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A Recovery for Cancer, Allegedly Caused by Radiation in the Course of Employment, Must Be Based on a Reasonable Probability of Causal Connection.

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CASE NOTES

WORKMEN'S COMPENSATION—QUANTUM OF PROOF—A RECOVERY FOR CANCER, ALLEGEDLY CAUSED BY RADIATION IN THE COURSE OF EMPLOYMENT, MUST BE BASED ON A REASONABLE PROBABILITY OF CAUSAL CONNECTION. *Parker v. Employers Mutual Liability Co. of Wisconsin*, 12 Tex. Sup. Ct. J. 200 (1969).

Plaintiff brought suit against his employer's insurer to recover for a disability allegedly caused by his employment. Based on the jury's verdict, the trial court rendered judgment for total and permanent disability from cancer caused by exposure to radioactive materials in the course of plaintiff's employment. The court of civil appeals reversed and rendered judgment for the defendant on the grounds that the evidence was insufficient to support the award.[1] Held—*Affirmed.* Medical testimony showing merely a possibility that exposure to radiation may cause cancer is insufficient to support an award in a suit for workmen's compensation.

The primary purpose of the Workmen's Compensation Act is to benefit and protect the employee.[2] It provides quick financial relief to an injured workman based on the assumption that his on-the-job injury was the result of the occupation.[3] In 1947 a list of occupational diseases was added to the Texas Workmen's Compensation Act,[4] allowing recovery for previously non-compensable disabilities. An occupational disease is defined as one acquired in the usual and ordinary course of employment and recognized from common experience to be incidental thereto.[5] Included in the list of occupational diseases is "a diseased condition caused by exposure to x-rays or radioactive substances."[6]

In a suit to recover under the Act, the party claiming compensation bears the burden of proof[7] and must show by a preponderance of the evidence[8] the causal connection between his injury and the nature of his employment.[9] If the suit alleges an occupational disease, the claimant cannot recover unless the disease is: (1) due to the nature of an employ-

1 Employers Mutual Liability Insurance Company of Wisconsin v. Parker, 418 S.W.2d 570 (Tex. Civ. App.—San Antonio 1967, writ granted).

2 Fidelity and Casualty Co. of New York v. McLaughlin, 134 Tex. 613, 135 S.W.2d 955 (1940).

3 Clark, *Commentary on The Workmen's Compensation Act*, TEX. REV. CIV. STAT. ANN. art. 8306-8309 (1956).

4 Acts of 1947, 50th Leg., ch. 113, p. 176.

5 Texas Employers' Insurance Association v. Cowan, 271 S.W.2d 350 (Tex. Civ. App.—Fort Worth 1954, writ ref'd n.r.e.).

6 TEX. REV. CIV. STAT. ANN. art. 8306, § 20(h) (1967).

7 TEX. REV. CIV. STAT. ANN. art. 8306, § 5 (1967).

8 Traders and General Insurance Company v. Stubbs, 91 S.W.2d 407 (Tex. Civ. App.—Texarkana 1936, writ ref'd).

9 TEX. REV. CIV. STAT. ANN. art. 8306, § 25 (1967).

ment in which the hazards of such disease actually exist; (2) characteristic thereof; (3) peculiar to the trade, occupation, process, or employment, and (4) actually incurred in such employment.[10] To determine the causal connection between the injury and the employment, the courts must often rely on expert medical testimony. Various rules have been formulated to determine the sufficiency of expert medical testimony showing the requisite causal connection. These rules are divided into two areas. The first area allows the jury to weigh the sufficiency of the evidence even though expert testimony was based on possibilities.[11] Under this theory, the evidence is weighed in its entirety and the jury allows or denies recovery. The more stringent area allows a claimant to recover only when his expert testimony is based on reasonable probability.[12] As a general rule, a recovery in any civil proceeding cannot be based on conjecture, surmise, imagination, fancy, theorizing or suspicion.[13] Thus, an injured workman's recovery is always contingent on the degree of certainty to which his expert witness is able to testify.[14]

