COURT OF APPEALS OF VIRGINIA

Present: Judges Willis, Annunziata and Senior Judge Coleman*
Argued at Richmond, Virginia

VIRGINIA BIRTH-RELATED NEUROLOGICAL
INJURY COMPENSATION PROGRAM

v. Record No. 0827-00-2

ADA F. YOUNG, MOTHER OF
WILLIAM T. YOUNG, JR.

OPINION BY
JUDGE JERE M. H. WILLIS, JR.
FEBRUARY 13, 2001

FROM THE VIRGINIA WORKERS' COMPENSATION COMMISSION

John J. Beall, Jr., Senior Assistant Attorney General (Mark L. Earley, Attorney General; Frank S. Ferguson, Deputy Attorney General, on brief), for appellant.

Grady W. Donaldson, Jr. (Schenkel & Donaldson, P.C., on brief), for appellee.

The Virginia Birth-Related Neurological Injury Compensation Program (Program) appeals the decision of the Workers' Compensation Commission (commission) awarding benefits and expenses to Ada F. Young, mother of William T. Young, Jr., (Tommy), pursuant to Code § 38.2-5009. The Program contends the commission erred when it found that the Program failed to rebut the statutory presumption contained in Code § 38.2-5008(A). For the reasons that follow, we affirm.

* Judge Coleman participated in the hearing and decision of this case prior to the effective date of his retirement on December 31, 2000 and thereafter by his designation as a senior judge pursuant to Code § 17.1-401.

I. THE ACT

The Virginia Birth-Related Neurological Injury Compensation Act (Act) was established to provide compensation to families whose neonates suffer "birth-related neurological injuries." See Code §§ 38.2-5000 through 38.2-5021. Code § 38.2-5001 defines a "birth-related neurological injury" as follows:

> "Birth-related neurological injury" means injury to the brain or spinal cord of an infant caused by the deprivation of oxygen or mechanical injury occurring in the course of labor, delivery or resuscitation in the immediate post-delivery period in a hospital which renders the infant permanently motorically disabled and (i) developmentally disabled or (ii) for infants sufficiently developed to be cognitively evaluated, cognitively disabled.

Code § 38.2-5008(A) provides as follows:

> A rebuttable presumption shall arise that the injury alleged is a birth-related neurological injury where it has been demonstrated, to the satisfaction of the Virginia Workers' Compensation Commission, that the infant has sustained a brain or spinal cord injury caused by oxygen deprivation or mechanical injury, and that the infant was thereby rendered permanently motorically disabled and (i) developmentally disabled or (ii) for infants sufficiently developed to be cognitively evaluated, cognitively disabled.
>
> If either party disagrees with such presumption, that party shall have the burden of proving that the injuries alleged are not birth-related neurological injuries within the meaning of the chapter.

There are two theories of presumptions, the "Thayer theory" and the "Morgan theory." The "Thayer theory," or "bursting

bubble theory," holds that "the only effect of a presumption is to shift the burden of production with regard to the presumed fact." City of Hopewell v. Tirpak, 28 Va. App. 100, 116, 502 S.E.2d 161, 169 (1998) (citations omitted). Under the "Thayer theory," if countervailing evidence is produced by the party against whom the presumption operates, "the presumption is 'spent and disappears,' and the party who initially benefited from the presumption still has the burden of persuasion on the factual issue in question." Id. The Thayer theory has been criticized because it gives presumptions an effect that is too "slight and evanescent" in view of the substantial policy reasons underlying their creation. See id.

The second theory, the "Morgan theory," holds that the "presumption should have the effect of shifting both the burden of production and the burden of persuasion on the factual issue in question to the party against whom the presumption operates." Id. This interpretation of the presumption's effect ensures that the "presumption, particularly one created to further public policy, has 'enough vitality to survive the introduction of opposing evidence which the trier of fact deems worthless or of slight value.'" Id. at 117, 502 S.E.2d at 169 (quoting 9 Wigmore, Evidence § 2493g (Chadbourn rev. 1981)).

The Program contends that Code § 38.2-5008(A) sets forth a "Thayer theory" presumption. The Program argues that it needed only produce evidence that Tommy's injury was not a

"birth-related neurological injury" to be relieved of paying compensation. Alternatively, the Program contends that even if Code § 38.2-5008(A) sets forth a "Morgan theory" presumption, it sufficiently rebutted the presumption by proving that Tommy's condition does not result from a "birth-related neurological injury."

