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Supreme Court of Kentucky

2003-SC-0097-WC

CITY OF OWENSBORO — APPELLANT

V.

APPEAL FROM COURT OF APPEALS
2002-CA-1150-WC
WORKERS' COMPENSATION BOARD NO. 88-41803

GARY DEWAYNE ADAMS; HON. LLOYD R. EDENS, ADMINISTRATIVE LAW JUDGE; AND WORKERS' COMPENSATION BOARD — APPELLEES

OPINION OF THE COURT BY JUSTICE COOPER

AFFIRMING

Upon reopening a previously settled award in this workers' compensation case, KRS 342.125(1)(d), the administrative law judge (ALJ) found that Gary Dewayne Adams was totally disabled as a result of a work-related injury, and awarded benefits under KRS 342.730(1)(a). Both the Workers' Compensation Board and the Court of Appeals affirmed. The primary issue on appeal is not the extent and duration of Adams's disability, but its cause. The employer asserts here as it did below that the ALJ based his decision that Adams's disability was work-related on expert medical evidence that was unreliable and thus inadmissible under KRE 702, and the principles enunciated in

Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993). We affirm.

I. FACTS.

On May 15, 1987, Adams, then age twenty-one, and a co-worker were cleaning a section of sewer line for their employer, the City of Owensboro. Adams's co-worker descended into the manhole and almost immediately collapsed, overcome by methane gas. After radioing for help, Adams attempted a rescue but was also overcome by the gas and fell, striking his head. Rescuers eventually arrived and began pumping oxygen into the manhole. Although Adams later regained consciousness and was taken to safety, his co-worker died from methane inhalation. At the time of his initial application for benefits, Adams had returned to work but still suffered from a sore neck and intermittent pain above his right eye and along the right side of his face. In July 1989, he settled his claim for $6,125.00, representing a lump sum payment for a 9.5% occupational disability.

Although Adams's neck pain abated, episodes of facial pain persisted. He testified upon reopening that he first experienced intermittent episodes of sharp pain that began over his right eye and spread to his face. In 1994, the episodes became more frequent and severe, and he was diagnosed with bilateral trigeminal neuralgia. Eventually, even morphine failed to control it. He underwent fourteen facial surgeries in an attempt to treat the condition but had obtained only temporary relief. Since the May 17, 1987, injury, he had also been treated for meningitis, an abscessed tooth, and shingles. He quit working in September 2000 due to the severity of his facial symptoms. He filed his motion to reopen on December 12, 2000.

II. MEDICAL EVIDENCE.

The record contains medical reports and records prepared by numerous physicians, only a few of whom rendered opinions as to the causation of Adams's bilateral trigeminal neuralgia. The only medical expert who actually testified was Dr. Harry R. van Loveren, a neurosurgeon affiliated with the Mayfield Clinic and the University of Cincinnati. Dr. van Loveren, who began treating Adams in 1994 and was the first physician to diagnose his condition as trigeminal neuralgia, testified that he had treated approximately 1,000 trigeminal neuralgia patients. According to Dr. van Loveren, the ailment is a very rare and specific condition that is typically sudden in onset. It affects the areas of the face controlled by the trigeminal nerve and its three branches, and is characterized by intermittent episodes of very sharp facial pain, followed by remissions and exacerbations. It is also typically undetectable by X-ray and laboratory studies. The immediate cause of the condition is a deterioration of the myelin sheath that encases the trigeminal nerve, which can result from a number of factors, including abnormal blood vessel growth around a nerve, a tumor, multiple sclerosis, trauma, and exposure to toxic chemicals. Dr. van Loveren ultimately opined that Adams's condition was caused by his 1987 exposure to toxic methane gas.

