, warrant a conclusion that a particular person knew of it. In any event, the relevant issue is not whether the danger of causing really serious injury was within the knowledge of the accused. It is whether he actually adverted to the risk of causing such injury at the time he carried out the actions alleged. That is an extraordinarily difficult thing to establish in a case such as this in which there is undisputed evidence that the accused had been a "doting Dad" and the only explanation for such conduct suggested was that he must have lost his temper.

[171] In Vann v Palmer (unreported, [2001] ACTSC 12, Crispin J, 22 February 2001) I observed that in some circumstances a court may act upon a presumed fact by taking judicial notice of it but that the test is a stringent one. Judicial notice may be taken of a fact only if it is "so generally known that every ordinary person may be reasonably presumed to be aware of it": Holland v Jones (1917) 23 CLR 149 at 153 per Isaacs J. It has been suggested that the test should be dependent upon the presumed knowledge of "educated men" per Dixon J in Australian Communist Party v Commonwealth (1951) 83 CLR 1 at 196 or "every well informed person in Australia" per Evatt J in Deputy Federal Commissioner of Taxation (NSW) v W R Moran Pty Ltd (1939) 61 CLR 735 at 806.

[172] I do not think that ordinary people, whether educated, well informed members of the Australian community, have any real knowledge of the thought processes of this accused or of other people who have alleged shaken babies. I certainly cannot accept that they should be taken to "know" that everyone who commits such an act actually adverts to the risk of causing really serious injury. Indeed, I suspect that most people would think that assaults are either acts of mindless violence committed with little if any thought for the consequences, or acts of desperation committed by people who have lost self control.

[173] In extreme cases, such a where a person has shot another person in the chest or pushed someone from a tenth storey balcony, the danger may be both so grave and so obvious that a jury, or judge in a trial by judge alone, might be entitled to infer that the accused must have adverted to it. However, such cases will necessarily be rare. Furthermore, even in such extreme cases it would still be necessary to take into account the emotional state of the accused at the time.

[174] In the present case the Crown submission really involves the argument that I could be satisfied beyond reasonable doubt of this element of the offence by making an assumption that anyone who shakes a baby must be taken to have at that time turned his or her mind to the risk of causing really serious injury. That may not be true.

[175] The Crown sought to augment the more general submission by reference the following passage in the record of interview with the police:

Q98 Have you ever shaken Charlie? Do you know the effects of shaking a baby?

A Yes, now I do. Doctors have told me. Doctors have told me that as a result of shaking the baby the brain can be ... I remember seeing something on the news last week about a baby being shaken, I remember sitting there with Stuart and Stuart said "I can't" - he had Charlie in his arms at the time and he said "I don't know how anyone can do that."

[176] It may be noted that the accused attributed his knowledge of the effects to what doctors had told him obviously after Charlie's admission to hospital. The statement provides no basis for an assumption that he had the necessary knowledge or understanding prior to that time. Indeed, the statement, "now I do" strongly suggests the contrary. The mere reference to "something on the news last week about a baby being shaken" does not prove such advertence.

[177] The Crown also argued that the force that would have been required to cause the injuries would have been so great that the accused must have realised that his actions might have caused her really serious injury. However, I am unable to accept either that the degree of force necessary to cause the injuries has been established with any real precision, or that it could safely be assumed that anyone exerting such an unknown degree of force must have adverted to the risk of causing serious injury. Furthermore, whilst knowledge is obviously relevant to an appraisal of whether a person may have adverted to something, it is not coextensive with the concept of advertence. Courts are constantly confronted by people who have committed violent acts in a state of rage or distress apparently without any thought for even the most obvious consequences.

[178] This case offers another example of the great difficulties that may be encountered in attempting to prove that a person who has made no relevant admissions must have adverted to something at the critical moment at which he or she may have carried out a particular act. One may more readily establish that a person had certain knowledge, though in the present case even that was not proven, but knowledge does not remain constantly within a person's conscious thoughts. It is stored in the memory banks of the mind and recalled when a person attempts to remember something or when some incident prompts his or her memory. In some circumstances, one might safely assume that certain circumstances would be sufficient to prompt the recall of certain memories. However, a person in the grip of powerful emotions may not advert even to things of which he or she is well aware. The phenomenon may be subsequently expressed in rueful phrases such as "I just didn't think ... or "I didn't have the presence of mind". For this reason the burden of proof cast on the Crown is an onerous one.