"The law of presumptions in Virginia reflects both the Thayer theory and the Morgan theory." Tirpak, 28 Va. App. at 117, 502 S.E.2d at 169. In Tirpak, we concluded that "there is no single rule governing the effect of all presumptions; instead, the effect of a particular presumption on the burdens of production and persuasion depends upon the purposes underlying the creation of the presumption." Id. at 118, 502 S.E.2d at 171.

The purpose of Code § 38.2-5008(A) is to implement a social policy of providing compensation to families whose neonates suffer birth-related neurological injuries. To give full effect to this policy, the presumption must be clothed with a force consistent with the underlying legislative intent. Application of the "Thayer theory" would be inconsistent with the policy objectives of Code § 38.2-5008(A). The presumption set forth in Code § 38.2-5008(A) must be construed according to the "Morgan theory." Therefore, the presumption set forth in Code § 38.2-5008(A) shifts to the Program both the burden of

production and the burden of persuasion on the issue of causation.

II. BACKGROUND

Tommy, who suffers from severe cerebral palsy, was born on March 30, 1989, after twenty-seven weeks gestation. Ms. Young, his mother, had undergone an amniocentesis on January 6, 1989, and began leaking amniotic fluid immediately thereafter. As a result, Ms. Young had a placenta previa[1] and developed oligohydramnios[2] and chorioamnionitis.[3]

Shortly before Tommy was born, Ms. Young arrived at Virginia Baptist Hospital with abdominal pains, a bloody vaginal discharge and frequent contractions. A fetal heart monitor was attached and indicated no fetal distress. Because of the suspected chorioamnionitis, placenta previa and prematurity of the pregnancy, Ms. Young was transferred to the University of Virginia Hospital.

Upon arrival at the University of Virginia Hospital at 9:03 p.m., Ms. Young was scheduled for an emergency caesarian section surgery. A fetal heart monitor was attached and indicated no fetal distress. Tommy was delivered at 10:40 p.m.

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[1] "[A] placenta which develops in the lower uterine segment, in the zone of dilatation . . . ." Dorland's Illustrated Medical Dictionary 1023 (26th ed. 1985).

[2] "[T]he presence of less than 300 ml. of amniotic fluid at term." Id. at 919.

[3] "[I]nflammation of fetal membranes." Id. at 264.

The obstetrician noted that the umbilical cord was wrapped once around Tommy's neck. The pH of the umbilical cord was 7.30, described as "good, not poor." The placenta was noted to be "foul smelling," indicating intrauterine infection.

Upon delivery, Tommy was not breathing and had no heart beat. Progress notes indicate that at birth, he was "small; limp & aphallic." CPR was administered. By 10:47 p.m., after administration of a surfactant, chest compressions, and "vigorous" bagging, Tommy's heart and respiratory rates elevated. His color improved, and he was moving. His Apgar scores were "0" at one minute, "1" at five minutes, and "5" at ten minutes.

Tommy was transferred to the neonatal intensive care unit and placed on a ventilator. Dr. Robert Darnell, an attending physician, noted that, upon arrival in the intensive care unit, Tommy "decompensated." The doctors were unable to maintain oxygen levels above eighty percent "despite vigorous bagging." A right-sided pneumothorax was noted, and a chest tube was placed. Tommy required vigorous bagging for one to two hours.

By 2:30 a.m., an attending physician noted that despite receiving the surfactant, treatment for the pneumothorax, and maximum ventilator pressures, Tommy's arterial blood gases were not satisfactory. He mentioned that withdrawal of life support should be considered if Tommy's condition did not improve within ten to twelve hours.

By 3:47 a.m. on March 31, 1989, blood work indicated that Tommy's "moderate" hypochromia should be downgraded to "slight." By 10:10 a.m., x-rays revealed a residual right-sided pneumothorax as well as a pneumomediastinum. By 12:30 p.m., the pneumothorax had resolved. The pneumomediastinum resolved by 11:20 p.m. A head ultrasound taken that day was interpreted as "normal," with no evidence of intracranial hemorrhage.