Dr. Harold Moses, Jr., a neurosurgeon affiliated with the Vanderbilt Medical Center, filed a report in which he noted that most individuals with trigeminal neuralgia suffer from multiple sclerosis, and diagnosed Adams's condition as probable relapse-remitting multiple sclerosis. Dr. David H. Mattson, a neurologist affiliated with the Indiana University Multiple Sclerosis Center, filed a report in which he agreed with Dr. Moses but admitted that he found no clinical evidence that Adams suffered from multiple sclerosis. Dr. Stephen Kirzinger, a Louisville neurologist, reported that he was

unable to determine the etiology of Adams's condition but noted that there was no evidence in Adams's history or medical records to confirm the possibility of demyelinating disease (multiple sclerosis). Dr. Kirzinger did not relate Adams's condition to the 1987 accident because he believed that the trigeminal neuralgia had not manifested itself until 1994. However, Dr. van Loveren testified that Adams gave him a history in 1994 of suffering from facial pain since shortly after the 1987 accident.

Dr. Elizabeth A. Shuster, a neurologist with the Mayo Clinic in Jacksonville, Florida, examined Adams in September 2000 and conducted extensive diagnostic testing over several days. She acknowledged in her report that his atypical facial pain raised questions concerning multiple sclerosis and noted that his maternal aunt suffered from it; yet no information obtained during her clinical examination supported that diagnosis, and a magnetic resonance imaging (MRI) test failed to reveal any brain lesions characteristic of multiple sclerosis. She noted other potential causes of trigeminal neuralgia including Lyme Disease and toxic brain injury, which would not be structurally apparent. However, Adams's Lyme serology test was negative. Dr. Shuster also mentioned that temporomandibular joint malfunction can cause facial pain and that herpes simplex may also be associated with facial palsy and possibly with trigeminal neuralgia. However, she did not opine that either of these ailments caused Adams's condition.

Dr. van Loveren testified that the onset of Adams's condition was gradual rather than dramatic. When he failed to respond typically to treatment and when the condition became bilateral, also atypical, Dr. van Loveren attempted to determine causation by a process of elimination. The surgeries revealed no tumor or blood vessel abnormality, and seven years of repeated radiographic studies and spinal fluid analyses had failed to

confirm the presence of multiple sclerosis. Although acknowledging that multiple sclerosis was the only well-documented cause of trigeminal nerve dysfunction, Dr. van Loveren stated that the repeated diagnostic studies and the lack of any neurological deficits outside the facial area led him to conclude that Adams did not suffer from multiple sclerosis. According to Dr. van Loveren, approximately one in 4,000 persons suffers from trigeminal neuralgia but only approximately one person in 400,000 suffers from the bilateral form; and in perhaps only four or five cases per year is the onset gradual. He admitted that he had seen only one other such case, and there, the patient was diagnosed with multiple sclerosis. He acknowledged that the medical literature contained no documented case associating a specific toxin with trigeminal neuralgia but pointed out that exposure to toxins was a known cause of nerve damage. Convinced that the claimant did not suffer from multiple sclerosis or any of the other known causes of trigeminal neuralgia, and emphasizing that the symptoms began within a year of Adams's exposure to toxic methane gas, Dr. van Loveren was steadfast in his opinion that the exposure caused Adams's condition.

Dr. van Loveren specifically rejected the opinions of Drs. Moses and Mattson, criticizing their use of the presence of trigeminal neuralgia as a clinical criteria for diagnosing multiple sclerosis while at the same time reporting findings inconsistent with multiple sclerosis, i.e., a positive though temporary response to surgery, the absence of brain abnormalities on his MRI, the lack of strong findings of oligoclonal IgG bands in the spinal fluid, and the presence of one very weak IgG band. In other words, the only indicator of multiple sclerosis was the presence of trigeminal neuralgia; thus, it was illogical to conclude that the trigeminal neuralgia was caused by multiple sclerosis.

The ALJ relied almost entirely on Dr. van Loveren's opinion in determining that Adams's 1987 work-related exposure to sewer gas was the cause of his disability. Appellant asserts that the ALJ erred in relying on Dr. van Loveren's opinion, arguing that it did not satisfy the Daubert test for reliability with respect to the admissibility of scientific, technical or other specialized knowledge. We disagree.