[179] The evidence reveals little of the accused's level of intelligence, understanding, background, education or temperament, and I do not think that there is any adequate means of discerning what he may have thought about if he had shaken the baby as alleged.

[180] Furthermore, if the actions which led to the injuries were taken in a genuine attempt to resuscitate a baby who had stopped breathing then fear of the he imminent death may have driven such considerations from his mind. Whilst others may be critical of a person who has used excessive force to resuscitate a child, he or she may not have had their medical knowledge and experience or the luxury of hindsight. It may be true that some lesser degree of force might have saved the child's life, or that she may even have recovered spontaneously, but the person confronted by that situation may not

know that. He or she may even have tried a lesser degree of force but to no avail. That can create a situation in which he or she may feel that desperate straits call for desperate measures. It is no doubt for that reason that even paramedical staff sometimes cause injuries to ribs or sternums in attempting to revive people in states of extremis. The prospect of the immediate death of a baby can also cause even the most devoted and responsible parent to succumb to panic.

[181] For these reasons I am unable to accept that there is any evidence capable of proving that the accused must have thought of the possibility of causing really serious injuries to save the baby.

Assault

[182] On the other hand, there could be no doubt that anyone who lost his or her temper and shook a baby would be guilty of an assault and, if any injury was caused, guilty of assault occasioning actual bodily harm.

[183] It should be noted, however, an assault is constituted by a hostile act and not be one carried out for a benign purpose. Hence a person who takes the arm of another person to pull them from the path of a speeding vehicle to safety does not commit an assault. Similarly, no offence is committed by a person who applies force in a conscientious attempt to resuscitate another person.

The present applications

[184] At the conclusion of the Crown case Mr Collaery submitted that I should enter verdicts of acquittal on all counts on the indictment because the evidence was insufficient to raise a prima facie case in relation to any of the offences so charged.

[185] The assessment of such a submission inevitably requires the application of a very stringent test. In a trial by jury, the judge is required to rule on any issue as to whether the evidence, if accepted by the jury, would be sufficient in law to establish the guilt of the accused in relation to the relevant charge or charges. It is for the jury to determine whether that evidence should be accepted and whether the guilt of the accused has been proven to the requisite standard. As the High Court of Australia said in Doney (1990) 171 CLR 207 at 214: "It follows that, if there is evidence (even if tenuous or inherently weak or vague) which can be taken into account by the jury in its deliberations and that evidence is capable of supporting a verdict of guilty, the matter must be left to the jury for its decision". In the subsequent decision in Case stated by DPP (No 2 of 1993) 70 A Crim R 323 King CJ observed at 326 that it is not the function of the judge in considering an issue of this kind to choose between inferences which are reasonably open to the jury. The judge must decide the matter on the assumption that the jury will draw those inferences reasonably open to it on the evidence as would be most favourable to the Crown case.

[186] Whilst this is a trial by judge alone, any issue as to whether there is a prima facie case in respect of one or more of the offences charged in the indictment must be resolved by reference to the same principles.

[187] The Crown submitted that the issue of a prima facie case was the only question that could be considered at this stage of the trial. It was argued, in essence, that if I were to find that a prima facie case had been so established, I should put the accused to his election as to whether he wished to call evidence, and defer any consideration of the weight of the evidence adduced by the Crown until the end of the trial. It was acknowledged that I had taken a different approach to that proposed by the Crown in the present case in R v Rao (unreported, [1999] ACTSC 132, Crispin J, 10 December 1999). The Crown contends that this approach had been contrary to established principle but I am unable to accept this submission.