Tommy's oxygen requirement slowly decreased during his stay in the intensive care unit. He was discharged to Virginia Baptist Hospital on July 7, 1989, with oxygen being administered through nasal cannula. His primary diagnosis was bronchopulmonary dysplasia.

Upon admission to Virginia Baptist Hospital, Tommy's neurological exam was "normal" except for "jitteriness." On August 10, 1989, Dr. Teresa Brennan of the Virginia Baptist Hospital Neurodevelopmental Clinic performed a "baseline neurodevelopmental exam." Dr. Brennan noted that Tommy was "at risk for developmental delay in light of extreme prematurity, low birth weight, initial asphyxia, and severe respiratory distress with subsequent bronchopulmonary dysplasia." She further noted that Tommy's exam was nevertheless "encouraging," given his degree of prematurity.

On August 15, 1989, Tommy was discharged home from Virginia Baptist Hospital. Following an apneic episode on August 23, 1989, he was readmitted. Dr. Stephen Bryant, the admitting

physician, noted that Tommy "has an extensive medical history secondary to a 28 week gestation, asphyxia, and hypoplastic lungs." Dr. Brennan performed a follow-up neurological exam on October 26, 1989, and noted "delayed motor and expressive language skills and borderline language skills." She noted that she discussed with Tommy's parents "the possibility of there having been some significant brain injury related to his perinatal problems." By March 22, 1990, Dr. Brennan diagnosed Tommy with cerebral palsy.

On August 1, 1997, Dr. Mark Abel, with the Commonwealth of Virginia's Children's Rehabilitation Center, opined that Tommy had "spastic quadriparesis secondary to Cerebral Palsy (birth injury)." An April, 1998 Campbell County Public Schools diagnostic summary stated that Tommy's "intellectual abilities fall in the mildly mentally deficient range."

Pursuant to the Virginia Birth-Related Neurological Injury Compensation Act (Act), a panel of physicians reviewed Tommy's medical records to determine whether his neurological condition was caused by the birth process. Dr. John Seeds, chairman of the Medical College of Virginia Hospital's Department of Obstetrics and Gynecology, stated in a September 25, 1998 report that the panel reviewing Tommy's records concluded that "infection or complications of extreme prematurity or both were the causes of this child's problems," and not the birth process. Dr. Seeds noted that "the neonate was described as foul

smelling, as was the fluid, consistent with intrauterine infection." He also stated that, although the Apgar scores were low, the umbilical cord pH was 7.30, "which is strong evidence against intrapartum hypoxemia." He further stated that "fetal heart rate monitoring does not show any pattern consistent with labor related fetal compromise."

The Program requested Dr. John Partridge, an obstetrician, to review Tommy's medical records. In an October 2, 1998 report, Dr. Partridge opined that "the baby's problems cannot be said to have been caused during the window of time around the delivery." At the hearing, Dr. Partridge testified that it was "entirely possible" Tommy had some asphyctic injury during the last weeks prior to birth but it was "more likely" that the injury was after the birth. He testified:

> Because the baby was premature, the baby's air sacks could not hold air, they couldn't let air get in and out well. Even the mechanical ventilator had difficulty doing its job because the baby's respiratory system was poorly developed. The problem lies in that right at birth and immediately after birth we have the least likely scenario of injury. The baby had a poor Apgar at birth. This can certainly indicate a problem either before or during the delivery process. But with resuscitation the baby did perk up, and it was common -- is moving its extremities and having better color by the time it reached the nursery. Plus the initial acid base level that we call a PH level looked good, not poor. If the baby had really suffered inside the uterus or during the delivery time of the C-section, that acid base level or PH should have been poor, not good. In addition, the

> scans that they did on the baby's head initially showed no hemorrhage. That included a CT scan, and a head ultrasound.

He opined that if Tommy had been injured inside the uterus, leading to bleeding inside the brain, that bleeding should have been visible on one of the scans taken in the first two days after birth. He stated:

> So my conclusion is that the baby's problem was caused by the air sack difficulty, the bronchial pulmonary hypoplasia or lack of development as we would phrase it [b]ecause of the prematurity [and] the fact that it had not had the normal amount of amniotic fluid around it to be able to develop those air sacks.

