PRESENT: All the Justices

MARIAM TORAISH, ADMINISTRATOR
OF THE ESTATE OF ADAM TRAISH, DECEASED

v. Record No. 160495

JAMES JAY LEE

OPINION BY
JUSTICE WILLIAM C. MIMS
April 13, 2017

FROM THE CIRCUIT COURT OF FAIRFAX COUNTY
Brett A. Kassabian, Judge

In this appeal, the Court considers whether expert testimony was based upon an adequate foundation. The Court also considers whether the circuit court abused its discretion by permitting a defendant physician to offer an opinion as a lay witness.

I. Background and Procedural History

James J. Lee, M.D. is a board certified otolaryngologist. In May 2012, he began treating five-year-old Adam Traish for severe obstructive sleep apnea. Following a sleep study, Dr. Lee recommended that Adam undergo tonsillectomy and adenoidectomy surgery. He scheduled the procedure on an outpatient basis so that Adam could go home following surgery.

Dr. Lee performed the surgery without complications. He transferred Adam to the post-anesthesia care unit where he was monitored by nurses and anesthesiologists. After awakening, he was discharged from the hospital with instructions to take prescribed pain medication every four hours. That afternoon his mother, Mariam Toraish, administered his medication and laid him down for a nap. Thirty minutes later, she found him unresponsive. He was rushed to the hospital where he was pronounced dead.

Jocelyn Posthumus, M.D., performed an autopsy. She concluded that the cause of death was "cardiac arrhythmia of unknown etiology." Her report noted that "[a]lthough nothing of significance was identified microscopically in the heart, an underlying cardiac channelopathy or

cardiac conduction system disorder cannot be ruled out especially given that the child was the product of a consanguineous marriage."[1]

Toraish, as the administrator of Adam's estate, instituted a medical malpractice action against Dr. Lee and his practice. Her complaint alleged that Adam was at a high risk for postoperative "respiratory compromise" due to his severe obstructive sleep apnea, and that Dr. Lee violated the applicable standard of care by failing to order that he be monitored overnight following surgery. In the subsequent jury trial, Dr. Lee, who was not offered or qualified as an expert witness, testified that he was not informed prior to surgery that Adam's parents are first cousins. He also testified that he was not aware that Adam had two siblings who predeceased him. Dr. Lee was then asked,

> Had you been aware of either the consanguineous marriage or the fact that two siblings had died of genetic problems, would you have recommended a [tonsillectomy and adenoidectomy surgery] on an outpatient basis . . .?

Dr. Lee responded, "I would not – knowing that there could be a genetic defect, there would be no way that I could recommend any surgery at that time." Toraish objected, arguing that this testimony was "in the nature of expert testimony." The circuit court overruled the objection.

Dr. Lee sought to offer the testimony of Simeon Boyd, M.D., a board certified pediatric geneticist, as an expert witness on genetics and on Adam's cause of death. Dr. Boyd investigated Adam's case with the goal of providing a "differential diagnosis," whereby he would narrow down the possible causes of death until only one remained. His investigation began with the parents' consanguineous marriage and two predeceased siblings. He also found evidence of developmental delay and "dysmorphic facial features," symptoms of an underlying

[1] In a consanguineous marriage, the spouses are related "by blood." Taber's Cyclopedic Medical Dictionary 550 (22d ed. 2013) (defining "consanguinity").

genetic disorder. After reviewing Adam's medical records, toxicology reports, and Dr. Posthumus's autopsy report, he ordered targeted gene testing on a sample of Adam's DNA. The testing revealed a variant in one of Adam's genes that allowed Dr. Boyd to opine with a "high" degree of medical certainty that Adam died of "cardiac arrest due to Brugada syndrome."[2]

On cross-examination, Dr. Boyd acknowledged that he was not a forensic pathologist, toxicologist, cardiologist, or otolaryngologist. When asked whether postoperative respiratory compromise could have caused Adam's death, Dr. Boyd answered that he is "not qualified to judge that . . . because it's out of the area of [his] expertise." He explained that to provide his differential diagnosis he either excluded all likely causes of death himself or "relied on the expertise of people who are qualified to exclude them."