[188] It is clear that a jury may acquit the accused at any time after the close of the Crown case. This right was affirmed by the Full Court of the Supreme Court of South Australia in Prasad (1979) 2 A Crim R 45 per King CJ at 47:

It is, of course, open to the jury at any time after the close of the case for the prosecution to inform the judge that the evidence that they have heard is insufficient to justify a conviction and to bring in a verdict of not guilty without hearing

more. It is within the discretion of the judge to inform the jury of this right, and if he decides to do so he usually tells them at the close of the case for the prosecution that they may exercise the right then or at any later stage of the proceedings, Archbold Criminal Pleading and Practice (39th ed, 1976) p332. He may undoubtedly, if he sees fit, advise them to stop the case and bring in a verdict of not guilty. But a verdict by direction is quite another matter. Where there is evidence which, if accepted, is capable in law of proving the charge, a direction to bring in a verdict of not guilty would be, in my view, a usurpation of the rights and function of the jury. I think that there is a clear distinction for this purpose between a trial before a magistrate or other court which is the judge of both law and facts and a trial by judge and jury.

[189] The Crown did not contend that Prasad had been wrongly decided, but submitted nonetheless that, whilst juries enjoyed such a right, judges in trials by judge alone did not. This submission was supported by reference to the remarks of the Privy Council in Haw Tua Tau v Public Prosecutor [1982] AC 136 at 151 where their Lordships stressed that in a jury trial, if there was some evidence as to each of the essential elements of a charge, the judge must let the case proceed. Their Lordships also said that only when all of the evidence that either party wished to adduce had been presented should jurors direct their minds to the question of whether the guilt of the accused had been proven beyond reasonable doubt. They added:

In their Lordships' view the same principle applies to criminal trials where the combined roles of decider of law and decider of fact are vested in a single judge. ... At the conclusion of the prosecution's case what has to be decided remains a question of law only. As a decider of law, the judge must consider whether there is some evidence (not inherently incredible) which, if he were to accept it as accurate, would establish each essential element in the alleged offence. If such evidence as respects any of those essential elements is lacking, then, and then only, is he justified in finding "that no case against the accused has been made out which if unrebutted would warrant his conviction," within the meaning of s188(1) [of the Criminal Procedure Code (Singapore)].

[190] It should be noted that the statutory provision with which their Lordships were concerned in Haw Tua Tau provided that if there was a case against the accused which, if unrebutted, would warrant his conviction, the court should call the accused to give evidence. Inferences could be drawn from any failure to do so. The terms of the statute clearly suggested that if there was a prima facie case then the procedure of calling upon the accused to give evidence should be followed. In those circumstances it seemed clear that there could be no room for any intervening finding based upon a perception that the strength of that case was insufficient to prove guilt beyond reasonable doubt. No similar provision exists in this Territory. Their Lordships' observation that juries have a duty to suspend judgement until all of the evidence for both parties has been presented was, strictly speaking, obiter dicta. It also seemed to overlook the right acknowledged by King CJ in Prasad and in other Australian authorities. Accordingly, I am unable to accept that the passage relied upon by the Crown should be accepted as a correct statement of the law in this jurisdiction.

[191] The submission also seems to overlook the fact that, after making the statements in Prasad which I have quoted above, King CJ continued:

I have no doubt that a tribunal, which is the judge of both law and fact, may dismiss a charge at any time after the close of the case for the prosecution, notwithstanding the fact that there is evidence upon which the defendant could lawfully be convicted, if that tribunal considers that the evidence is so lacking in weight and reliability that no reasonable tribunal could safely convict on it. This power is analogous to the power of the jury, as judges of the facts, to bring in a verdict of not guilty at any time after the close of the prosecution's case.

[192] There is an apparent incongruity in the suggestion that the right of a judge or magistrate charged with the responsibility of determining issues of both law and fact should be contingent upon a view that "the evidence is so lacking in weight and reliability that no reasonable tribunal could safely convict on it". The statement could not have related to the finding of a prima facie case because that is a question of law and the power was said to be analogous to the power of a jury. Furthermore, the power of a jury is not constrained by any such principle. The statement was obiter dicta and, regrettably, no reason was offered for the intrusion of this apparent qualification upon one of two powers said

to be analogous. It was also made before the advent of trials by judge alone in the superior courts in Australia.