He agreed that "certainly in the first day there was a struggle trying to get good ventilation, and it was a profound struggle, even in that first 24 hours." He noted, however, that during the first half hour to forty-five minutes, the doctors performed immediate resuscitation efforts and the baby seemed to show some response: "The baby was moving its extremities and seemed to improve in color." During the next few hours, Tommy took a turn for the worse and his condition deteriorated from there. Dr. Partridge concluded that Tommy had difficulty ventilating within the first week of birth and that his brain injury developed during that first week. Despite his attending physicians' efforts during that time, they could not overcome the basic deficiency of his small airways.

The deputy commissioner ruled that the Program had overcome the rebuttable presumption set forth in Code § 38.2-5008(A), holding that the pre-delivery fetal heart monitoring and post-delivery pH reading along with the first CT scan and ultrasound together with the opinions of Drs. Seeds and Partridge, overcame the rebuttable presumption and proved that Tommy's condition resulted from injuries that took place other than during labor, delivery and resuscitation. Upon review, the full commission reversed the deputy commissioner's decision, noting that "[Tommy] was not breathing when he was born, the umbilical cord was wrapped around his neck, and he required seven minutes of CPR to resuscitate him." The commission further noted:

> Dr. Brennan, a neurologist, and Dr. Bryant, who treated Tommy shortly after he was born, both attributed his problems in part to asphyxia. Dr. Brennan specifically referred to "initial asphyxia" as contributing to his neurological condition. Dr Wells, another treating physician, simply described Tommy's cerebral palsy as a "birth injury." Dr. Partridge's report indicates that he was trying to discern the "asphyxia causation."

The commission held that the program had "failed to provide sufficient evidence to rebut the statutory presumption [of Code § 38.2-5008(A)]."

III. CREDIBLE EVIDENCE NECESSARY TO REBUT THE PRESUMPTION OF CODE § 38.2-5008(A)

The Program contends that it produced sufficient evidence to overcome the rebuttable presumption set forth in Code

§ 38.2-5008(A). Because the presumption of Code § 38.2-5008(A) shifts to the Program both the burden of production and the burden of persuasion on the issue of causation, whether the Program rebutted the presumption is a question to be determined by the commission as fact finder after weighing the evidence produced by both parties.

> The determination whether the employer has [rebutted the presumption and carried its burden of proof] is made by the Commission after exercising its role as finder of fact. In this role, the Commission resolves all conflicts in the evidence and determines the weight to be accorded the various evidentiary submissions. "The award of the Commission . . . shall be conclusive and binding as to all questions of fact."

Bass v. City of Richmond Police Dep't, 258 Va. 103, 114, 515 S.E.2d 557, 562 (1999) (quoting Code § 65.2-706(A)). "On appeal from this determination, the reviewing court must assess whether there is credible evidence to support the commission's award." Id. at 115, 515 S.E.2d at 563 (citations omitted).

In ruling that the Program had failed to rebut the presumption, the full commission found as follows:

> We are persuaded that the Program has not carried its burden. Notwithstanding the opinions of Dr. Seeds, writing on behalf of the panel, and Dr. Partridge, it is clear that Tommy suffered from oxygen deprivation during the birth-process -- he was not breathing when he was born, the umbilical cord was wrapped around his neck, and he required seven minutes of CPR to resuscitate him. Although his condition improved for a few moments after resuscitation, he

> immediately decompensated in intensive care and for several hours the doctors were unable to obtain acceptable oxygen levels.
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> As to the contribution of this oxygen deprivation to his disability, Dr. Brennan, a neurologist, and Dr. Bryant, who treated Tommy shortly after he was born, both attributed his problems in part to asphyxia. Dr. Brennan specifically referred to "initial asphyxia" as contributing to his neurological condition. Dr. Wells, another treating physician, simply described Tommy's cerebral palsy as a "birth injury." Dr. Partridge's report indicates that he was trying to discern the "asphyxia causation."

