IN THE SUPREME COURT OF TENNESSEE
SPECIAL WORKERS' COMPENSATION APPEALS PANEL
AT NASHVILLE
September 22, 2014 Session

JOSEPH E. PEEK v. TRI-GREEN EQUIPMENT, LLC, ET AL.

Appeal from the Circuit Court for Putnam County
No. 11N0089 John Maddux, Judge

No. M2013-02731-SC-R3-WC - Mailed November 20, 2014
FILED: December 30, 2014

An employee was exposed to a chemical in the course of his employment. He alleged that he developed a disabling pulmonary condition as a result of the exposure. His employer denied that the condition was caused by the exposure. The trial court found for the employee and awarded permanent partial disability and other benefits. The employer has appealed, contending that the evidence preponderates against the finding of causation. The appeal has been referred to the Special Workers' Compensation Appeals Panel for a hearing and a report of findings of fact and conclusions of law pursuant to Tennessee Supreme Court Rule 51. We affirm the judgment.

Tenn. Code Ann. § 50-6-225(e) (2008 & Supp. 2013) Appeal as of Right; Judgment of the Circuit Court Affirmed

PAUL G. SUMMERS, SR. J., delivered the opinion of the Court, in which JEFFREY S. BIVINS, J. and BEN H. CANTRELL, SR. J., joined.

Beverly D. Nelms, Knoxville, Tennessee, for the appellants, Tri-Green Equipment, LLC and Wausau Business Insurance Company.

Martin S. Sir and Daniel A. Horwitz, Nashville, Tennessee, for the appellee, Joseph E. Peek.

Opinion

Facts and Procedural Background

Joseph Peek ("Employee") worked for Tri-Green Equipment ("Employer") as a delivery driver and forklift operator. On September 30, 2008, Employee was at work when he and a coworker attempted to pour a chemical fungicide, "Baler's Choice." into a hay bailing machine's reservoir. During the pour, the chemical got onto Employee's arms, shirt, and the bottom of his pants.

Employee stated that the chemical had a strong odor that made it difficult to breathe. Shortly after the incident, Employee was able to wash the chemical off his body and change shirts, but he continued to smell the chemical the rest of the day.

On October 6, 2008, Employee consulted his primary care physician, Dr. Steven Flatt, complaining of muscle weakness and a persistent cough. Employee had no medical history of similar complaints and was prescribed antibiotics. Employee's medical complaints worsened over the days following his visit to Dr. Flatt. On October 12, 2008, Employee went to the emergency room at Cookeville Regional Medical Center with similar complaints of increased severity and was admitted as an in-patient. He was diagnosed with left lower lobe infiltrates.

Employee remained in the hospital for forty-three (43) days, of which eighteen (18) days were spent on a mechanical ventilator after suffering respiratory failure. Employee was discharged on November 24, 2008, but suffered several subsequent hospitalizations and extended periods of rehabilitation.

Employee sought workers' compensation benefits from Employer, but his claim was denied. A Benefit Review Conference between the parties resulted in an impasse. Employee then filed the instant action in the Circuit Court for Putnam County. The case was tried on October 8, 2013.

Employee was fifty-two (52) years old when the trial occurred. He obtained a G.E.D. in 1989. His work history included being a delivery driver, warehouse clerk, valve tester, and maintenance/set up worker for a small appliance manufacturer. His last day of work for Employer was October 3, 2008. Employee testified that he has not worked since that time and, due to pulmonary deficiency and muscle weakness, is now limited to lifting no more than ten or fifteen pounds. He is able to climb a flight of stairs or make his bed but must rest afterwards. Dust, fumes, heat and cold cause him breathing difficulties. Reaching and gripping is difficult due to stiffness in his hands. He is, however, able to walk on a treadmill for up to thirty minutes as recommended by his physician. He uses supplemental oxygen during these and other activities. He did not believe he would be able to perform any of his

previous jobs or could work at any job on a regular basis.