III. DAUBERT.

We start with the proposition that the principles established in Daubert, supra, apply to the consideration of Dr. van Loveren's opinion as to causation in this case. The Kentucky Rules of Evidence govern workers' compensation proceedings, 803 KAR 25:010E § 14, and Daubert governs the admissibility of expert testimony under KRE 702. Mitchell v. Commonwealth, Ky., 908 S.W.2d 100, 102 (1995), overruled on other grounds by Fugate v. Commonwealth, Ky., 993 S.W.2d 931, 937 (1999); see also Goodyear Tire & Rubber Co. v. Thompson, Ky., 11 S.W.3d 575, 578 (2000) (adopting principles enunciated in Kumho Tire Co. v. Carmichael, 526 U.S. 137, 119 S.Ct. 1167, 143 L.Ed.2d 238 (1999)). Virtually every state that applies the rules of evidence to workers' compensation proceedings holds that either Daubert or Frye v. United States, 293 F. 1013 (D.C. Cir. 1923), whichever it has adopted, governs the admissibility of expert opinion testimony in workers' compensation proceedings. E.g., United States Sugar Corp. v. Henson, 823 So.2d 104, 107 (Fla. 2002); K-Mart Corp. v. Morrison, 609 N.E.2d 17, 26-27 (Ind. Ct. App. 1993); Bethley v. Keller Constr., 836 So.2d 397, 401-03 (La. Ct. App. 2002); Case of Canavan, 733 N.E.2d 1042, 1048 (Mass. 2000); Wells v. Howe Heating & Plumbing, Inc., 677 N.W.2d 586, 592 (S.D. 2004). The only case found holding otherwise is Banks v. IMC Kalium Carlsbad Potash Co., 77 P.3d 1014, 1018-20 (N.M. 2003), which held that application of Daubert was precluded by a

separate New Mexico statute governing standards for the admission of medical testimony in workers' compensation cases.

The ALJ's function as both "gatekeeper" and fact-finder is irrelevant to this inquiry, and does not preclude the application of Daubert to workers' compensation proceedings. It is uniformly held that Daubert applies to bench trials as well as jury trials. Seaboard Lumber Co. v. United States, 308 F.3d 1283, 1301-02 (Fed. Cir. 2002) ("A concern underlying the rule in Daubert is that without this screening function, the jury might be exposed to confusing and unreliable expert testimony. . . . While these concerns are of lesser import in a bench trial, where no screening of the factfinder can take place, the Daubert standards of relevance and reliability for scientific evidence must nevertheless be met."); United States v. Brown, 279 F.Supp.2d 1238, 1243 (S.D. Ala. 2003) ("Federal district courts are still required to rely only on admissible and reliable expert testimony, even while conducting a bench trial.") (internal quotation and citation omitted); Bradley v. Brown, 852 F.Supp. 690, 700 (N.D. Ind. 1994) ("The court has found no authority that suggests this gate-keeping function is inapposite at a bench-trial and, indeed, the requirement that a scientific expert base his or her testimony upon scientific knowledge is equally apropos regardless of the identity of the fact-finder."), aff'd, 42 F.3d 434 (7th Cir. 1994); Robert G. Lawson, The Kentucky Evidence Law Handbook § 6.20[6], at 458 (4th ed. 2003) ("Daubert is applicable in bench trials . . . ."); Charles Alan Wright & Victor James Gold, 29 Federal Practice & Procedure Evidence § 6266, at 293 (Supp. 2004) ("[S]ince Daubert is aimed at protecting jurors from evidence that is unreliable for reasons they may have difficulty understanding, the standards for admission may be relaxed where the judge is the trier of fact. Nonetheless, Daubert-Kumho still applies in a bench trial."). Like a trial judge in a bench trial, an ALJ in a

workers' compensation case is no more authorized to consider inadmissible evidence than is a jury.

