## STATE OF MICHIGAN

## COURT OF APPEALS

ROYCE WILCOXSON-BEY, by Next Friend PEPPER WILCOXSON-BEY, and ROXY WILCOXSON-BEY, a Stillborn Child, by PEPPER WILCOXSON-BEY, Personal Representative, and PEPPER WILCOXSON-BEY, Individually,

UNPUBLISHED July 28, 2009

Plaintiff-Appellee,

v

PROVIDENCE HOSPITAL & MEDICAL CENTERS, INC.,

Defendant-Appellant,

No. 279146 Wayne Circuit Court LC No. 05-524008-NH

**ON REMAND** 

and

DEBRA WRIGHT, M.D., and ST. JOHN HEALTH SYSTEMS, INC.,

Defendants.

Before: Murphy, P.J., and Sawyer and Fitzgerald, JJ.

PER CURIAM.

This case is before us once again following remand from our Supreme Court. *Wilcoxson-Bey v Providence Hosp & Medical Ctrs, Inc*, 483 Mich 1023; 765 NW2d 344 (2009). We initially held that causation was not established as a matter of law, reversing a \$3 million medical malpractice verdict, entered after a bench trial, and remanding for entry of judgment in favor of defendant Providence Hospital & Medical Centers, Inc. (hereinafter defendant). We now affirm the verdict.

<sup>&</sup>lt;sup>1</sup> The parties stipulated to the dismissal of the remaining defendants, and thus they are not parties to this appeal.

As reflected in our earlier opinion, plaintiff Pepper Wilcoxson-Bey was diagnosed with a monoamniotic-monochorionic twin pregnancy, which is an extremely rare high-risk pregnancy wherein both fetuses share a single amniotic sac. A monoamniotic twin pregnancy involves an increased risk of complications, including the possibility that the two umbilical cords will become entangled, that cord compression will ensue, and that subsequently one or both of the fetuses will die or be injured as a result of cord occlusion. Additionally, the death of one twin can lead to brain injury or the death of the other through a process referred to as twin-twin transfusion syndrome. Here, one of plaintiff's twins died and the other, who was delivered by way of an emergency cesarean section, suffered a severe brain injury.

Plaintiff, on behalf of the twins and herself individually, filed suit, alleging that her treating physician, defendant Dr. Debra Wright, committed malpractice in the summer of 2003 during the pregnancy by failing to order daily fetal monitoring. Plaintiff's expert witness, Curtis Cetrulo, M.D., stated that the standard of care or practice in 2003 with respect to a monoamniotic twin pregnancy, beginning at the 26th week of pregnancy, required Dr. Wright to order daily inpatient monitoring with non-stress testing (NST) and, if additionally indicated, with biophysical profiles. NST can detect variable decelerations, which are associated with cord compression. Dr. Cetrulo opined that Dr. Wright breached the standard of care by ordering NST only twice a week. He did indicate that the standard of care did not entail continuous fetal monitoring. Dr. Cetrulo acknowledged that there is always a risk with monoamniotic twin pregnancies because they typically involve some level of cord entanglement. He also acknowledged that, even where NST is undertaken three times a day, a patient can still experience an acute cord accident. Dr. Cetrulo opined, however, that data from the available literature suggested that, in a case involving monoamniotic twins, daily testing "can change the outcome and prevent a poor outcome[.]"