Employee testified that on the morning after the spill occurred, his fingers were "stiff and achy." He did not feel the need to report this symptom at the time because it did not seem serious. The spill occurred on a Tuesday. As the week progressed, he experienced an increase in symptoms. He became tired and weak and began coughing more. On Monday, October 6, Employee went to Dr. Flatt and received a chest x-ray. Dr. Flatt suspected that Employee had bronchitis and prescribed an antibiotic medication. Employee then left for a previously planned vacation in Gatlinburg. His symptoms worsened during the trip. His wife called Dr. Flatt, and Dr. Flatt prescribed a more powerful antibiotic. Patient returned to Cookeville on October 12 and went to the emergency room with breathing difficulties, which led to the previously mentioned hospitalization.

Dr. Flatt testified by deposition that, prior to September 2008, Employee had no pulmonary problems. Dr. Flatt testified that Employee presented on October 6, 2008, complaining he had suffered four (4) days of respiratory symptoms. Although his X-ray appeared normal, his nasal passages were red and inflamed. Dr. Flatt stated that exposure to some chemicals can cause nasal inflammation.

The Employee was admitted to the hospital, where he suffered respiratory failure and had to be placed in intensive care on a mechanical ventilator. Dr. Flatt testified that his course of treatment was "complicated," and Employee's survival was questionable at times. His diagnosis was chemical pneumonitis, consistent with chemical exposure, that developed into acute respiratory syndrome ("ARDS"). Dr. Flatt opined that the exposure to Baler's Choice was related to Employee's illness, but qualified his opinion by stating it was "a family physician's opinion on a specialty condition."

Dr. Flatt opined that Employee was unable to work and has been so since September 2008. Dr. Flatt stated he was aware that Employee had received treatment from physicians at Emory University in Atlanta for muscular condition myositis (inflammation of the muscles), which required a consistent regime of the steroid prednisone. The side effects of prednisone include weight gain, hypertension, thinning of the skin and muscle aches. Dr. Flatt testified that Employee had developed hypertension as a result of the prednisone treatment.

Upon cross examination, Dr. Flatt stated that during Employee's initial visit on October 6, 2008, Employee did not inform him of his exposure to Baler's Choice. Dr. Flatt testified his initial impression was Employee had bacterial bronchitis. Dr. Flatt deferred to specialist testimony as to the causes of Antisynthetase Syndrome and myositis.

Dr. Elizabeth Willers is a pulmonary and critical care physician at Vanderbilt University Medical Center. Employee was referred to her by Dr. Flatt in April 2009. Her

initial examination revealed that Employee was "cushingoid" as a result of chronic prednisone use. He experienced weakness in his legs and required supplemental oxygen in order to maintain normal oxygen levels in his blood. Dr. Willers' review of Employee's 2008 lung CT scan showed diffuse pulmonary infiltrates. Blood tests revealed elevated JO-1 antibodies. Dr. Willers testified the JO-1 levels caused her to suspect that Employee had an autoimmune disorder of the lungs. She referred Employee to the Vanderbilt rheumatology department, where subsequent testing confirmed her suspicion that he suffered from Antisynthetase Syndrome. Dr. Willers said that this is an autoimmune disease of unknown cause. However, she did not believe that Employee's disease was related to his chemical exposure. Employee was started on a course of autoimmune medications, including Cytoxan and Imuran. Employee's lung function stabilized and muscle function improved.

During cross-examination, Dr. Willers restated that the cause of Antisynthetase Syndrome is unknown, and there is no medical literature linking the disease to any chemical exposure. Dr. Willers conceded she did not know the chemical to which the Employee was exposed, other than it was a fungicide. She agreed that a long, critical illness can cause muscular myopathy, but not an inflammatory myopathy such as Employee's. Dr. Willers conceded that chemical exposure could have triggered the disease but stated, during redirect, that it was not probable that this had occurred.

Dr. James Lang, a pulmonary physician, first saw Employee on July 27, 2009, and became his primary treating physician until December 23, 2010, after which he moved his practice to Florida. Based on pulmonary function test and CT scans, his initial diagnosis was pulmonary infiltrates of unknown etiology, but likely due to chemical exposure. He treated Employee with various doses of prednisone, in addition to continued regimens of Cytoxan and Imuran, which Dr. Lang described as chemotherapy drugs intended to slow down Employee's "revved-up" autoimmune process. At various times, Dr. Lang attempted to decrease Employee's dosage of prednisone, but the effort had poor results.