The difference between the application of Daubert in a jury trial and its application in a bench trial or a workers' compensation proceeding is only procedural. In a jury trial, a Daubert hearing, is usually required "to protect juries from being bamboozled by technical evidence of dubious merit." SmithKline Beecham Corp. v. Apotex Corp., 247 F.Supp.2d 1011, 1042 (N.D. Ill. 2003).[1] However, in a bench trial, the trial court, without a Daubert hearing, will often admit the evidence first and then disregard it upon deciding that it is unreliable. United States v. Brown, supra, at 1243 ("[C]ourts conducting bench trials have substantial flexibility in admitting proffered expert testimony at the front end, and then deciding for themselves during the course of trial whether the evidence meets the requirements of Rule 702.") (internal quotation and citation omitted); Berry v. Sch. Dist., 195 F.Supp.2d 971, 977 n.3 (W.D. Mich. 2002) ("A court sitting as trier of fact frequently will allow the testimony to be heard, then will disregard that evidence which is inadmissible . . . ."); Ekotek Site PRP Comm. v. Self, 1 F.Supp.2d 1282, 1296 n.5 (D. Utah 1998) (district courts presiding over bench trials can decide questions of admissibility and reliability after the proffered evidence is presented at trial); Bradley v. Brown, supra, at 700 (granting motion in limine to exclude unreliable expert evidence following completion of bench trial).

"[T]he trial court's broad latitude to make the reliability determination does not include the discretion to abdicate completely its responsibility to do so." Elsayed Mukhtar v. Cal. State Univ., 299 F.3d 1053, 1064 (9th Cir. 2002). A trial court must, at

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[1] Nevertheless, a court need not always hold a Daubert hearing even when the evidence is offered in a jury trial, Clay v. Ford Motor Co., 215 F.3d 663, 667 (6th Cir. 2000), though it should do so when admissibility is not obvious from the record. Commonwealth v. Christie, Ky., 98 S.W.3d 485, 488 (2002).

least, state on the record its Daubert conclusion with respect to reliability. United States v. Velarde, 214 F.3d 1204, 1209 (10th Cir. 2000) ("While we recognize that the trial court is accorded great latitude in determining how to make Daubert reliability findings before admitting expert testimony, Kumho and Daubert make it clear that the court must, on the record, make some kind of reliability determination."). In doing so, however, the court need not recite any of the Daubert factors, so long as the record is clear that the court effectively conducted a Daubert inquiry. United States v. Norris, 217 F.3d 262, 270 (5th Cir. 2000) ("By making a finding of 'substantial similarity,' the district court effectively conducted a Daubert inquiry by ensuring that the evidence was relevant and reliable, despite not expressly addressing the four non-exclusive factors listed in Daubert . . . .").

Our recent statement in Brown-Forman Corp. v. Upchurch, Ky., 127 S.W.3d 615 (2004), that "the ALJ correctly determined that the test set forth in Daubert, supra, did not apply to the admissibility of Dr. Gupta's testimony concerning the cause of the claimant's wrist problems," id. at 621, did not mean that Daubert does not apply to workers' compensation proceedings. Rather, it meant that Daubert did not require exclusion of Dr. Gupta's opinion as to causation. The opinion went on to recite the indicia of reliability that authorized the admission of Dr. Gupta's opinion:

> The basis for the employer's objection is the assertion that Dr. Gupta's opinion of causation is unreliable. Dr. Gupta was a hand surgeon and the claimant's treating physician. His medical expertise was not challenged. He testified to the history he received, to the course of treatment, to the results of testing and observation, and to his opinion that the physical demands of claimant's work caused the harmful changes in her wrists. When deposed, he presented research articles and studies concerning musculoskeletal injuries, including hand injuries and their causes.

Id. at 621-22 (emphasis added). The opinion then concluded that the employer's evidence to the contrary was not so overwhelming as to render unreasonable the ALJ's decision to rely upon Dr. Gupta's opinion. Id. at 622.

Nor does Daubert require exclusion of Dr. van Loveren's opinion as to causation in the case sub judice. The fact that other experts disagree with his opinion is not conclusive. Daubert specifically held that the "general acceptance" test enunciated in Frye v. United States, supra, at 1014, had been superseded by FRE 702. Daubert, 509 U.S. at 588-89, 113 S.Ct. at 2794. A theory's general acceptance in the relevant scientific community is now but one factor to be considered. Id. at 594, 113 S.Ct. at 2797. Furthermore, even though Daubert suggests other relevant factors, i.e., whether the theory has been tested, whether it has been subjected to peer review, and the known or potential rate of error, id. at 592-94, 113 S.Ct. at 2796-97, "[t]he inquiry envisioned by Rule 702 is, we emphasize, a flexible one." Id. at 594, 113 S.Ct. at 2797.