The issues in this case involved defining the appropriate standard of care and causation; the parties stipulated to the amount of damages, \$3 million. The trial court denied defendant's repeated motions for summary disposition and ruled in favor of plaintiff following a bench trial. Defendant appealed, arguing for reversal on the grounds that Dr. Cetrulo's testimony on the standard of care and breach of the standard should have been excluded because the testimony failed to meet the requirements of MRE 702 and MCL 600.2955, or, in the alternative, defendant argued for remand to allow the trial court to conduct an evidentiary hearing on the admissibility of the doctor's testimony. Defendant also argued on appeal that it was entitled to summary dismissal and judgment because there was a failure, as a matter of law, to establish causation. We avoided discussion of the issue concerning the standard of care and the argument that Dr. Cetrulo's testimony with respect to the appropriate standard should be excluded. Instead, for the reasons detailed in the opinion, we held that "plaintiff has not established that it was Dr. Wright's failure to perform daily NST[] that caused the . . . injuries." Wilcoxson-Bey v Providence Hosp & Medical Ctrs, Inc, unpublished opinion per curiam of the Court of Appeals, issued December 11, 2008 (Docket No. 279146). Our Supreme Court disagreed with our conclusion, reversing our ruling and reinstating the trial court's order denying "defendant's motion for summary disposition with regard to causation." Wilcoxson-Bey, supra, 483 Mich 1023. The Supreme Court reasoned and ruled:

When the record is reviewed in its entirety, there was sufficient evidence presented to demonstrate that daily fetal monitoring is effective in the vast

majority of cases in detecting cord compression and fetal distress – which are events that precede cord occlusion and that signal the need for intervention to prevent injury. The actual timing of the occlusion itself is not relevant to the question of whether it is more likely than not that daily fetal monitoring would have discovered cord compression and fetal distress. We therefore REMAND this case to the Court of Appeals for consideration of the other issues raised by the defendant that were not addressed in its opinion.

On the issues raised but not previously addressed, defendant argues that Dr. Cetrulo's opinion that the recognized standard of care in the summer of 2003 required a single regimen of daily NST, rather than testing on a twice-weekly basis, was not scientifically reliable or based on sufficient facts and data. Defendant claims that the medical literature upon which Dr. Cetrulo relied actually demonstrated that there was no consensus of opinion on the standard of care and that different testing regimens, including twice-weekly NST, were in fact being used in 2003. Thus, according to defendant, MRE 702 and MCL 600.2955 precluded admission of Dr. Cetrulo's testimony on the standard of care and breach of the standard, and, because Dr. Cetrulo's testimony was the only evidence on these matters, plaintiff's action must be dismissed. In the alternative, defendant contends that remand for an evidentiary hearing under MRE 702 and Daubert v Merrell Dow Pharmaceuticals, Inc, 509 US 579; 113 S Ct 2786; 125 L Ed 2d 469 (1993), is necessary in order to determine the admissibility of the doctor's testimony. The trial court had ruled that there was a sufficient foundation to allow the testimony and opinions of Dr. Cetrulo on the standard of care. The court denied defendant's motion to strike or exclude Dr. Cetrulo's testimony.

We review a trial court's decision on a motion for summary disposition de novo. *Kreiner v Fischer*, 471 Mich 109, 129; 683 NW2d 611 (2004). "Whether a witness is qualified to render an expert opinion and the actual admissibility of the expert's testimony are within the trial court's discretion." *Tate v Detroit Receiving Hosp*, 249 Mich App 212, 215; 642 NW2d 346 (2002), citing *Franzel v Kerr Mfg Co*, 234 Mich App 600, 620; 600 NW2d 66 (1999); see also *People v Dobek*, 274 Mich App 58, 93; 732 NW2d 546 (2007). A court's ruling to exclude or admit expert testimony is therefore reviewed for an abuse of discretion. *Id.*; *Tate, supra* at 215. An abuse of discretion occurs when the decision results in an outcome that falls outside a principled range of outcomes. *Maldonado v Ford Motor Co*, 476 Mich 372, 388; 719 NW2d 809 (2006). If this Court's inquiry into the admissibility of evidence entails a preliminary question of law, such as whether the Michigan Rules of Evidence or statutory provisions preclude admissibility, or simply an issue concerning the construction of an underlying evidentiary rule or statute, this Court reviews the matter de novo. *People v Washington*, 468 Mich 667, 670-671; 664 NW2d 203 (2003); *Dobek, supra* at 93. When a court permits the admission of evidence that is inadmissible as a matter of law, an abuse of discretion is established. *Id*.

