

THE STATE OF NEW HAMPSHIRE

v.

ALAN CORT

No. 97-892

THE SUPREME COURT OF NEW HAMPSHIRE

December 28, 2000

Strafford

Philip T. McLaughlin, attorney general (Christopher H.M. Carter, assistant attorney general, on the brief and orally), for the State.

Backus, Meyer, Solomon, Rood & Branch, of Manchester (Jon Meyer on the brief and orally), for the defendant.

BROCK, C.J.

The defendant, Alan Cort, was convicted after a bench trial in Superior Court (Fitzgerald, J.) of first degree assault on his daughter, see RSA 631:1, I(d) (1996). On appeal he argues that: (1) there was insufficient evidence to find that the victim was injured by being severely shaken and that the defendant inflicted the injuries; (2) the trial court erred in admitting testimony regarding the amount of force needed to inflict injuries on the victim; and (3) the trial court erred in allowing certain expert testimony. We affirm.

The following facts were adduced at trial. On August 26, 1996, the victim was approximately three months old. Although suffering from a virus, she was otherwise in good health. Her mother and father picked her up from the latter's grandmother's house at approximately 5:00 p.m., at which time there was nothing unusual about the child's behavior. At approximately 6:00 p.m., her mother left her at home with the defendant while she went to purchase food. The defendant and the child were alone for approximately thirty to forty-five minutes. The mother returned home to find her daughter already asleep, although her usual bedtime was at least an hour and a half later.

The next morning, mother and father were awakened by the child's strange, raspy cry. The victim would not open her eyes and was unable to hold up her head. Her parents brought her to Rochester Pediatrics and she was soon admitted to Frisbee Hospital.

The next day, the victim's condition worsened and she was transferred to Dartmouth-Hitchcock Medical Center. Dr. James J. Filiano, a pediatrician, treated the victim who, by this time, was in a comatose state and suffering from intermittent seizures. A physical examination revealed she had sustained bilateral retinal hemorrhaging and the splitting or separation of her retinal tissues. Dr. Filiano estimated that the victim's injuries occurred between twenty and forty-eight hours before he saw her, which was consistent with information from the victim's mother and the defendant that the child had appeared healthy until 7:00 p.m. on August 26.

Dr. Filiano asked the mother and father what might have happened to the victim to cause her injuries. Both denied knowing the cause of their daughter's injuries. The mother also asked the defendant if anything had happened while she had been gone on August 26. He denied that anything had happened. On two separate occasions, detectives from the Rochester Police Department also asked the parents if they recalled any accident or other incident that could be responsible for the child's injuries. Both denied knowing anything regarding the cause of their daughter's injuries.

On September 4, however, while meeting with one of the detectives, the defendant disclosed an incident that occurred on August 26 while he had been alone with his daughter. The defendant stated that while he was holding her and giving her a bottle, he fell asleep. As the victim began to fall to the ground, her head made contact with his hand. The defendant awoke and caught the victim by her right leg. The next day the defendant provided a videotape demonstration of how the victim had fallen from his lap. Doctors treating the victim viewed the videotape and concluded that the defendant's description of the incident could not have caused the victim's injuries. Detectives questioned the defendant again to see if he had anything to add to his description of events, and he stated that he did

not.

Approximately two months later, while she was being treated for spinal meningitis at Massachusetts General Hospital, the victim was diagnosed with von Willebrand's disease (VWD). VWD is a hereditary bleeding disorder which affects the blood's ability to clot.

The defendant was indicted for first degree assault for recklessly causing serious bodily injury to the victim. The bench trial consisted mostly of expert medical testimony. Three medical experts testified for the State that the victim's injuries were consistent with a significant and violent shaking incident. The defendant's medical expert did not dispute the nature of the victim's physical injuries, but opined that because the victim suffered from VWD, the force necessary to cause the injuries was actually very slight and that a fall as described by the defendant could have caused her injuries. The trial court found the defendant guilty of first degree assault and this appeal followed.