The first area is exemplified by *Sentilles v. Inter-Caribbean Shipping Corp.*[15] Sentilles sued his employer for the aggravation of a previously dormant tubercular condition. A specialist testified that the condition *might* be a consequence of an accident which had occurred during the course of his employment. In overruling the defendant's objection to the failure of any medical witness to testify that the accident was in fact the cause of the injury, the court held:

> The matter does not turn on the use of a *particular* form of words by the physicians in giving their testimony. The members of the jury, not the medical witnesses, were sworn to make a legal determination of the question of causation. They were entitled to take all the circumstances, including the medical testimony into consideration.[16]

Following the reasoning of the Supreme Court in *Sentilles*, the Court

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10 *Id.*

11 Sentilles v. Inter-Caribbean Shipping Corp., 361 U.S. 107, 80 Sup. Ct. 173, 4 L. Ed. 2d 142 (1959); Ernest v. Boggs Lake Estates, 12 N.Y.2d 414, 190 N.E.2d 528, 240 N.Y.S.2d 153 (1963); Weller v. Northwest Airlines, Inc., 239 Minn. 298, 58 N.W.2d 739 (1953); Pitman v. Pillsbury Flour Mills, 234 Minn. 517, 48 N.W.2d 735 (1951).

12 Miller v. Springfield Township Highway Dept., 202 Pa. Super. 616, 198 A.2d 399 (1964); Mohler v. Cook, 205 Pa. Super. 232, 209 A.2d 7 (1965); Yount v. United Fire & Casualty Co., 256 Ia. 813, 129 N.W.2d 75 (1964); Reed v. Whitmore Electric Co., 141 So. 2d 569 (Fla. Sup. Ct. 1962).

13 Jacoby v. Texas Employers' Insurance Association, 318 S.W.2d 921 (Tex. Civ. App. —San Antonio 1958, writ ref'd), and cases cited therein.; *See also* 100 C.J.S. *Workmen's Compensation* § 547(4).

14 To avoid an unnecessarily long discussion of medical cause as compared to legal cause, this area is excluded. For a thorough examination of this problem see Small, *Gaffing At a Thing Called Cause*, 31 TEXAS L. REV. 630 (1953).

15 Sentilles v. Inter-Carribean Shipping Corp., 361 U.S. 107, 80 Sup. Ct. 173, 4 L. Ed. 2d 142 (1959).

16 *Id.* at 109-110.

of Appeals of New York has held that it is not the court's function to reject evidence because non-lawyer witnesses fail to use the words preferred by lawyers and judges. Instead, the court shall determine from the entire record whether there is a sufficient showing of causal connection between the accident and the injury.[17] The Minnesota Supreme Court in 1951 decided that causal connection shall be determined from all circumstances surrounding the injury, and that a medical expert's opinion need not be free from doubt or capable of demonstration.[18] The testimony of physicians that they did not know the exact cause of cancer did not prohibit recovery in *Pittman v. Pillsbury Flour Mills.*[19] The Court stated in *Pittman* that although the absence of exact medical knowledge on the cause of cancer makes it impossible to say with absolute certainty whether a particular injury caused a particular result, the Court was not compelled to say that a finding of cause and effect in a given case is without support in the evidence because such tenuous uncertainty exists.[20]

Other jurisdictions require that expert testimony be presented with more certainty. When medical testimony is necessary to establish causal connection, the Pennsylvania courts require medical witnesses to testify, not that the injury or condition might have or possibly came from the assigned cause, rather that in their opinion the result in question did come from the assigned cause.[21] In requiring unequivocal medical testimony, a less direct expression will not constitute legally competent evidence.[22]

In *Yount v. United Fire & Casualty Co.*[23] the Supreme Court of Iowa said that testimony of a possible causal connection is insufficient. Recovery was allowed in *Yount* when the testimony indicated probability or likelihood of a causal connection. Requiring a more stringent rule than probability, the Court in *Reed v. Whitman Electric Co.*[24] held that the medical testimony should establish causal relationship with reasonable medical certainty.

Possibly the best rule is found in *Travelers Ins. Co. v. Industrial Accident Commission.*[25] In *Travelers,* the medical expert testified to prob-

17 Ernest v. Boggs Lake Estates, 12 N.Y.2d 414, 190 N.E.2d 528, 240 N.Y.S.2d 153 (1963). The trial of a workmen's compensation case in New York is limited to the evidence presented at the hearing, and the case is tried as an administrative proceeding and not as a trial de novo as in Texas.