Dr. Lang's diagnosis was interstitial fibrosis, scarring of the connective tissue in the lungs. Dr. Lang considered the issue of causation to be straightforward, opining the cause was inhalation of chemical fumes. Dr. Lang noted that Baler's Choice contained ammonium hydroxide, a known respiratory irritant. In Dr. Lang's view, the ammonia exposure led to inflammation, which caused scarring in the lungs. He attributed Employee's symptoms of muscle weakness to his long stay in intensive care, stating that the condition

> "is common in patients who are in intensive care for a long time. It's a critical care myopathy caused by being in bed for an extended period of time and having many illnesses thrown at a person. They can develop what is called a myopathy and be left extremely weak. Sometimes they do recover, and sometimes they don't. Often times they need physical therapy. Steroids can also cause a myopathy."

Dr. Lang acknowledged that physicians at Vanderbilt and Emory University had diagnosed Employee with Antisynthetase Syndrome, but he was skeptical of that diagnosis. He summarized his opinion by saying

> "[I]t's a very, very rare disease, and it's very strange to try to say that a disease that - - I did look up some information on it. And this disease occurs in about two out of a million people per year. That's one out of 500,000. So what they're trying to say is that the person who had a documented exposure, ends up coincidentally with a disease that's rare as hen's teeth."

During cross examination, Dr. Lang agreed that he never treated a case of Antisynthetase Syndrome; that he was not an expert on the condition; and that it affected both the lungs and the muscles. His opinion on causation was based primarily on the time line of Employee's exposure to Baler's Choice and the onset of his symptoms.

Dr. Jonas Kalnas, an occupational and environmental physician employed by Vanderbilt University, performed an analysis of Employee's case at the request of Employer. He was asked to determine if there was causal connection between the Employee's exposure to Baler's Choice and his pulmonary condition. He reviewed the Employee's medical records and discovery deposition; the depositions of Drs. Flatt, Willers, and Lang; and medical literature concerning Antisynthetase Syndrome. He did not conduct an examination of the Employee. He noted that the Employee was exposed to the Baler's Choice chemical for approximately one-half hour. He stated that interstitial lung disease does not usually arise from a brief, one time exposure. He also noted that the rapid onset of Employee's symptoms was consistent with an autoimmune disorder, such as Antisynthetase.

Dr. Kalnas reviewed information concerning propionic acid and ammonium hydroxide, the primary ingredients in Baler's Choice. Both substances can cause irritation of the nose and airways. However, Employee did not report symptoms consistent with such irritation, such as burning, itching eyes, sneezing, running nose, coughing or hoarseness at the time of the exposure. Dr. Kalnas also observed that the exposure occurred outdoors. He testified that harmful chemical exposures usually occur in enclosed areas where the concentration of fumes is greater. For those reasons, among others, he considered it unlikely that harmful fumes had reached Employee's lungs on September 30, 2008.

Dr. Kalnas noted that physicians at both Vanderbilt and Emory had diagnosed Antisynthetase Syndrome. Additionally, when Employee was treated for that condition with autoimmune medications, his conditions improved. He stated that Employee's condition

deteriorated during his treatment by Dr. Lang, who relied primarily on prednisone. Dr. Kalnas further noted that Employee reported symptoms of muscle fatigue and pain very early in his course. These symptoms were suggestive of an autoimmune disorder. The presence of these symptoms before Employee was hospitalized was inconsistent with Dr. Lang's opinion that Employee's muscular problems were the result of critical care myopathy. Dr. Kalnas restated his opinion that exposure to Baler's Choice did not cause Employee's condition. The basis of his opinion was that there was no evidence in medical literature for a connection between the ingredients of Baler's Choice and Antisynthetase Syndrome, and Employee did not report symptoms of lung or airway irritation at the time of exposure.

Without regard to causation, Dr. Kalnas opined that Employee had a 32% permanent impairment to the body as a whole, based on the results of pulmonary function tests administered by Dr. Flatt.

During cross examination, Dr. Kalnas testified there was very little information about the causes of Antisynthetase Syndrome. For that reason, he said it was not possible to determine what caused Employee to develop it. He agreed that Employee had inhaled fumes of Baler's Choice. He repeated that exposure to ammonia fumes was not a likely cause of inflammation in his lungs because his description of his symptoms at the time of the exposure was not consistent with lung irritation.