As such, the fact that this is the first known case where trigeminal neuralgia was deemed caused by exposure to toxic gas does not render Dr. van Loveren's opinion per se inadmissible. The issue is not whether anyone else has ever espoused Dr. van Loveren's opinion that trigeminal neuralgia can be caused by exposure to toxic gas, but whether his opinion was reached by a valid scientific method or process, according it a sufficient measure of scientific validity, or whether it is the product of only subjective belief or unsupported speculation, i.e., "junk science." See Gen. Elec. Co. v. Joiner, 522 U.S. 136, 154 n.6, 118 S.Ct. 512, 622 n.6, 139 L.Ed.2d 508 (1997) (Stevens, J., concurring in part and dissenting in part) (defining "junk science" by example).

> The subject of an expert's testimony must be scientific . . . knowledge. The adjective "scientific" implies a ground in the methods and procedures of science. Similarly, the word "knowledge" connotes more than subjective belief or unsupported speculation. . . . Of course, it would be

> unreasonable to conclude that the subject of scientific testimony must be "known" to a certainty; arguably, there are no certainties in science . . . . Indeed, scientists do not assert that they know what is immutably "true" – they are committed to searching for new, temporary, theories to explain, as best they can, phenomena . . . . Science is not an encyclopedic body of knowledge about the universe. Instead it represents a process for proposing and refining theoretical explanations about the world that are subject to further testing and refinement . . . . But, in order to qualify as "scientific knowledge," an inference or assertion must be derived by the scientific method. Proposed testimony must be supported by appropriate validation – i.e., "good grounds," based on what is known.

Daubert, 509 U.S. at 589-90, 113 S.Ct. at 2795 (internal quotations and citations omitted).

Because Dr. van Loveren used sound scientific methodology in reaching his conclusions, we find that the ALJ correctly exercised his discretion in considering them. While the ALJ did not hold a "Daubert hearing" (none was requested), it is clear that he properly conducted the required Daubert analysis. Acknowledging Daubert and its application to workers' compensation proceedings, the ALJ wrote:

> In this instance, the vitae of Dr. Van Loveren [sic] was introduced through his testimony. His qualification leaves no doubt that he is an experienced and recognized expert in the treatment of trigeminal neuralgia. Additionally, he testified that he had treated over 1000 cases in his career. He further explained that the situation presented by Mr. Adams was indeed unique. By reviewing diagnostic testing, he eliminated other potential causes, including the most common, multiple sclerosis, as a cause of Mr. Adams' condition. He further testified that Mr. Adams was exposed to a toxic substance, methane, which was also toxic to nerves. Having eliminated other potential causes of the condition and noting the onset of the preliminary stages of the condition following the 1987 injury and exposure, Dr. Van Loveren [sic] concluded that it was a probable cause of the Plaintiff's condition. I am persuaded by his expertise and analysis, in conjunction with the scientific testing done to eliminate other potential causes, that the exposure to methane in 1987 was the cause of the Plaintiff's trigeminal neuralgia and that Dr. Van Loveren's [sic] opinion comports with the requirements of KRE 702.

(Emphasis added.)

Accordingly, we affirm.

Lambert, C.J.; Graves, Johnstone, Keller, and Stumbo, JJ., concur.

Wintersheimer, J., concurs in result only without separate opinion.

COUNSEL FOR APPELLANT:

W. Kenneth Nevitt
Nevitt Law Office
Suite 4
804 Stone Creek Parkway
Louisville, KY 40223-5361

COUNSEL FOR APPELLEE:

James D. Howes
Howes & Paige, PLLC
Watterson City West, Suite 1020
1941 Bishop Lane
Louisville, KY 40218