[193] Despite the weight that must be accorded the decision in Prasad, I am unable to accept that the power of a judge hearing a trial by judge alone is limited in the manner suggested. In my opinion there are only two tests that arise in a criminal trial. The first is one of law: does the evidence adduced by the Crown establish a prima facie case in relation to each element of the relevant charge? That test must be applied by the judge whatever the form of trial. The second is one of fact: does the evidence prove each such element beyond reasonable doubt? That test must be applied by the jury or by the judge in a trial by judge alone. There is no room for any intermediate test based on speculation as to what weight some other court or tribunal might have given to the evidence. Nor, in my opinion, is there any basis for doubting that a jury or the judge in a trial by judge alone may acquit the accused at any time after the close of the Crown case if satisfied that the second test has not been satisfied.

[194] The Crown also relied upon the High Court's decision in May v O'Sullivan (1995) 92 CLR 654. However it was not suggested in that case that in a trial by judge alone the judge has no power to acquit the accused at the close of the Crown case on the ground that the evidence was insufficient to prove his or her guilt beyond reasonable doubt. The High Court had been concerned rather with dispelling a legal heresy that had arisen from the earlier English case of R v Lovett (1908) 1 Cr App R 111 in which a recorder had directed the jury that if the prosecution had established a prima facie case and the accused had not satisfactorily answered it, it was their duty to find the accused guilty. In O'Hallorhan v Crafter [1940] SASR 29 the Full Court of the Supreme Court of South Australia had held that the direction in Lovett had not been a substantial misdirection. In May v O'Sullivan the High Court held that Lovett had been wrongly decided and that what the recorder had said to the jury was a "palpable and serious misdirection". Their Honours affirmed that the question of whether there was a prima facie case was one of law, and that in the absence of any statutory provision to the contrary, a ruling on that issue could have no effect on the burden of proof, which remained on the prosecution from beginning to end. Hence, a magistrate who had decided that there was a "case to answer" might, consistently with that ruling, refuse to convict on the evidence of the prosecution, notwithstanding the fact that no evidence had been called for the defendant.

[195] In at least some jurisdictions magistrates often seemed to assume that the decision in May v O'Sullivan permitted them to act only in accordance with the constraints urged upon me by the Crown. At the close of the Crown case the magistrate might acquit the defendant if no prima facie case had been established. However, if there was such a case then it seemed to have been assumed that the magistrate had no right to order an acquittal on the basis that the evidence was insufficient to prove the defendant's guilt beyond reasonable doubt until the defence case had been concluded, or until the accused had indicated that he or she intended calling no evidence. Furthermore, it often seemed to be assumed that until that time the magistrate should not reveal his or her view that the evidence was insufficient to prove the relevant charge or charges to the requisite extent or even reveal his or her misgivings about its weight. Consequently, the defendant was placed in a position akin to that of a television game-show contestant in which he or she would be required to decide whether to abandon the right to call further evidence and hope that the magistrate had formed a sufficiently adverse view of the evidence adduced by the prosecution, or could otherwise be persuaded that such evidence had not proven his or her guilt to the requisite standard, or alternatively, to embark upon a defence case that might not only prove to have been a complete waste of time and money but a source of other legal and practical problems. At this stage of the proceedings counsel would often seek to divine the magistrate's state of mind from any verbal clues or even facial expression. I do not accept that the law ever required such an approach.

[196] I accept, of course, that in most cases it will be appropriate to defer any consideration about whether the guilt of the defendant has been proven beyond reasonable doubt until the defence case has been presented or the defendant has indicated that she or he does not wish to adduce any evidence. To entertain argument as to the weight of the evidence at the close of the case for the prosecution will in many cases involve an unwarranted delay in the resolution of the case. However I do not accept that a magistrate or, in the case of a trial by judge alone, a judge lacks the power to dismiss the relevant charges at the close of the Crown case if he or she has by then formed the view that the evidence led in support of the charges is not sufficiently strong to sustain them.

[197] In my view, it would be quite inappropriate for a judge trying an accused without a jury to decline to return a verdict of not guilty when the prosecution case had failed to satisfy him or her of the guilt of the accused to the requisite standard either because of an inability to be satisfied that no reasonable tribunal could have come to a contrary view, or because of a view that the prosecution should be offered a sporting chance to take advantage of any rash disclosures by an intemperate defendant. To accede to such a proposition could result in unnecessary financial expense, a waste of court time, inconvenience to any further witnesses called and, most importantly, further emotional strain for the accused and for others such as the families of alleged victims. The only conceivable advantage which it might offer to the prosecution would be the slim chance that an ineptly presented defence might fill in some of the deficiencies in the Crown case. That possibility would obviously evaporate upon any intimation as to the judge's misgivings concerning the strength of the Crown case. However, even if the judge could be enjoined to maintain a 'poker face' lest his or her scepticism of the evidence be deduced, such a possibility could provide no justification for proceeding in the vain hope that a person still presumed to be innocent might somehow secure his or her own conviction.