After hearing this evidence, the trial court issued its findings from the bench. It found that Employee had sustained a compensable injury as a result of his exposure to Baler's Choice, and that he sustained an 85% partial permanent disability due to that injury. Judgment was entered in accordance with the trial court's findings. Employer has appealed from that judgment, asserting that the evidence preponderates against the trial court's finding that Employee's "autoimmune disease, Antisynthetase Syndrome, arose out of his employment as a result of his exposure in the course of [his] employment with Employer."

Analysis

The standard of review of issues of fact in a workers' compensation case is *de novo* upon the record of the trial court accompanied by a presumption of correctness of the findings, unless the preponderance of evidence is otherwise. Tenn. Code Ann. § 50-6-225(e)(2) (2008 & Supp. 2013). When credibility and weight to be given testimony are involved, considerable deference is given the trial court when the trial judge had the opportunity to observe the witness' demeanor and to hear in-court testimony. Madden v. Holland Group of Tenn., 277 S.W.3d 896, 900 (Tenn. 2009). When the issues involve expert medical testimony that is contained in the record by deposition, determination of the weight

and credibility of the evidence necessarily must be drawn from the contents of the depositions, and the reviewing court may draw its own conclusions with regard to those issues. Foreman v. Automatic Sys., Inc., 272 S.W.3d 560, 571 (Tenn. 2008). A trial court's conclusions of law are reviewed *de novo* upon the record with no presumption of correctness. Seiber v. Reeves Logging, 284 S.W.3d 294, 298 (Tenn. 2009).

In our view, this case concerns an occupational disease and is therefore governed by Tenn. Code Ann. § 50-6-301(2008), which provides:

> As used in this chapter, "occupational diseases" means all diseases arising out of and in the course of employment. A disease shall be deemed to arise out of employment only if:
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> (1) It can be determined to have followed as a natural incident of the work as a result of the exposure occasioned by the nature of the employment;
> (2) It can be fairly traced to the employment as a proximate cause;
> (3) It has not originated from a hazard to which workers would have been equally exposed outside of the employment;
> (4) It is incidental to the character of the employment and not independent of the relation of the employer and employee;
> (5) It originated from a risk connected with the employment and flowed from that source as a natural consequence, though it need not have been foreseen or expected prior to its contraction; and
> (6) There is a direct causal connection between the conditions under which the work is performed and the occupational disease. Diseases of the heart, lung, and hypertension arising out of and in course of any type of employment shall be deemed to be occupational diseases.
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> Tenn. Code Ann. § 50-6-301(2008)

"[O]ccupational diseases arising out of and in the course of employment are synonymous with 'injury' and 'personal injury' for the purposes of the Workers' Compensation Act." Bazner v. Am. States Ins. Co., 820 S.W.2d 742, 746 (Tenn. 1991). We therefore evaluate the issue of causation according to the same standard applied in accidental injury cases. "Although causation in a workers' compensation case cannot be based upon speculative or conjectural proof, absolute certainty is not required because medical proof can rarely be certain." Clark v. Nashville Mach. Elevator Co., 129 S.W.3d 42, 47 (Tenn. 2004); see also Glisson v. Mohon Int'l, Inc./ Campbell Ray, 185 S.W. 3d 348, 354 (Tenn. 2006). All reasonable doubts as to the causation of an injury and whether the injury arose out of the employment should be resolved in favor of the employee. Phillips v. A & H Constr. Co., 134 S.W.3d 145, 150 (Tenn. 2004).

It is undisputed that Employee had no pulmonary symptoms of any sort prior to September 30, 2008. On that date, he was exposed to chemical fumes in the course of employment. He displayed symptoms of respiratory difficulty within a few days of that event, and symptoms developed into acute respiratory failure within another week. He has sustained significant permanent impairment and disability as a result of respiratory and muscle problems. Dr. Willers and physicians at Emory University have diagnosed his condition as "Antisynthetase Syndrome." Dr. Willers and Dr. Kalnas have opined that there is no connection between Employee's exposure to fumes of Baler's Choice and his subsequent disease and disability. Those opinions are based to a large extent on current medical literature concerning Antisynthetase Syndrome. However, the syndrome is very rare. Data about the syndrome is limited. Further, its cause is unknown at this time.