Under MRE 104(a), a trial court is not bound by the rules of evidence, except as to privilege, when resolving a preliminary question regarding the qualifications of a person to be a witness or the admissibility of evidence. MRE 104(a) applies to the admission of expert testimony under MRE 702, allowing the court to address the preconditions set forth in MRE 702 before admitting the testimony. *Gilbert v DaimlerChrysler Corp*, 470 Mich 749, 780-781; 685 NW2d 391 (2004). MRE 702 provides:

If the court determines that 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 if (1) the testimony is based on sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

This rule was intended to emphasize the trial court's gatekeeping role to exclude unreliable expert testimony consistent with the United States Supreme Court's decision in *Daubert, supra*. See Staff Comment to 2004 Amendment of MRE 702; *Woodard v Custer*, 476 Mich 545, 599 n 15; 719 NW2d 842 (2006) (Taylor, C.J.); *Gilbert, supra* at 781. While the exercise of the gatekeeper function is within a court's discretion, the court can neither abandon this obligation nor perform the function inadequately. *Gilbert, supra* at 780. "Expert testimony may be excluded when it is based on assumptions that do not comport with the established facts or when it is derived from unreliable and untrustworthy scientific data." *Dobek, supra* at 94.

Our Legislature has also enacted MCL 600.2955 in an apparent attempt to codify the holding in *Daubert, supra*. See *Greathouse v Rhodes*, 242 Mich App 221, 238; 618 NW2d 106 (2000), rev'd in part on other grounds 465 Mich 885 (2001).<sup>2</sup> A trial court "shall consider all of

(1) In an action for the death of a person or for injury to a person or property, a scientific opinion rendered by an otherwise qualified expert is not admissible unless the court determines that the opinion is reliable and will assist the trier of fact. In making that determination, the court shall examine the opinion and the basis for the opinion, which basis includes the facts, technique, methodology, and reasoning relied on by the expert, and shall consider all of the following factors:

- (a) Whether the opinion and its basis have been subjected to scientific testing and replication.
- (b) Whether the opinion and its basis have been subjected to peer review publication.
- (c) The existence and maintenance of generally accepted standards governing the application and interpretation of a methodology or technique and whether the opinion and its basis are consistent with those standards.
  - (d) The known or potential error rate of the opinion and its basis.
- (e) The degree to which the opinion and its basis are generally accepted within the relevant expert community. As used in this subdivision, "relevant (continued...)

<sup>&</sup>lt;sup>2</sup> MCL 600.2955 provides in pertinent part:

the . . . factors" listed in MCL 600.2955(1). See Clerc v Chippewa Co War Mem Hosp, 477 Mich 1067, 1068; 729 NW2d 221 (2007).

In a medical malpractice action, a plaintiff must prove the applicable standard of care, breach of the standard of care, and an injury proximately caused by the breach of the standard of care. Gonzalez v St John Hosp & Medical Ctr (On Rehearing), 275 Mich App 290, 294; 739 NW2d 392 (2007). "Failure to prove any one of these elements is fatal." Cox v Flint Bd of Hosp Managers, 467 Mich 1, 10; 651 NW2d 356 (2002). Expert testimony is necessary to establish the applicable standard of care and to demonstrate that the defendant breached that standard. Gonzalez, supra at 294-295. For a specialist, the applicable standard of care is "the recognized standard of practice or care within that specialty as reasonably applied in light of the facilities available in the community or other facilities reasonably available under the circumstances." MCL 600.2912a(1)(b).

Here, we hold that Dr. Cetrulo's testimony and the underlying literature regarding the appropriate course of treatment and practice standards supported the court's ruling.

Dr. Cetrulo explained that the effectiveness of daily monitoring and testing was reflected in his own experience with the five to ten monoamniotic twin pregnancies that he had personally managed and in the medical literature. He believed that, "in 2003, there was enough in the medical literature to suggest [that] the more prudent way of managing monoamniotic twins was to admit [the mother] at somewhere around 26 weeks and do daily testing. And, therefore, the failure to do that was a deviation in acceptable standards of care."