18 Weller v. Northwest Airlines, Inc., 239 Minn. 298, 58 N.W.2d 739 (1953).

19 Pitman v. Pillsbury Flour Mills, 234 Minn. 517, 48 N.W.2d 735 (1951).

20 *Id.*

21 Miller v. Springfield Township Highway Dept., 202 Pa. Super. 616, 198 A.2d 399 (1964).

22 Mohler v. Cook, 205 Pa. Super. 232, 209 A.2d 7 (1965).

23 Yount v. United Fire & Casualty Co., 256 Ia. 813, 129 N.W.2d 75 (1964).

24 Reed v. Whitmore Electric Co., 141 So. 2d 569 (Fla. Sup. Ct. 1962).

25 Travelers Ins. Co. v. Industrial Accident Commission, 33 Cal. 2d 685, 203 P.2d 747 (1949).

able cause, but on cross examination said it was only a possibility. This, coupled with other evidence, was held sufficient to support a recovery.

The instant case has removed any doubts concerning the Texas rule as it presently exists. The Court said, quoting from *Galveston H. & S. A. Ry. Co. v. Powers*,[26] that in Texas, expert medical testimony can enable a plaintiff's action to go to the jury if the testimony is founded upon a "reasonable probability" of causal connection between an act and a present injury. The Court, however, apparently based its decision on the recent case of *Insurance Co. of North America v. Myers*.[27] In this case, the plaintiff alleged that an on-the-job injury aggravated an existing brain tumor producing death. The Court refused recovery holding that medical testimony expressing no more than a medical possibility was insufficient. Similarly, recovery was denied in *Parker*. Parker began work in April 1961, healthy. He worked under constant exposure to radioactive materials for four years. In April 1965, a swelling developed on his neck which was removed and diagnosed as a "metastatic carcinoma in the cervical lymph node"—a malignant tumor.[28] He sought workmen's compensation based on § 20 (h) of article 8306. The expert testimony was to the effect that the etiology of cancer is really unknown. The cancer "could have" been caused by radiation and it is possible for a person exposed to radiation over a long period of time to develop cancer. The experts went on to say that any radioactive material can conceivably cause cancer on prolonged exposure and that anyone exposed to certain amounts of radiation has a higher than normal risk of developing malignant changes in body tissues.[29] The Court held that a recovery for cancer, allegedly caused by radiation in the course of employment, may not be based on medical testimony showing merely that the cancer was "possibly" caused by plaintiff's exposure to radiation.

As a result of *Parker*, it is apparent that in future suits requiring expert medical testimony to determine causal connection, recovery will be denied unless plaintiff presents testimony based on reasonable medical probability. Even when the surrounding evidence points to a probable cause, it seems that unless expert probability testimony is also present, a recovery will be denied.

The Court in *Parker* seems to indicate the requisites for recovery in a case involving a disease or condition whose etiology is uncertain. Proof in such a case must show evidence that there is a causal connection be-

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[26] Galveston H. & S.A. Ry. Co. v. Powers, 101 Tex. 161, 105 S.W. 491 (1907).
[27] Insurance Co. of North America v. Myers, 411 S.W.2d 710 (Tex. Sup. 1966).
[28] Parker v. Employers Mutual Liability Insurance Co. of Wisconsin, 12 TEX. SUP. CT. J. 200, 201 (1969).
[29] *Id.* at 202.

tween cancer and radiation.[30] The other possible causes such as natural radiation, virus, and infection should be designated improbable by the expert. Lastly, the Court appears to require evidence of a sequence of events strong enough to establish a probable causal connection. The criteria for establishing this sequence is based on the quantum of proof necessary to prove a traumatic cancer, which include: measurements of the authenticity and severity of the trauma; the origin of the cancer at the place of injury; and a "reasonable relationship" between the date of the trauma, appearance of the cancer, and the character or structure of the resulting growth.[31] These criteria are equivalent to the so-called Ewing postulates.[32] Ewing's postulates set out seven steps necessary to establish the necessary sequence of events in a traumatic cancer case:

