

IN THE SUPREME COURT OF NORTH CAROLINA

No. 482A02

FILED: 13 JUNE 2003

BRENDA JOYCE HOLLEY,
Employee

v.

ACTS, INC.,
Employer,
LIBERTY MUTUAL INSURANCE COMPANY,
Carrier

Appeal pursuant to N.C.G.S. § 7A-30(2) from the decision of a divided panel of the Court of Appeals, 152 N.C. App. 369, 567 S.E.2d 457 (2002), remanding with instructions an opinion and award entered 26 February 2001 by the North Carolina Industrial Commission. Heard in the Supreme Court 13 March 2003.

Griffin, Smith, Caldwell, Helder & Helms, P.A., by Annika M. Brock; The Law Offices of George W. Lennon, by George W. Lennon; and Scudder & Hedrick, by Samuel A. Scudder, for plaintiff-appellee.

Hedrick, Eatman, Gardner & Kincheloe, L.L.P., by Terry L. Wallace and Neil P. Andrews, for defendant-appellants.

Smith Moore LLP, by Jeri L. Whitfield and Caroline H. Lock, on behalf of the North Carolina Association of Defense Attorneys, amicus curiae.

LAKE, Chief Justice.

This case arises from proceedings before the North Carolina Industrial Commission and raises the issue of whether the Commission's findings of fact were supported by competent evidence establishing causation between an employment-related injury and the development of deep vein thrombosis (DVT), a

condition caused by a blood clot in a deep vein which obstructs blood flow and causes inflammation.

At the time of the incident, plaintiff was forty-nine years old. She was on blood pressure medication to control her hypertension and was under a doctor's care to lose weight. Since 1995, plaintiff had been taking the estrogen replacement drug Premarin, which increases the risk of blood clots. Her medical history also included treatment for benign breast tumors and complaints of leg cramps. According to medical treatises relied on by the Commission, some of the risk factors for DVT are: age greater than forty; use of estrogen; history of tumors; and preexisting conditions such as heart disease, obesity and hypertension.

On 13 July 1996, while working as a certified nurses' assistant for employer-defendant ACTS, Inc., a retirement center/rest home facility, plaintiff twisted her leg on the carpet and felt a sudden pain in her left calf. She reported the injury immediately but finished working her shift, and afterwards, went home to soak her injured leg. The next day, plaintiff sought medical care for her sore leg at Presbyterian Hospital, where she was examined by Dr. Jason Ratterree, an emergency room physician. Dr. Ratterree diagnosed plaintiff with a pulled calf muscle but wrote in his medical report that he might have suspected "DVT in etiology had not the patient told me that there was sudden pain during slight traumatic episode." Plaintiff was treated with anti-inflammatory and pain medications for a pulled calf muscle, was sent home with a bandage and

crutches, and was ordered to stay off her left leg for three days. As a preventive measure, Dr. Ratterree told plaintiff to stop taking her estrogen replacement drug. If her pain increased, plaintiff was told to return to the hospital for a Doppler study of the leg to determine whether she might have a blood clot. Plaintiff returned to work on 22 July 1996, following a week of bed rest. Approximately five weeks later, following a weekend in bed with a stomach virus, plaintiff awoke with a painful, swollen leg. On 3 September 1996, she returned to the emergency room for treatment. On that date, her doctor ordered a Doppler study of her left leg, which revealed that plaintiff had DVT. After her release from the hospital three days later, plaintiff was seen regularly by internist Dr. Dietlinde Zipkin until 16 November 1996 when she returned to light-duty work. Plaintiff continued to experience leg pain and was hospitalized again in June of 1997 for "chronic DVT." She returned to work on 11 July 1997.

When plaintiff filed a workers' compensation claim, defendants denied payment on the grounds that plaintiff's medical problems stemmed from "a pre-existing condition that was not aggravated or accelerated by a compensable accident or occupational disease." On 31 August 1999, plaintiff filed a request for a hearing before the Commission seeking: lost wages; payment of medical expenses; payment for permanent partial disability; and payment for permanent injury to internal organs or parts of the body, which she claimed resulted from the accident at work. On 22 March 2000, a deputy commissioner heard

the matter and, on 27 June 2000, filed an opinion and award concluding that plaintiff's DVT was not the result of her injury by accident to her left leg arising out of and in the course and scope of her employment, and denying all claims. On 24 January 2001, the full Commission reviewed the case and, on 26 February 2001, filed its opinion and award concluding that plaintiff's DVT was the result of a compensable injury at work and awarding benefits. One commissioner dissented, maintaining that the evidence failed to establish a causal connection between the twisting injury and the DVT. Defendants gave notice of appeal to the Court of Appeals.