Toraish did not object to Dr. Boyd's qualifications as an expert in genetics or to his diagnosis of Brugada syndrome. She did object, however, to his opinion that Adam died from Brugada syndrome. She contended that because Dr. Boyd was not qualified to exclude postoperative respiratory compromise as a cause of death, his differential diagnosis was not based upon an "adequate factual foundation." Dr. Lee argued that Dr. Boyd's testimony should be admitted because he relied upon the genetic testing, autopsy report, toxicology report, medical records, and medical research when forming his opinion. Over Toraish's objection, the circuit court qualified Dr. Boyd "to testify not only of the conclusion that the boy suffers from Brugada syndrome, but also . . . that manifestations of that syndrome were the cause of death in this case."

The jury returned a verdict in favor of Dr. Lee and his practice. We granted Toraish this appeal.

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[2] Brugada syndrome is "[a] rare hereditary syndrome . . . [with] a high risk of sudden death from ventricular arrhythmias." Taber's Cyclopedic Medical Dictionary 342 (22d ed. 2013).

II. Analysis

A. Dr. Boyd's Testimony

On appeal, Toraish argues that Dr. Boyd's expert testimony should have been excluded because it lacked an adequate factual foundation. "The admission of expert testimony is a matter within the sound discretion of the trial court, and we will reverse the trial court's judgment only when the court has abused this discretion." *Keesee v. Donigan*, 259 Va. 157, 161, 524 S.E.2d 645, 647 (2000) (citing *Tarmac Mid-Atlantic, Inc. v. Smiley Block Co.*, 250 Va. 161, 166, 458 S.E.2d 462, 465 (1995)). The three principal ways a court abuses its discretion are "when a relevant factor that should have been given significant weight is not considered; when an irrelevant or improper factor is considered and given significant weight; and when all proper factors, and no improper ones, are considered, but the court, in weighing those factors, commits a clear error of judgment." *Manchester Oaks Homeowners Ass'n v. Batt*, 284 Va. 409, 429, 732 S.E.2d 690, 702 (2012) (quoting *Landrum v. Chippenham & Johnston-Willis Hosps., Inc.*, 282 Va. 346, 352, 717 S.E.2d 134, 137 (2011)).

Expert testimony is generally admissible if it will aid the trier of fact in understanding the evidence. *Commonwealth v. Allen*, 269 Va. 262, 274, 609 S.E.2d 4, 12 (2005); Va. R. Evid. 2:702(a)(1). "However, the admission of expert testimony is subject to certain fundamental requirements, including the requirement that the evidence be based on an adequate foundation." *Keesee*, 259 Va. at 161, 524 S.E.2d at 647 (citing *Tittsworth v. Robinson*, 252 Va. 151, 154, 475 S.E.2d 261, 263 (1996)).

Code § 8.01-401.1 permits an expert in civil cases to render an opinion "from facts, circumstances or data made known to or perceived by such witness." It also permits an expert's opinion to be based on any information normally considered by experts practicing in the expert's

discipline, even if that information would be inadmissible in evidence. *Id.*; *see also McMunn v. Tatum*, 237 Va. 558, 565, 379 S.E.2d 908, 912 (1989) (an expert may rely upon hearsay when forming his opinion); Charles E. Friend & Kent Sinclair, The Law of Evidence in Virginia § 13-8[d], at 777-78 (7th ed. 2012).

While Code § 8.01-401.1 has "liberalized the admissibility of expert testimony," *Tittsworth*, 252 Va. at 155, 475 S.E.2d at 263, it does not "sanction[] the admission of expert testimony based upon a mere assumption which . . . has no evidentiary support." *Lawson v. Doe*, 239 Va. 477, 483, 391 S.E.2d 333, 336 (1990). Indeed, "[e]xpert testimony founded upon assumptions that have no basis in fact is not merely subject to refutation by cross-examination or by counter-experts; it is inadmissible." *Norfolk S. Ry. v. Rogers*, 270 Va. 468, 479, 621 S.E.2d 59, 65 (2005) (quoting *Vasquez v. Mabini*, 269 Va. 155, 160, 606 S.E.2d 809, 811 (2005)); *Tarmac*, 250 Va. at 166, 458 S.E.2d at 466 (holding that expert testimony cannot be speculative or founded upon assumptions that have an insufficient factual basis). Thus, a trial court's decision to admit such unsupported testimony is "subject to reversal on appeal." *Vasquez*, 269 Va. at 160, 606 S.E.2d at 811.