"Medical evidence is not necessarily conclusive, but is subject to the commission's consideration and weighing." Hungerford Mechanical Corp. v. Hobson, 11 Va. App. 675, 677, 401 S.E.2d 213, 214 (1991). In its role as fact finder, the commission was entitled to weigh the medical evidence. The commission did so and accepted the opinions of a treating physician, Dr. Bryant, and of Dr. Brennan, a neurologist, while rejecting the contrary opinions of Drs. Seeds and Partridge. "Questions raised by conflicting medical opinions must be decided by the commission." Penley v. Island Creek Coal Co., 8 Va. App. 310, 318, 381 S.E.2d 231, 236 (1989).

From this record, we find credible evidence supporting the commission's decision. "The fact that there is contrary evidence in the record is of no consequence if there is credible evidence to support the commission's finding." Wagner Enters., Inc. v. Brooks, 12 Va. App. 890, 894, 407 S.E.2d 32, 35 (1991).

Accordingly, we affirm the judgment of the commission.

Affirmed.

Annunziata, J., dissenting.

I respectfully dissent from the majority opinion. Although the evidence fully establishes that the infant suffered oxygen deprivation and injury, it fails to establish that the injury was caused by oxygen deprivation occurring in the course of labor, delivery or resuscitation in the immediate post-delivery period. Thus, the evidence presented by the Program, all of which established that the injury was caused by conditions occurring prenatally, remained uncontroverted and was sufficient to rebut the statutory presumption arising under Code § 38.2-5008(A)(1).

The commission found that the infant "suffered from oxygen deprivation during the birth process [because] he was not breathing when he was born, the umbilical cord was wrapped around his neck, and he required seven minutes of CPR to resuscitate him." In addition, the commission noted that several physicians attributed the infant's neurological disabilities to the asphyxia the infant suffered. However, there is no finding that the asphyxia causing the injury occurred during labor, delivery or in the immediate post-delivery time frame. Nor is there evidence to support such a finding.

While there is little dispute that the infant's problems are attributable at least in part to asphyxia at birth, asphyxia alone is insufficient to support an award under Code

§§ 38.2-5001, -5008, -5009. In addition to the express words used in the statute which limit compensation to neonates who suffer an "injury to the brain or spinal cord . . . caused by the deprivation of oxygen or mechanical injury occurring in the course of labor, delivery or resuscitation in the immediate post-delivery period," the Virginia legislature specifically excluded neonates who suffer "disability . . . caused by genetic or congenital abnormality, degenerative neurological disease, or maternal substance abuse" from the compensation scheme. Code § 38.2-5001 (emphasis added); see also Code § 38.2-5014. Thus, in the absence of evidence showing that the asphyxia occurred in the course of "labor, delivery, or resuscitation in the immediate post-delivery period," and that it caused the resultant injury, no award may be made.

In proving a compensable injury in this case, the claimant relied solely on the statutory presumption which arises under Code § 38.2-5008(A)(1). The presumption arises upon proof of brain injury caused by oxygen deprivation; proof that the oxygen deprivation caused the injury is not necessary to give rise to the presumption. Id.

As noted by the majority opinion, whether the Program rebutted the presumption is a question to be determined by the commission as fact finder after weighing the evidence produced by both parties. Although claimant presented evidence of the two foregoing elements, she presented no evidence which

established that the oxygen deprivation which occurred in the course of labor, delivery or resuscitation in the immediate post-delivery period caused the infant's injury.

At best, the claimant's medical evidence cited by the commission in support of its conclusion that the Program failed to rebut the statutory presumption is limited to a description of the infant's condition at the time of delivery and in the immediate post-delivery period. The evidence clearly showed that the infant was oxygen deprived, but nothing more.

In reaching its decision, the commission specifically relied on the records provided by the infant's treating physicians, Drs. Brennan, Bryant and Wells. The medical documents relate the child's medical history, but contain no opinion, either express or implied, with respect to whether asphyxia occurring during labor, delivery, or post-delivery in the course of resuscitation caused the disabilities described. A physician's notation of the child's condition at birth, without more, cannot provide the nexus required by statute, which calls for evidence relating the neurological disability to an event occurring during labor, delivery or resuscitation post-delivery.

