

U. S. DEPARTMENT OF LABOR

Employees' Compensation Appeals Board

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In the Matter of LOIS E. CULVER, claiming as widow of CLAIR L. CULVER and  
IMMIGRATION & NATURALIZATION SERVICE, BORDER PATROL,  
Yuma, AZ

*Docket No. 01-640; Submitted on the Record;  
Issued March 5, 2002*

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DECISION and ORDER

Before DAVID S. GERSON, WILLIE T.C. THOMAS,  
MICHAEL E. GROOM

The issue is whether the employee's death on September 28, 1999 was causally related to his federal employment.

The Board has reviewed the case record on appeal and finds that appellant failed to meet her burden of proof in establishing that the employee's death on September 28, 1999 was causally related to his federal employment.

On December 7, 1999 appellant submitted a claim for compensation by widow, Form CA-5, alleging that her husband's death on September 28, 1999 from myelodysplasia was causally related to the long-term medications he took for treatment of his April 17, 1974 accepted employment injuries, which included concussion, contusions to both arms and legs, the head, face, chest, liver and kidneys, fractured ribs, compression fracture of the dorsal vertebrae, right ankle sprain and trigeminal neuralgia of the face.<sup>1</sup> Appellant alleged that the employee's death was directly linked to his 20-year use of Tegretol, a drug prescribed for the treatment of his trigeminal neuralgia. By decision dated April 27, 2000, the Office of Workers' Compensation Programs rejected appellant's claim on the basis that she failed to establish that her husband's accepted employment injuries resulted in his death. On May 11, 2000 appellant requested a review of the written record. By decision dated September 29, 2000, the Office hearing representative affirmed the Office's April 27, 2000 decision denying benefits.

Appellant has the burden of proving by the weight of the reliable, probative and substantial evidence that the employee's death was causally related to his employment.<sup>2</sup> This

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<sup>1</sup> On April 17, 1974 the employee, then a 45-year-old border patrol pilot, sustained multiple injuries in an airplane crash while in the performance of duty. Appellant remained totally and permanently disabled by his injuries until the time of his death.

<sup>2</sup> *Carolyn P. Spiewak (Paul Spiewak)*, 40 ECAB 552, 560 (1989); *Lorraine E. Lambert (Arthur R. Lambert)*, 33 ECAB 1111, 1120 (1982).

burden includes the necessity of furnishing rationalized medical opinion evidence, based on a complete factual and medical background, showing causal relationship.<sup>3</sup>

In the present case, the reverse of the Form CA-5 contains a report from Dr. David Bartsch, a Board-certified internist and the employee's attending physician, indicating that the direct cause of the employee's death was rapidly progressive myelodysplasia which was possibly phasing into an acute myelogenous leukemia. Dr. Bartsch stated that the contributory causes of death were pancytopenia due to myelodysplastic syndrome and staphylococcus aureus septicemia, probably due to bilateral pneumonia. In response to a question as to whether the death of the employee was due to the employment injury, Dr. Bartsch wrote "unknown" and then stated:

"For over 20 years [the] patient was given Tegretol for his trigeminal neuralgia. Adverse reactions can occur with Tegretol that calls for the discontinuation of the drug. Tegretol can affect the hemopoietic system and so regular monitoring of the blood count is required. According to the patient and his wife, this was done regularly; monthly the first several years and then every two months and finally every six months. They stated the blood counts were [okay] in January 1999 but by July 1999 were critically low. His Tegretol was discontinued. A bone marrow biopsy was completed August 6, 1999."

A copy of the bone marrow biopsy report was submitted into the record, together with a death certificate signed by Dr. Robert Clemens stating that the immediate cause of death was myelodysplastic syndrome. No secondary causes are listed.

Dr. Bartsch does not provide a rationalized opinion supporting causal relationship between the employee's death and his employment injury, but rather indicated that it was "unknown" whether Tegretol use could have contributed to the employee's development of myelodysplasia. He simply discussed the precautions which need to be taken when using Tegretol, but did not provide an opinion as to how the use of the drug might have caused or contributed to the employee's death. As noted above, the opinion of a physician must be of reasonable medical certainty and must be supported by medical rationale explaining causal relationship. Dr. Bartsch does not provide a rationalized opinion that establishes causal relationship between the employee's death on September 28, 1999 and his accepted employment injury.

The remaining medical opinions of record also fail to provide the necessary discussion of causal relationship. In 1992, many years prior to the employee's death, his treating physician at the time indicated that because of the types of medications he required, regular laboratory evaluation was necessary to check for possible bone marrow suppression or liver and kidney damage. Hospital treatment notes by numerous physicians who treated the employee between August 6, 1999, shortly after his critical July 1999 blood work results were returned, and the date of his death on September 28, 1999, document the employee's diagnostic progression from pancytopenia with anemia, to myeloproliferative disorder and preleukemia, to his final diagnosis of myelodysplasia, as established by bone marrow biopsy. In a treatment note dated August 6,

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<sup>3</sup> *Martha A. Whitson (Joe E. Whitson)*, 43 ECAB 1176, 1180 (1992).