1. *Previous integrity of the wounded part.* This can be shown with relative certainty by showing that the injured person had no history of ailments located in the area of the cancer.
2. *Nature and authenticity of the trauma.* To prove this point it is necessary to prove that the injured plaintiff was exposed to radioactive materials during the course of his employment.
3. *Adequacy or severity of the trauma.* The amount of exposure cannot be determined with any relative certainty. Though there is a lack of scientific knowledge as to what amount of radiation is necessary to cause an injury, it is conceded that there is no safe exposure to radiation.[33]
4. *Diagnosis of the cancer.* The medical expert can testify with absolute certainty as to this point.
5. *Origin of the cancer at the place of inquiry.* In the case of radiation it is impossible to show where radiation entered the body or to show the primary point of the development of the cancer.
6. *Reasonable time relation between date of the trauma and the appearance of the cancer.* This element is also very difficult if not impossible to prove. Because of the varied susceptibility of persons to develop cancer,[34] it would be impossible to determine absolutely what is a reasonable time for the injury to develop.
7. *Character or structure of the resulting growth.* This, like the diagnosis, can be proved with certainty by medical testimony. In applying the postulates to a case in which the plaintiff alleges cancer caused by radiation, it is apparent that three of the seven postulates cannot be proved with certainty.

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30 *Id.*
31 *Id.* at 203.
32 Halpern, *Legal Relation of Trauma and Cancer*, 12 CLEV.-MAR. L. REV. 208 (1963), citing Ewing, *Neoplastic Diseases* 108 (4th Ed. 1940).
33 Parker v. Employers Mutual Liability Insurance Co. of Wisconsin, 12 TEX. SUP. CT. J. 200, 204 (1969), citing Besner v. Walker Kidde Nuclear Labs, 24 App. Div. 2d 1045, 265 N.Y.S. 312, 313 (1965).
34 *Id.*

Apparently the Court in *Parker* is requiring that proof of an occupational disease (disease caused by radioactive exposure) be founded on a criteria which was formulated for use in proving a traumatic injury. Accidental injury (traumatic) is distinguishable from an occupational disease because it can be traced to a definite time, place and cause.[35] Because of their nature, occupational diseases were added separately in the Workmen's Compensation Act, the purpose being to avoid the difficulty of making the plaintiff trace his disease to a specific point in time. By forcing the plaintiff to prove the requirements set out in *Parker*, the Court has changed the requirements of proof set out in the Act itself.[36]

The Court also made reference to certain jurisdictions whose workmen's compensation laws contain implicit presumptions.[37] After citing these jurisdictions, and cases from them which have allowed recovery in suits similar to *Parker*, the Court says:

> *But with no statutory* or common law *rules creating an applicable policy otherwise* this Court must require evidence of a probable causal relation between an injury and act before a case can go to a jury for decision.[38] (Emphasis supplied.)

Here may lie the solution. The Legislature could pass a presumption in favor of the workman to enable him to recover in a case such as *Parker*. The other solution available which will more adequately serve the aims of the Workmen's Compensation Act is to follow the rule of *Atkinson v. United States Fidelity & Guaranty Co.*[39] wherein the court held:

> In determining whether or not a showing of mere possibility and no more has been made, all of the pertinent evidence on the point must be considered. The fact that an expert medical witness, in speaking of cause and effect uses such expressions as "might cause," "could cause," "could possibly cause," or phrases similar thereto does not preclude a jury finding of causal connection, provided there be other supplementary evidence supporting the conclusion. Causal connection is generally a matter of inference, and possibilities may often play a proper and important part in the argument which establishes the existence of such relationship.[40]

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35 Travelers Ins. Co. v. Grimes, 358 S.W.2d 247 (Tex. Civ. App.—Fort Worth 1962, no writ).

36 TEX. REV. CIV. STAT. ANN. art. 8306, § 25 (1967).

37 Parker v. Employers Mutual Liability Insurance Co. of Wisconsin, 12 TEX. SUP. CT. J. 200, 204 (1969).

38 *Id.*

39 Atkinson v. United States Fidelity & Guaranty Co., 235 S.W.2d 509 (Tex. Civ. App. —San Antonio 1950, writ ref'd n.r.e.).

40 *Id.* at 513-514.