[198] In any event, such a proposition cannot be maintained in the face of the provision of s68C of the Supreme Court Act 1933 empowering a judge who tries criminal proceedings without a jury to "make any finding that could have been made by a jury as to the guilt of the accused person...". It may be unnecessary, and perhaps undesirable, to hear full argument at the close of the prosecution case as to whether it is adequate to establish the guilt of the accused beyond reasonable doubt unless there is some aspect of the evidence which fairly raises that issue. However, in the light of s68C it cannot be said that in a trial by judge alone the judge lacks the power that would have been enjoyed by a jury, or that in the exercise of that power he or she is constrained in the manner suggested by King CJ in Prasad.

[199] Accordingly, I adhere to the view I expressed in Rao that if, at the close of the Crown case in a trial by judge alone, the judge is satisfied that the Crown has failed to prove the commission of an offence to the requisite standard, he or she has the power to acquit the accused.

[200] This power must obviously be exercised with due care and in a manner calculated to avoid any prejudice to the Crown that might arise as a consequence of being taken by surprise. Hence, in the present case, I indicated that I might adopt such a course, invited the Crown to supplement its submissions as to whether a prima facie case had been established with argument as to the weight of the evidence, and adjourned the trial for a short time to permit adequate time for supplementary submissions to be prepared.

[201] The case for the Crown has now been comprehensively and competently argued but I have found it far from compelling.

[202] As the High Court's decision in Doney makes clear, there is a prima facie case if there is some evidence capable of supporting a verdict of guilty, even if tenuous or inherently weak or vague. There is evidence as to the causation of Charlie's injuries which satisfies that test and hence there is a prima facie case on that issue. Since such causation would plainly have involved an assault and have occasioned actual bodily harm, I am obliged to find that there is a prima facie case in relation to the offence charged in the second count of the indictment. In my opinion, there is no evidence, even tenuous weak or vague, capable of supporting such a verdict on the issue of recklessness and hence no prima facie case exists in relation to the offence charged in the first count of the indictment.

[203] However, whilst the evidence adduced by the Crown may be sufficient to constitute a prima face case in relation to Count 2 on the test stated in Doney, I am not satisfied that the Crown has proven to the requisite standard the allegation that the accused shook the baby in the manner alleged. On the contrary, I think that the injuries may have been caused by a combination of events including some cerebral event in the shower, the well meaning but perhaps overly vigorous application of force in an attempt to resuscitate her and a prolonged series of very severe and intractable seizures.

[204] In short, I am not satisfied that there is a prima facie case in relation to the first count on the indictment and whilst, I am satisfied that there is a prima facie case in relation to the second count, the evidence is plainly insufficient

to prove the guilt of the accused beyond reasonable doubt.

[205] Accordingly the accused must be acquitted on both counts.

[206] Before leaving the matter I should record my gratitude for the assistance provided by Ms Woodward who presented a thoroughly prepared case in a competent and careful manner and to Mr Collaery who subjected the Crown case to well researched and critical examination.

Order

THE COURT FINDS THAT:

1. The accused is not guilty of the offence charged in the first count in the indictment, namely, that on or about 27 July 1999 at Canberra in the Australian Capital Territory he recklessly inflicted grievous bodily harm on Charlie Paige Billerwell.

2. The accused is not guilty of the offence charged in the second count in the indictment, namely, that on or about 27 July 1999 at Canberra he assaulted Charlie Paige Billerwell and thereby occasioned to her actual bodily harm.

Counsel for the prosecution: J Woodward

Solicitors for the prosecution: The ACT Director of Public Prosecutions

Counsel for the accused: B Collaery

Solicitors for the accused: Bernard Collaery & Associates