In a 1987 study found in the American Journal of Obstetrics and Gynecology entitled Antenatal diagnosis and management of monoamniotic twins, a team of doctors in the field of maternal-fetal medicine from the Department of Obstetrics and Gynecology, University of Connecticut, stated:

Cord entanglement should . . . be sought at each examination. We recommended hospitalization for bed rest and daily testing in all monoamniotic twins. Since the incidence of cord entanglement is great, we felt that changes in fetal heart tracings might precede intrauterine fetal demise . . . . Therefore daily nonstress tests are recommended. [Emphasis added.]

(...continued)

expert community" means individuals who are knowledgeable in the field of study and are gainfully employed applying that knowledge on the free market.

- (f) Whether the basis for the opinion is reliable and whether experts in that field would rely on the same basis to reach the type of opinion being proffered.
- (g) Whether the opinion or methodology is relied upon by experts outside of the context of litigation.

This was 16 years prior to the incident that occurred in the case at bar.

In a 1993 study found in the American Journal of Obstetrics and Gynecology entitled *The use of color flow Doppler ultrasonography to diagnose umbilical cord entanglement in monoamniotic twin gestations*, a team of doctors in the field of maternal-fetal medicine from the Department of Obstetrics and Gynecology, Baylor College of Medicine, stated:

In our institutions we admit patients with potentially viable monoamniotic twin pregnancies and confirmed cord entanglement,[<sup>3</sup>] and electronic fetal heart rate monitoring is undertaken *three time daily*. We also perform biweekly biophysical profiles. In those cases where fetal heart rate abnormalities occur, color flow Doppler may be useful in confirming umbilical vein compression, a situation that is known to be associated with sudden fetal loss. [Emphasis added.]

In a 1997 study found in the American Journal of Obstetrics and Gynecology entitled *Monoamniotic twins: Improved perinatal survival with accurate prenatal diagnosis and antenatal diagnosis fetal surveillance*, a team of doctors from the Department of Obstetrics and Gynecology, University of Connecticut, including Dr. Rodis who worked on the above-referenced 1987 study, stated:

In conclusion, we believe that with accurate prenatal diagnosis, intense fetal surveillance, and a timed cesarean delivery the corrected perinatal survival should be [greater than] 90% in the rare obstetric complication of monoamniotic twin pregnancy. Further study is needed to delineate the optimal time for initiation of fetal heart rate monitoring, the role of umbilical Doppler velocimetry, and the frequency with which these tests should be performed.

While the 1997 article called for further study, the doctors noted that 13 cases of monoamniotic twin pregnancies were reviewed, and in the "one case of death not ascribed to major congenital abnormalities[,] the frequency of surveillance was two times per week." This led to the conclusion "that antepartum heart rate testing more than twice weekly may be necessary." More importantly, the article indicated that "[t]he current University of Connecticut protocol for management of monoamniotic twins" included "[d]aily nonstress tests beginning at 24 to 26 weeks." This protocol was in place six years before the tragedy occurred here.

Dr. Cetrulo also referred to Creasy and Resnik, *Maternal-Fetal Medicine* (W.B. Saunders Company, 1999), as being a helpful medical textbook on the standard of care issue. The doctors authoring the chapter on "Multiple Gestation: Clinical Characteristics and Management" indicated:

<sup>&</sup>lt;sup>3</sup> There was evidence of some cord entanglement here prior to the death and injury, but it was not viewed as being a threat to the fetuses.

Because umbilical cord accidents seem to be the primary cause of fetal death, most management protocols for monoamniotic twins emphasize intensive fetal surveillance.

\* \* \*

Because umbilical cord accidents are not predictable by our current methods of fetal surveillance and since continuous fetal heart monitoring throughout pregnancy is not feasible, we have managed monoamniotic twin gestations with *daily non-stress tests from 26 weeks' gestation* to evaluate for increasing frequency of variable decelerations. If variable decelerations increase in frequency, we perform continuous fetal heart monitoring and intervene with cesarean delivery if fetal heart testing becomes nonreassuring. [Emphasis added.]