The defendant makes two insufficiency arguments. He first asserts that there was insufficient evidence presented by the State to demonstrate that he acted recklessly in injuring the victim because the victim's injuries could have been caused by the accident described by the defendant. Second, he argues that the State presented insufficient evidence that the defendant was the one who caused the victim's injuries. To prevail on these arguments, "the defendant must show that no rational trier of fact could have found guilt beyond a reasonable doubt, viewing the evidence in the light most favorable to the State." *State v. Hodgdon*, 143 N.H. 399, 402, 725 A.2d 660, 663 (1999) (quotation omitted). The trier of fact "may . . . infer guilt from circumstantial evidence if that evidence excludes all other rational conclusions." *State v. Evans*, 134 N.H. 378, 383, 594 A.2d 154, 158 (1991).

The defendant argues that there was no basis in the evidence for a finding of guilt beyond a reasonable doubt of first degree assault because the testimony of the State's experts as to what degree of force was necessary to inflict the victim's injuries failed to account properly for the VWD diagnosis. We disagree.

The defendant's trial consisted of conflicting expert opinions. The State introduced testimony from three medical experts: Dr. Filiano, qualified as an expert in pediatrics and neurology; Dr. William J. Rosen, qualified as an expert in ophthalmology; and Dr. Eli H. Newberger, qualified as an expert in pediatrics and in the field of child abuse. Dr. Filiano, who initially treated the victim, testified regarding the types of physical injuries that usually suggest shaken baby syndrome. These included: retinal hemorrhages, bleeding around the brain, subdural hematoma, cerebral edema, and retinoschisis.

Dr. Filiano then testified that when he first examined the victim she was unresponsive, there were occasional jerking movements of her eyes, and she had intermittent seizures. During the initial examination, Dr. Filiano became concerned that there was blood in the back of the retinas and referred her to an ophthalmologist, Dr. Rosen. As a result of Dr. Rosen's examination, the victim was diagnosed as having bilateral hemorrhages through nearly all nine layers of each retina. Additionally, Dr. Filiano diagnosed the victim with having both subdural hematoma and cerebral edema. Based largely on this information, Dr. Filiano testified that in his opinion the victim had "under[gone] an acceleration/deceleration injury," that is, the victim had been shaken.

Dr. Filiano also testified that he had viewed the defendant's videotape demonstration of the incident on August 26. He testified that the demonstration could not explain the victim's injuries because the defendant supported the victim's head and the acceleration/deceleration of the victim's fall was not of sufficient force to have caused the victim's injuries.

After learning that the victim was diagnosed with VWD, Dr. Filiano testified that he re-evaluated the victim's case to determine if VWD supported the defendant's account, and he testified that the injuries to the brain and retinas could not have been caused without a significant force. Additionally, Dr. Filiano testified that the victim suffered from brain atrophy, which occurs when the brain loses some of its structural mass. Finally, Dr. Filiano testified that the victim's injuries -- brain atrophy, retinal injuries, subdural hematoma and cerebral edema -- were tissue injuries as opposed to injuries caused by excessive bleeding.

The ophthalmologist, Dr. Rosen, testified that the victim suffered from retinal hemorrhages and retinoschisis, which is indicative of shaken baby syndrome. He also testified that a disorder affecting the blood's ability to clot would not cause the bleeding in the first place; an event would first need to occur to cause the bleeding. Finally, Dr. Rosen

testified that his opinion was based not on the quantity of blood found, but on its location in the eyes.

The State's final expert witness was Dr. Newberger who testified that, in his opinion, based on the results of the physical examination, the victim's mental status, and the ophthalmological findings, the victim suffered from shaken baby syndrome. Dr. Newberger testified that this opinion took into account the diagnosis of VWD. He also testified, similar to Dr. Rosen, that while the victim's disorder may have increased her tendency to bleed, the injuries could not have been initially caused by VWD. Although the State's experts were all familiar with VWD, none had expertise in that particular disorder.

The defendant's medical expert, Dr. Michael Laposata, was qualified as an expert in coagulation and coagulation studies. Dr. Laposata disputed neither the victim's physical injuries nor that the injuries were caused by an acceleration/deceleration force. Rather, he opined that given her VWD disorder, a trauma such as the one described by the defendant, could have caused the victim's injuries. Dr. Laposata conceded that he had previously neither treated nor diagnosed shaken baby syndrome. Additionally, he conceded that the head of the Pediatrics Division of Massachusetts General Hospital had disclaimed his opinion that because the victim suffered from VWD, a fall as the defendant described could have generated enough force to cause her injuries. Dr. Laposata also disputed whether all of the victim's injuries were tissue injuries as opposed to injuries caused by bleeding.