On 20 August 2002, a divided panel of the Court of Appeals held that competent evidence supported the full Commission's determination that plaintiff's accident on 13 July 1996 caused her DVT. *Holley v. ACTS, Inc.*, 152 N.C. App. 369, 567 S.E.2d 457 (2002). The dissenting judge held that plaintiff had failed to establish a causal connection between the compensable injury and her ensuing DVT and that the expert testimony was mere speculation. *Id.* at 378-79, 567 S.E.2d at 463-64.

The specific issue before this Court is whether there was competent evidence presented to establish a causal connection between the original injury by accident to plaintiff's leg on 13 July 1996 and her diagnosis of DVT on 3 September 1996. The Court of Appeals' majority determined that competent evidence was presented sufficient to support the Commission's findings of fact and conclusions of law. We disagree.

In deciding an appeal from an award of the Industrial Commission, appellate courts may set aside a finding of fact only if it lacks evidentiary support. *Saunders v. Edenton Ob/Gyn Ctr.*, 352 N.C. 136, 140, 530 S.E.2d 62, 65 (2000); *McRae v. Wall*, 260 N.C. 576, 578, 133 S.E.2d 220, 222 (1963). Although the Industrial Commission is the sole judge of the credibility and the evidentiary weight to be given to witness testimony, *Adams v. AVX Corp.*, 349 N.C. 676, 680, 509 S.E.2d 411, 413 (1998), the Commission's conclusions of law are fully reviewable, *Lanning v. Fieldcrest-Cannon, Inc.*, 352 N.C. 98, 106, 530 S.E.2d 54, 60 (2000). "When the Commission acts under a misapprehension of the law, the award must be set aside and the case remanded for a new determination using the correct legal standard." *Ballenger v. ITT Grinnell Indus. Piping, Inc.*, 320 N.C. 155, 158, 357 S.E.2d 683, 685 (1987).

In a worker's compensation claim, the employee "has the burden of proving that his claim is compensable." *Henry v. A.C. Lawrence Leather Co.*, 231 N.C. 477, 479, 57 S.E.2d 760, 761 (1950). An injury is compensable as employment-related if "any reasonable relationship to employment exists.'" *Kiger v. Bahnson Serv. Co.*, 260 N.C. 760, 762, 133 S.E.2d 702, 704 (1963) (quoting *Allred v. Allred-Gardner, Inc.*, 253 N.C. 554, 557, 117 S.E.2d 476, 479 (1960)). Although the employment-related accident "need not be the sole causative force to render an injury compensable," *Hansel v. Sherman Textiles*, 304 N.C. 44, 52, 283 S.E.2d 101, 106 (1981), the plaintiff must prove that the accident was a causal factor by a "preponderance of the evidence," *Ballenger*, 320 N.C.

at 158-59, 357 S.E.2d at 685. See also 1 Kenneth S. Broun, *Brandis and Broun on North Carolina Evidence* § 41, at 137 (5th ed. 1998).

In cases involving "complicated medical questions far removed from the ordinary experience and knowledge of laymen, only an expert can give competent opinion evidence as to the cause of the injury." *Click v. Pilot Freight Carriers, Inc.*, 300 N.C. 164, 167, 265 S.E.2d 389, 391 (1980). "However, when such expert opinion testimony is based merely upon speculation and conjecture, . . . it is not sufficiently reliable to qualify as competent evidence on issues of medical causation." *Young v. Hickory Bus. Furn.*, 353 N.C. 227, 230, 538 S.E.2d 912, 915 (2000). "[T]he evidence must be such as to take the case out of the realm of conjecture and remote possibility, that is, there must be sufficient competent evidence tending to show a proximate causal relation." *Gilmore v. Hoke Cty. Bd. of Educ.*, 222 N.C. 358, 365, 23 S.E.2d 292, 296 (1942) (discussing the standard for compensability when a work-related accident results in death).

Treatises on evidence note that the standards for admissibility of expert opinion testimony have been confused with the standards for sufficiency of such testimony. See 1 Henry Brandis, Jr., *Brandis on North Carolina Evidence* § 137, at 549 n.57 (2d rev. ed. 1982); Dale F. Stansbury, *The North Carolina Law of Evidence* § 137, at 108 n.67a (Henry Brandis, Jr., 2d ed. Supp. 1970). Prior to 1983, an expert was not allowed to testify on causation "with outright certainty since that would supposedly invade the 'province of the jury.'" *Cherry v. Harrell*, 84 N.C.