The record also includes a 2001 abstract from the American Journal of Obstetrics and Gynecology that refers to a study entitled *Intensive Management of Monoamniotic Twin Pregnancies Improves Perinatal Outcome*, which was undertaken by doctors from the New England Medical Center, Cambridge Hospital, Columbia Presbyterian Medical Center, and Tufts University. The study encompassed review of 22 cases of monoamniotic twin pregnancies over a ten-year period. The study stated that the twins "were managed according to a consistent protocol: *daily testing starting between 24-26 weeks*, steroid administration, delivery for evidence of fetal compromise and elective delivery between 34-35 weeks." (Emphasis added.) It also indicated that, "[w]ith a management protocol of intensive antepartum surveillance, no fetal mortality occurred in this group of mono/mono twins, in sharp contrast to the high rates of mortality reported historically."

Finally, the record also includes a study published in 2005 in the American Journal of Obstetrics and Gynecology entitled *Improved perinatal survival of monoamniotic twins with intensive inpatient monitoring*. This study was published after the events that transpired in the present case, but it looked at cases of monoamniotic twin pregnancies occurring between 1993 and 2003. An overview of the results and conclusion stated:

Eighty-seven women had both twins who were surviving at 24 weeks of gestation; 43 women were admitted electively for inpatient surveillance[4] at a median gestational age of 26.5 weeks; the remainder of the women were followed as outpatients and admitted only for routine obstetric indications . . . . [5] No intrauterine fetal deaths occurred in any hospitalized patient. The risk of intrauterine fetal death in women who were followed as outpatients was 14.8% (13/88) versus 0 for women who were followed as inpatients[.] . . .

\_

<sup>&</sup>lt;sup>4</sup> Fetal monitoring was for "1 hour 2 to 3 times daily."

<sup>&</sup>lt;sup>5</sup> "For women followed as outpatients, electronic fetal monitoring was carried out 1 to 3 times per week."

We observed improved neonatal survival and decreased perinatal morbidity among women who were admitted electively for inpatient fetal monitoring.

The authors recommended that, on the basis of the data, practitioners should initiate "fetal heart rate monitoring 2 to 3 times daily for all mothers with monoamniotic twins around the time of viability." The authors further indicated that fetal deaths because of cord entanglement in monoamniotic twins can be "predicted and prevented with monitoring 2 to 3 times a day." While Dr. Wright would not have been aware of this most recent study in 2003, it does reveal that, between 1993 and 2003, the medical community was ordering daily inpatient fetal monitoring and was having complete success with monoamniotic pregnancies when daily monitoring took place, while less frequent outpatient monitoring was, at times, ending in death and injury.<sup>6</sup>

In sum, although there was some literature suggesting different approaches were being utilized in 2003 other than daily fetal monitoring, the great weight of the literature, along with Dr. Cetrulo's own practices, support a conclusion, without need for remand, that the appropriate standard of care or practice entailed daily fetal monitoring. Dr. Cetrulo's testimony was based on sufficient facts and data and was the product of reliable principles and methods, MRE 702, and it satisfied the factors and standards outlined in MCL 600.2955.

Affirmed.

/s/ William B. Murphy

/s/ David H. Sawyer

/s/ E. Thomas Fitzgerald

\_

<sup>&</sup>lt;sup>6</sup> Although the data from this final study could be interpreted as showing that half of practitioners were taking an outpatient, limited NST approach from 1993 to 2003, the data does not specify the timeframe during which the cases of limited monitoring took place. It is entirely feasible that most of the cases of limited, outpatient monitoring occurred closer to 1993 and not 2003, especially given the medical advances over the years that clearly calls for inpatient daily fetal monitoring between 24 to 26 weeks. Thus, we cannot say that the study supports a finding that daily monitoring was not the standard of care in the summer of 2003.