In reaching its decision that the defendant was guilty of first degree assault, the trial court necessarily evaluated the testimony of the various experts, and found with regard to the defendant's expert that "the reasons he gave in support of his opinion were not sound and that the other medical evidence within this case substantially outweighed the opinion expressed by Dr. Laposata." The trial court, as the trier of fact, was free to evaluate the various experts' credibility, to resolve conflicts in the testimony in favor of the State, see *State v. Wong*, 125 N.H. 610, 625, 486 A.2d 262, 272 (1984), and in doing so "reject any inferences urged by the defendant." *Evans*, 134 N.H. at 384, 594 A.2d at 158 (quotation omitted). Thus, we conclude that the evidence was sufficient for the trial court to find, beyond a reasonable doubt, that the victim's injuries resulted from being recklessly shaken, and to exclude all other rational explanations.

The defendant next contends that, even assuming that the victim's injuries were caused by shaking, there was insufficient evidence to establish that the defendant was the one who shook the victim. We disagree.

The State presented evidence that the victim showed no sign of injury when her mother left her with the defendant on August 26. The defendant was then alone with the victim for approximately thirty to forty-five minutes. When the victim's mother returned, the victim was already in bed, and no one had contact with her until the next morning by which time the victim was suffering from various injuries. Dr. Filiano testified that the victim's injuries occurred between twenty and forty-eight hours prior to his examination on August 28. Thus, the evidence clearly showed that the defendant was alone with the infant at the critical time the injury was apparently inflicted. *State v. McClary*, 541 A.2d 96, 103 (Conn. 1988). Viewing the record in the light most favorable to the State, we conclude that there was sufficient evidence from which the trial court could have found beyond a reasonable doubt that the defendant was responsible for the victim's injuries.

The defendant next contends that the trial court erred in permitting the State's experts to testify as to the amount of force required to inflict the victim's injuries. The admission of expert testimony is governed by New Hampshire Rule of Evidence 702:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise.

The trial court's decision to admit expert testimony will be upheld absent a clear abuse of discretion. *State v. Paris*, 137 N.H. 322, 332, 627 A.2d 582, 588 (1993).

The defendant argues that the trial court should have required a Frye hearing, see *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923), to determine if the amount of force required to cause the victim's injuries was accepted in the scientific community given her diagnosis of VWD. Because the parties do not contend that the Daubert standard, see *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), should govern our analysis, we do not decide

whether the Frye test has been superseded by the adoption of New Hampshire Rule of Evidence 702, see, e.g., *State v. Cressey*, 137 N.H. 402, 405, 628 A.2d 696, 698 (1993).

The trial court denied the defendant's request for a Frye hearing, stating that the proffered testimony was opinion, and "not `scientific evidence' subject to a [Frye] analysis. It is not like a BAC [blood alcohol concentration] or a DNA evidence of that type of material which requires the [Frye] analysis. It is simply subject to the standard rules regarding an expert witness . . . ." We agree with the trial court's assessment.

The defendant concedes that shaken infant syndrome, as a term used to connote conditions which may typically result from vigorously shaking a young child, is generally accepted in the medical community. The specific question on appeal, therefore, is whether a Frye hearing was necessary to determine the reliability of testimony regarding the amount of force necessary to cause the victim's injuries given that the victim suffered from VWD.

Having conceded that shaken baby syndrome is generally accepted in the medical community, the defendant necessarily concedes that an expert can testify that symptoms, such as those exhibited by the victim, generally require vigorous shaking. Thus the defendant's contention on appeal is a challenge to the application of such expert testimony to this particular case in light of the victim's diagnosis of VWD. This contention, however, goes more to the weight to be given the experts' opinions rather than to the admissibility of their testimony. "That there are other possible causes of the injur[ies] goes to the weight of the opinion[s], not to [their] admissibility." *McClary*, 541 A.2d at 102.

Based on their respective expertise, each of the experts testified as to the amount of force necessary to inflict the victim's injuries. Although none of the State's experts professed to be experts on VWD, all were familiar with VWD and could offer opinions as to whether minimal force would cause a victim with VWD to suffer such traumatic injuries. The defendant had ample opportunity to test the State's experts regarding the validity of their opinions given the VWD diagnosis. We therefore hold that the trial court did not abuse its discretion in admitting expert testimony regarding the amount of force necessary to cause the victim's injuries.