Dr. Brennan, who conducted a neurological exam of the infant at approximately four months of age, simply noted the infant's medical history at birth, and the fact that the infant was "at risk for developmental delay in light of extreme

prematurity, low birth weight, initial asphyxia, and severe respiratory distress with subsequent bronchopulmonary dsyplasia." She does not state expressly or implicitly that the developmental delay which ultimately occurred was caused by "the deprivation of oxygen . . . occurring in the course of labor, delivery or resuscitation in the immediate post-delivery period." Indeed, she identified multiple factors which might cause the developmental delay in question, and the developmental delay she references at the time of her note itself remained only a possibility. Although after a follow-up neurological exam Dr. Brennan states in her medical report that she discussed with the infant's parents "the possibility of . . . some significant brain injury related to his perinatal problems," the use of the term "perinatal" does not indicate that the infant's injury was caused at birth. The term "perinatal" refers to "the period beginning after the 28th week of pregnancy through 28 days following birth." Taber's Cyclopedic Medical Dictionary 1282 (Clayton L. Thomas, M.D. ed., 15th ed. 1985). Thus, the term "perinatal" refers to a much broader period of time than that required by the statute and, in fact, encompasses a period of time that is not covered by the statute. Code §§ 38.2-5001, -5014 (problems occurring before birth are not compensable under the statute). Finally, I note that Dr. Brennan's opinion, couched as it is in terms of a "possibility" is not relevant evidence of the cause of the infant's injury. "It is well

established that '[a] medical opinion based on a "possibility" is irrelevant [and] purely speculative.'" Circuit City Stores, Inc. v. Scotece, 28 Va. App. 383, 388, 504 S.E.2d 881, 884 (1998) (quoting Spruill v. Commonwealth, 221 Va. 475, 479, 271 S.E.2d 419, 421 (1980)).

Dr. Bryant, who examined the infant upon a hospital admission for an apneic episode, also only noted the infant's "medical history secondary to a twenty-eight week gestation, asphyxia and hypoplastic lungs." He does not state that the infant's injury was caused by oxygen deprivation occurring in the course of labor, delivery or post-delivery resuscitation. Furthermore, neither Dr. Bryant nor Dr. Brennan states that the resulting injury was caused by asphyxia resulting from the umbilical cord wrapped around the infant's neck, a fact relied upon by the commission in its findings, and neither stated that the neurological injury was caused by the post-delivery resuscitation efforts, an alternative basis for awarding compensation under the statute.

The only evidence in the case which arguably links the asphyxia and resulting injury to the period from labor to the immediate post-delivery time frame is that of Dr. Wells, a treating physician who, eight years after the infant's birth, described the child's disability as "Cerebral Palsy (birth injury)." However, nothing in the record supports a conclusion that Dr. Wells used the term "birth injury" as a surrogate for

an opinion that the injury in question was caused by oxygen deprivation occurring in the course of labor, delivery or during immediate post-delivery resuscitation period.

In short, I find no evidence in the record which supports the commission's findings of fact that the injury suffered by the infant was caused by "oxygen deprivation occurring in the course of labor, delivery or resuscitation in the immediate post-delivery period," as required by Code §§ 38.2-5001, -5008, -5009. The only evidence relating to an explanation of the issue of how the injury occurred was presented by the Program. Its evidence showed that the injuries in question occurred in utero before labor commenced.[4] The commission's conclusion that the Program failed to carry its burden of proof and persuasion to rebut the statutory presumption is thus not sustained by the record. For these reasons, I would reverse the commission's decision. Morris v. Badger Powhatan/Figgie International, Inc.,

[4] The medical evidence presented by the Program supporting that conclusion included the presence of oligohydramnios in the mother which is defined as a condition in which there is less than the normal amount of amniotic fluid around the fetus and which may result, inter alia, in underdevelopment of the infant's lungs. Dorland's Illustrated Medical Dictionary 1174 (28th ed. 1994); 4 Attorneys' Dictionary of Medicine and Word Finder O-40 (J.E. Schmidt, M.D. ed., 1999). The Program's evidence also established that the mother suffered a complete placenta previa, and chorioamnionitis, which is an inflammation of the membranes which cover the fetus, Taber's at 324, and that the child was premature. The absence of intraventricular hemorrhage at birth also indicated that no asphyxic injury occurred during labor, delivery, or in the immediate post-delivery period.

3 Va. App. 276, 279, 348 S.E.2d 876, 877 (1986) ("[T]he Commission's findings of fact are not binding upon us when there is no credible evidence to support them.").