App. 598, 603, 353 S.E.2d 433, 436, *disc. rev. denied*, 320 N.C. 167, 358 S.E.2d 49 (1987); see also N.C.G.S. § 8C-1, Rule 704 (2001) (not changed since its adoption in 1983). Therefore, medical experts were asked only whether “a particular event or condition *could* or *might* have produced the result in question, not whether it did produce such result.” *Lockwood v. McCaskill*, 262 N.C. 663, 668, 138 S.E.2d 541, 545 (1964) (quoting Stansbury, *North Carolina Evidence* § 137, at 332 (2d ed. 1963)). With the adoption of Rule 704 in 1983, experts were allowed to testify more definitively as to causation. N.C.G.S. § 8C-1, Rule 704. While the “could” or “might” question format circumvented the admissibility problem, it led to confusion that such testimony was sufficient to prove causation. See *Alva v. Charlotte Mecklenburg Hosp. Auth.*, 118 N.C. App. 76, 80-81, 453 S.E.2d 871, 874 (1995) (a case that erroneously relied on *Lockwood*, an opinion on the *admissibility* of expert opinion testimony, to find “could” or “might” testimony *sufficient* to prove causation). Although expert testimony as to the *possible* cause of a medical condition is admissible if helpful to the jury, *Cherry*, 84 N.C. App. at 604-05, 353 S.E.2d at 437, it is insufficient to prove causation, particularly “when there is additional evidence or testimony showing the expert’s opinion to be a guess or mere speculation,” *Young*, 353 N.C. at 233, 538 S.E.2d at 916.

In the case *sub judice*, the Court of Appeals’ majority held that the Industrial Commission’s findings of fact regarding plaintiff’s DVT were not based on speculative expert medical testimony and were, therefore, competent to show that plaintiff’s

DVT was a result of her 13 July 1996 accident at work. *Holley*, 152 N.C. App. at 376-77, 567 S.E.2d at 462. However, a review of the expert testimony reveals that neither of plaintiff's physicians could establish the required causal connection between plaintiff's accident and her DVT.

In his deposition, Dr. Ratterree made a number of comments that demonstrate the speculative nature of his opinion. Dr. Ratterree testified that DVT is a consideration anytime a patient has calf pain, but he thought it was a "low possibility" in plaintiff's case given her sudden acute injury. Dr. Ratterree said that "by far 90 percent or greater" of his DVT patients have not suffered any injury. He testified that plaintiff could have been developing a blood clot prior to the injury at work, concluding: "It's just a galaxy of possibilities." On cross-examination, Dr. Ratterree responded to questioning as follows:

Q. Can you say to a reasonable degree of medical certainty or a reasonable degree of medical probability that the incident related to you by Ms. Holley was a significant contributing factor in causing DVT?

A. I can't say that, no.

Dr. Zipkin was equally uncertain about the etiology of plaintiff's DVT. In her letter of 14 April 1997 to plaintiff's attorney, Dr. Zipkin stated: "I am unable to say with *any degree of certainty* whether or not the above mentioned work injury is related to the development of her DVT." (Emphasis added.) During her deposition, Dr. Zipkin testified in part as follows:

Q. . . . what, in your opinion, could or might have caused this DVT?

A. I don't really know what caused the DVT.

Q. Is it fair to say that you can't state to a reasonable degree of medical certainty what caused the DVT in this particular incident?

A. It is fair to state, yes.

The entirety of the expert testimony in the instant case suggests that a causal connection between plaintiff's accident and her DVT was possible, but unlikely. Doctors are trained not to rule out medical possibilities no matter how remote; however, mere possibility has never been legally competent to prove causation. *See, e.g., Young*, 353 N.C. at 233, 538 S.E.2d at 916. Although medical certainty is not required, an expert's "speculation" is insufficient to establish causation. *See id.* As the foregoing testimony indicates, plaintiff's doctors were unable to express an opinion to any degree of medical certainty as to the cause of plaintiff's DVT.

When dealing with a complicated medical question such as the genesis of DVT, expert medical testimony is necessary to provide a proper foundation for the Commission's findings. "Reliance on Commission expertise is not justified where the subject matter involves a complicated medical question." *Click*, 300 N.C. at 168, 265 S.E.2d at 391. Therefore, we hold that the medical evidence as to causation in this case was insufficient to support the Industrial Commission's findings of fact and conclusions of law.

Finally, plaintiff argues that defendants failed to prove that plaintiff's preexisting conditions were the sole cause

of her DVT and that, to the contrary, no evidence was presented that plaintiff's DVT was caused by anything other than her work-related accident. This argument is unpersuasive. Plaintiff has the burden to prove each element of compensability, *Harvey v. Raleigh Police Dep't*, 96 N.C. App. 28, 35, 384 S.E.2d 549, 553, *disc. rev. denied*, 325 N.C. 706, 388 S.E.2d 454 (1989); *see also Taylor v. Twin City Club*, 260 N.C. 435, 437, 132 S.E.2d 865, 867 (1963). Furthermore, evidence of plaintiff's age and medical history of hypertension, breast tumors, leg cramps, and estrogen use suggests other potential causes of plaintiff's DVT.

We hold that the entirety of causation evidence before the Commission failed to meet the reasonable degree of medical certainty standard necessary to establish a causal link between plaintiff's twisting injury and her DVT. The opinion of the Court of Appeals, affirming the Industrial Commission's findings of fact, is, therefore, reversed, and this case is remanded to that court for further remand to the North Carolina Industrial Commission for disposition in accordance with this opinion.

REVERSED AND REMANDED.