The defendant also argues that a Frye hearing was necessary relative to Dr. Filiano's direct testimony regarding the amount of force necessary to inflict the victim's injuries:

Studies have been done to try to estimate the amount of force applied and have extrapolated from other scientific studies, and the order is in many times the force of gravity applied to a child. So somewhere between 4 and 10 G's has been considered a reasonable estimate.

Assuming, arguendo, that the State was required to demonstrate that it is generally accepted in the scientific community that the force required to cause shaken baby syndrome is four to ten G-forces, any error was harmless beyond a reasonable doubt.

The State bears the burden of proving that an error is harmless, a burden satisfied by proof beyond a reasonable doubt that the erroneously admitted evidence did not affect the verdict. In deciding whether the State has met its burden, we consider the strength of the alternative evidence presented at trial. We also consider the character of the inadmissible evidence, including whether the evidence was cumulative or inconsequential in relation to the State's evidence.

*Hodgdon*, 143 N.H. at 401-02, 725 A.2d at 663 (quotation omitted).

The defense at trial was that the force inflicted on the victim was minimal. Each of the State's experts disputed this and described the force necessary to cause the victim's injuries as "excessive," "violent," and "vigorous[]." Thus, Dr. Filiano's specific testimony regarding the G forces involved when shaking a baby was cumulative. Moreover, as the trial court noted, it was not required "to find . . . the precise degree of force used," but simply that the amount of force used was reckless.

Intertwined with the defendant's Frye argument is the contention that the State's experts were allowed to testify as to the amount of force required to inflict the victim's injuries without the introduction and examination of the medical literature upon which their opinions were based. Having held that the State's experts could testify as to the amount of force inflicted upon the victim, we find this argument to be without merit. New Hampshire Rule of Evidence 705 provides:

The expert may testify in terms of opinion or inference and give reason therefor without prior disclosure of the underlying facts or data, unless the court requires otherwise. The expert may in any event be required to disclose the underlying facts or data on cross-examination.

See also N.H. R. Ev. 703. The State's experts' testimony does not become unreliable merely because their opinions were based on undisclosed information. The defendant was free to cross-examine the State's experts regarding the basis for their opinions.

Finally, the defendant argues that the trial court erred in allowing Dr. Newberger to rebut Dr. Laposata's opinions because Dr. Newberger lacked expertise in coagulopathy or VWD. We disagree.

The defendant does not dispute that the trial court correctly qualified Dr. Newberger as an expert in pediatrics and child abuse; rather, he contends that the doctor's expertise in these fields does not make him an expert on the effects of VWD on the victim. We agree that simply because a witness has been qualified as an expert in a particular area does not mean that the witness can testify regarding all related areas. Cf., e.g., *Chase v. Mary Hitchcock Mem. Hosp.*, 140 N.H. 509, 512-13, 668 A.2d 50, 53 (1995). Here, however, the focus of the defendant's objection is that Dr. Newberger based his opinion on the effects of VWD on the victim even though he lacked a thorough understanding of VWD and its possible effects.

"Objections to the basis of an expert's opinion go to the weight to be accorded the opinion evidence, and not to its admissibility. The appropriate method of testing the basis of an expert's opinion is by cross-examination of the expert." *Tullgren v. Phil Lamoy Realty Corp.*, 125 N.H. 604, 609-10, 484 A.2d 1144, 1148 (1984) (citation omitted). Here, the defendant had ample opportunity to cross-examine Dr. Newberger on the basis of his opinion that a VWD diagnosis would not lead to the victim's injuries without a severe trauma. This cross-examination allowed the defendant to test the weight that Dr. Newberger's opinion should be given by demonstrating Dr. Newberger's familiarity or lack thereof with VWD. Thus, the trial court did not abuse its discretion in allowing Dr. Newberger's testimony.

Affirmed.

JOHNSON, J., sat for oral argument but retired prior to the final vote; THAYER, J., sat for oral argument but resigned prior to the final vote; BRODERICK, J., concurred; and HORTON, J., retired, specially assigned under RSA 490:3, concurred.