1. Dr. Posthumus's Autopsy Report

Generally, when an expert examines facts and circumstances leading to an injury, his opinion as to the cause of the injury is not rendered factually unsupported by the possibility of another cause. *See generally Ford Motor Co. v. Bartholomew*, 224 Va. 421, 429-30, 297 S.E.2d 675, 679-80 (1982). Dr. Boyd, however, purported to give a differential diagnosis, whereby he eliminated all possible causes of death until only one remained. Accordingly, to opine that Adam died from Brugada syndrome, he needed to exclude postoperative respiratory compromise as a cause of death. While he acknowledged that as a geneticist he was not qualified to do this,

he explained that he excluded all potential causes of death outside his area of expertise by "rel[ying] upon the expertise of people who are qualified to exclude them." At trial and on appeal, Dr. Lee has consistently maintained that Dr. Boyd relied on Dr. Posthumus's autopsy report to exclude respiratory compromise as a cause of death.

Dr. Boyd explained that geneticists employ a collaborative approach, wherein they form a "multidisciplinary team" of medical professionals to establish a diagnosis. Dr. Boyd's reliance on Dr. Posthumus's conclusions in the autopsy report was consistent with this practice and therefore appropriate under Code § 8.01-401.1. But, contrary to Dr. Lee's argument, Dr. Posthumus did not actually exclude respiratory compromise as a cause of death. She stated only that Adam died of "cardiac arrhythmia of unknown etiology" and speculated about the possibility of a genetic cause. Moreover, experts for both Toraish and Dr. Lee acknowledged that respiratory compromise would have led to cardiac arrhythmia. Thus, instead of excluding respiratory compromise as a cause of death, the autopsy report leaves it open as a possibility.

Accordingly, respiratory compromise was not excluded by Dr. Boyd nor any source upon which he relied. His differential diagnosis was therefore founded upon an assumption that was not established during the trial. The circuit court abused its discretion by admitting it into evidence.

2. Dr. Casolaro's Deposition

Throughout the course of litigation, Dr. Lee never suggested that Dr. Boyd relied upon anything other than the autopsy report to exclude respiratory compromise as a cause of death. He maintained this position before the trial court and in his brief on appeal to this Court. Nevertheless, during oral argument, Dr. Lee suggested for the first time an alternative basis upon which Dr. Boyd could have relied.

He points to the *de bene esse* video deposition of Mario A. Casolaro, M.D., a board certified pulmonologist. Without objection, Dr. Casolaro was qualified as an expert in pulmonary medicine and opined to a reasonable degree of medical certainty that Adam did not die from respiratory compromise. The video recording of his deposition was played for the jury, but neither the recording nor the transcript of the deposition were included by the parties in the appendix on appeal.

Rule 5:32 states that the "appendix shall contain . . . exhibits necessary for an understanding of the case . . .; [and] other parts of the record to which the parties wish to direct this Court's attention." Rule 5:32(a)(1)(iv) and (vi). In fact, "[i]t will be assumed that the appendix contains everything germane to the granted assignments of error." Rule 5:32(a)(2). "We cannot too strongly urge upon counsel the necessity of complying with the Rules of Court. Everything germane to an error assigned should be designated . . ., so that the printed record may contain everything essential to determine whether or not error has been committed." *Hall v. Miles*, 197 Va. 644, 645-46, 90 S.E.2d 815, 817 (1956) (citing a predecessor of Rule 5:32); *see also Carter v. Nelms*, 204 Va. 338, 340, 131 S.E.2d 401, 403 (1963) ("The purpose of the rule is to incorporate in the printed record everything essential and germane to an intelligent determination of the errors assigned and to relieve the [C]ourt of the burden of looking to the manuscript record for this purpose."). Nevertheless, "[p]arts of the record may be relied on by this Court or the parties even though not included in the appendix." Rule 5:32(a)(2).

Our careful review of the record belies Dr. Lee's argument. Dr. Boyd testified that he "formed [his] opinion of the *causation* of the death" before ordering Adam's genetic testing. (emphasis added). The results of this testing were reported on October 9, 2015, and Dr. Boyd explained that they "confirmed [his] *previously formed* opinion." (emphasis added). Thus, Dr.

Boyd concluded prior to October 9th that Adam died from Brugada syndrome. Dr. Casolaro, however, did not give his *de bene esse* deposition testimony until December 5th – more than eight weeks later. It is therefore impossible for Dr. Boyd to have relied upon this deposition testimony when forming his differential diagnosis.

Additionally, Dr. Boyd repeatedly described the sources upon which he relied when forming his opinion. During voir dire he testified that he relied upon Adam's family history, toxicology reports, the autopsy report, and the results of Adam's genetic testing. During his direct examination, he testified that he relied upon Adam's medical records, medical literature, and the sleep study. During cross-examination, he testified that he relied upon medical literature and the autopsy report. He never testified that he relied upon Dr. Casolaro's conclusions when forming his opinion.