Dr. Flatt, Employee's personal physician, opined that Employee suffered from chemical pneumonitis consistent with chemical exposure. Dr. Lang, who was Employee's treating pulmonologist for a period of time, similarly opined that Employee developed pulmonary fibrosis as a result of chemical exposure. Those opinions were based to a large extent on the timing of the exposure to Baler's Choice and the onset of Employee's symptoms. However, as pointed out by Dr. Kalnas, Employee's description of his initial reaction and symptoms is not entirely consistent with an exposure sufficient to start an inflammatory process in the lungs. Further, both Dr. Flatt and Dr. Lang had limited knowledge concerning Antisynthetase syndrome.

The trial court was thus presented with conflicting expert medical opinions, all of which were based on a combination of known facts, assumptions, and medical uncertainties. Drs. Willers and Kalnas concluded that Employee acquired a very rare condition, the causes of which are unknown. In their view, the exposure to chemical fumes was essentially a coincidence. Drs. Flatt and Lang concluded that Employee acquired a relatively well-known condition as a result of the exposure; but, in doing so, they appeared to discount Employee's own account of his initial reaction to the exposure.

In order for the appellant to succeed, the proof in the record would have to preponderate against the trial court's finding that Employee sustained his burden of proof at trial. When the issues involve expert medical testimony contained in the record by deposition, determination of the weight and credibility of the evidence necessarily must be drawn from the contents of the depositions; and the reviewing court may draw its own conclusion with regard to those issues. Foreman v Automatic Sys. Inc., 272 S.W.3d 560, 571 (Tenn. 2008). Expert testimony may be, and normally is, divided in view between the opposing parties. In Joyner v. Erachem Comilog Inc., No. M2013-02646-SC-R3-WC,2014 WL 4674091, at *1 (Tenn. Workers' Comp. Panel 2014), the plaintiff, Joyner, asserted inhalation injuries and sought workers' compensation benefits. Joyner claimed that exposure

to cadmium exacerbated his emphysema. Id. at *15-17 All of the medical witnesses agreed that Mr. Joyner had emphysema and that his condition was related, at least in part, to his forty year history of cigarette smoking. Id. at *16

Joyner further claimed occupational exposure to nickel caused his dermatitis and exposure to manganese caused neurological deficits. Id. at *15, *17-18 In Joyner, determining proof of causation required resolution of the dilemma requiring distinguishing which of his medical issues could be attributed to cigarette smoking, and which, if any, could be connected to his exposure at work. The trial court ruled Joyner failed to sustain his burden of proof regarding causation. Id. at *18

Here, Employee had no medical history of pulmonary issues. He had no history of cigarette smoking. There was no history of any breathing or lung related illness prior to being exposed to fumes from Baler's Choice. This is a close case which depends on the evaluation of testimony and careful analysis of depositions. Considering the above and having carefully reviewed the record, transcripts, and depositions, we conclude that it would be reasonable for the trial court to have ruled in favor of either party on the issue of causation. All reasonable doubts as to the causation of an injury and whether the injury arose out of the employment should be resolved in favor of the Employee. We must therefore affirm the judgment of trial court. We are unable to find that the totality of the evidence preponderates against the conclusions and findings of the trial court.

Conclusion

The judgment of the trial court is affirmed. Costs are taxed to Tri-Green Equipment, LLC, Wausau Business Insurance Company and their surety, for which execution may issue if necessary.

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Paul G. Summers, Senior Judge

IN THE SUPREME COURT OF TENNESSEE
SPECIAL WORKERS' COMPENSATION APPEALS PANEL
AT NASHVILLE

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Circuit Court for Putnam County
No. 11N0089

No. M2013-02731-SC-R3-WC - Filed December 30, 2014

JUDGMENT

This case is before the Court upon the entire record, including the order of referral to the Special Workers' Compensation Appeals Panel, and the Panel's Memorandum Opinion setting forth its findings of fact and conclusions of law, which are incorporated herein by reference.

Whereupon, it appears to the Court that the Memorandum Opinion of the Panel should be accepted and approved; and

It is, therefore, ordered that the Panel's findings of fact and conclusions of law are adopted and affirmed, and the decision of the Panel is made the judgment of the Court.

Costs will be paid by Tri-Green Equipment, LLC, Wausau Business Insurance Company, for which execution may issue if necessary.

PER CURIAM