Thus, Dr. Boyd's own testimony defeats the appellee's eleventh-hour attempt to provide a foundation for his differential diagnosis.

B. Dr. Lee's Testimony

Toraish also argues that the circuit court abused its discretion by allowing Dr. Lee, who testified in his own defense as a lay witness, to give expert testimony.[3] Again, we review the circuit court's ruling regarding the admission of evidence for an abuse of discretion. *Landrum*, 282 Va. at 352, 717 S.E.2d at 137.

A doctor who is a defendant in a medical malpractice case may serve as an expert witness in his defense. *See State Farm Mut. Auto. Ins. Co. v. Kendrick*, 254 Va. 206, 209, 491 S.E.2d

[3] We reverse and remand because Dr. Boyd's expert testimony was not supported by an adequate foundation. We nevertheless recognize that the issue presented in Toraish's second assignment of error will likely arise on remand. Accordingly, we analyze it herein. *Cain v. Lee*, 290 Va. 129, 136, 772 S.E.2d 894, 897 (2015) (citing *Harman v. Honeywell Int'l, Inc.*, 288 Va. 84, 95-96, 758 S.E.2d 515, 522 (2014)).

286, 288 (1997); Code § 8.01-396 ("No person shall be incompetent to testify because of interest, or because of his being a party to any civil action."). In so doing, he may provide an "expert opinion" on whether his treatment of the plaintiff "demonstrated that degree of skill and diligence employed by a reasonably prudent practitioner in the same field of practice or specialty in Virginia." *Smith v. Irving*, 268 Va. 496, 502, 604 S.E.2d 62, 65 (2004). Dr. Lee, however, testified only as a lay witness.

As a lay witness, he was permitted to testify as to any matter upon which he had "personal knowledge." Va. R. Evid. 2:602. He could also offer lay witness opinion testimony that was "reasonably based upon [his] personal experience or observations." Va. R. Evid. 2:701; *see also Harman v. Honeywell Int'l, Inc.*, 288 Va. 84, 95-96, 758 S.E.2d 515, 522 (2014) ("The first prong of Rule 2:701 requires personal knowledge."). Dr. Lee's testimony did not transgress these principles. As the defendant in a medical malpractice case, his explanation of "what actions he took and his reasons for taking those actions" was "factual testimony" based upon his personal knowledge of the case. *Smith*, 268 Va. at 501-02, 604 S.E.2d at 65.

Moreover, his statement that he would not have recommended surgery had he known about the consanguineous marriage or predeceased siblings was not an expert opinion. The purpose of expert testimony is to provide the trier of fact with the "scientific, technical, or other specialized knowledge" necessary to "assist the trier of fact to understand the evidence or to determine a fact in issue." Va. R. Evid. 2:702(a)(i); *Holmes v. John Doe*, 257 Va. 573, 578, 515 S.E.2d 117, 120 (1999). Dr. Lee's testimony did not do this, nor was it designed to. He did not testify that when treating children with Adam's background, a reasonably prudent otolaryngologist should not perform tonsillectomy and adenoidectomy surgery. He simply stated, from his personal knowledge and experience, that *he* would not have done so. *See Smith*,

268 Va. at 502, 604 S.E.2d at 65 (holding that "testimony [from a medical doctor who was the defendant in a medical malpractice action] regarding what 'many surgeons *do*' . . . was factual in nature and did not constitute expert testimony" because it did not address the "standard of care") (emphasis added).

As the defendant in a medical malpractice action, Dr. Lee was entitled to give such factual testimony regarding the circumstances that impacted or would have impacted his decision to perform surgery. *See Turner v. Duke University*, 381 S.E.2d 706, 716 (N.C. 1989) (when a plaintiff's treating physician testifies not about the standard of care but about his treatment of the plaintiff and his decision to recommend surgical options, he is providing factual, not opinion, testimony); *Thompson v. KFB Ins. Co.*, 850 P.2d 773, 784-85 (Kan. 1993) ("A treating doctor, while certainly possessing special knowledge, skill, experience, and training required of a witness testifying as an expert, typically would be called principally to recount plaintiff's injury and treatment."). Accordingly, the circuit court did not abuse its discretion by admitting this testimony.

III. Conclusion

Dr. Boyd's expert testimony should not have been admitted because it was based upon an assumption that has no basis in fact. Accordingly, we reverse the judgment and remand the case for a new trial consistent with this opinion.

Reversed and remanded.