1999, Dr. William J. Waldo stated that the employee's pancytopenia was ascribed to Tegretol, but did not otherwise explain the basis for this comment. In a treatment note dated August 16, 1999, Dr. Gerald D. Hagin noted that approximately two months prior, the employee first had changes in his blood work and noted that the employee had a 25-year history of taking Tegretol, with no other exposure such as radiation or toxic chemicals, but concluded that the etiology of the employee's disease was unclear. In an August 24, 1999 treatment note, Dr. Michael Seby indicated that the employee's use of quinine, Tegretol, Propulsid and Prilosec was suspected to possibly be involved in his development of myelodysplasia, but did not further discuss this issue. In a treatment note dated September 9, 1999, Dr. Alan F. List noted that the employee had been recently diagnosed with myelodysplastic syndrome and had a long-standing history of Tegretol use, which required regular hemotologic monitoring. Dr. List concluded that all prior medications thought to be potentially exacerbating to the employee's hematologic disorder, such as Tegretol and quinine, had been discontinued, but there had been no improvement in the employee's blood counts since that time. Dr. List did not otherwise discuss the relationship, if any, between Tegretol and the development of the employee's condition. In a hospital treatment note dated September 20, 1999, Dr. Randy P. Graff noted that there "might be a relationship" between the employee's diagnosed myelodysplasia and his past Tegretol use and in a treatment note dated September 23, 1999, Dr. Michael E. Hogue noted that he felt the employee's myelodysplasia "possibly came from the Tegretol he was on." However, neither physician offered a definitive discussion as to the cause of the employee's condition.<sup>4</sup> Because none of the medical evidence submitted by appellant contains a rationalized medical opinion that the employee's accepted injuries and associated medications resulted in his development of fatal myelodysplasia, appellant has not submitted sufficient medical evidence to meet her burden of establishing that her husband's death was causally related to his employment.<sup>5</sup>

The only remaining medical opinion of record which addressed whether the employee's accepted conditions and associated medications contributed to his death, is the April 14, 2000 report of Dr. Ann Lanzerotti, a Board-certified internist from whom the Office sought a second opinion. After reviewing appellant's medical file, Dr. Lanzerotti noted that Tegretol had been reported to depress blood counts and, in rare instances, to cause pancytopenia. She explained that pancytopenia simply refers to the fact that all three blood cell lines are reduced in number and emphasized that there are several causes of pancytopenia. Dr. Lanzerotti surmised that the relationship, although rare, between Tegretol and pancytopenia accounted for the fact that several of the employee's primary physicians had apparently indicated to him that his medication was the most likely culprit of his diagnosed condition.

Dr. Lanzerotti explained that there are at least five separate causes of pancytopenia, and that examination of the bone marrow gives important information about the specific cause of pancytopenia in a given individual. She stated that in pancytopenia associated with aplastic anemia, the bone marrow is hypocellular, frequently empty of blood cell precursors.

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<sup>4</sup> While the opinion of a physician supporting causal relationship need not be one of absolute medical certainty, neither can such opinion be speculative or equivocal. Medical reports not containing rationale on causal relation are entitled to little probative value and are generally insufficient to meet an employee's burden of proof. *Judith J. Montage*, 48 ECAB 292 (1997).

<sup>5</sup> *Arlonia B. Taylor*, 44 ECAB 591 (1993).

Dr. Lanzerotti explained that this type of pancytopenia can be the result of a direct toxic metabolic effect of medication<sup>6</sup> or environmental toxin, certain viral infections or an antibody-related immune destruction of the bone marrow cells. She explained that in the instant case, however, examination of the employee's bone marrow revealed that his pancytopenia resulted "from abnormal (dysplastic) production of bizarre-looking cells -- *myelodysplastic syndrome* -- in which the marrow is cellular or hypercellular, but incapable of producing normal mature circulating blood cells." As to the cause of the myelodysplastic syndrome itself, Dr. Lanzerotti explained that there were two types of myelodysplastic syndromes: primary, which occurs spontaneously without a recognized or precipitating cause; and secondary, which results from damage to the bone marrow after exposure to radiation or certain drugs or toxins. She noted that there was no way to definitively distinguish primary from secondary myelodysplastic syndrome. Dr. Lanzerotto stated that although the employee's bone marrow exhibited several chromosomal abnormalities, as bone marrow chromosome abnormalities have been described in both primary and secondary myelodysplastic syndromes, and as the employee's two bone marrow chromosome reports did not entirely agree, it was impossible to distinguish between the syndromes on this basis. She also noted that extensive research using an on-line medical library from 1966 to March 2000, as well as several other medical volumes, revealed occasional or rare reports of hemotologic side effects associated with five of appellant's medications,<sup>7</sup> but no entries whatsoever correlating myelodysplastic syndromes to either Tegretol, or any of the other medications the employee was taking. Dr. Lanzerotti concluded her report, saying:

"In summary, it is highly unlikely, although not impossible, that one or a combination of Mr. Culver's medications caused genetic changes in the bone marrow that resulted in his developing a severe myelodysplastic syndrome. Tegretol, hydrochlorothiazide and parafor forte have been in use for so many years (at least 30), quinine for hundreds of years, that one could expect reports of such toxicity to have surfaced. Enalapril, Prilosec, fluconazole and Propulsid have been in use for less time -- 10 to 15 years, but again long enough for reports of secondary myelodysplasia to have been published."

The Board finds that appellant has not submitted sufficient rationalized medical opinion to support that the employee's death was caused by factors of his federal employment. An award of compensation may not be based on surmise, conjecture or speculation. Neither the fact that the employee's death occurred during a period of employment, nor the belief that his death was caused, precipitated or aggravated by his employment is sufficient to establish causal relationship. Causal relationship must be established by rationalized medical opinion evidence. The Office properly found that the thorough, well-explained and well-rationalized report of Dr. Lanzerotti represents the weight of the medical evidence and denied appellant's claim for compensation.

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<sup>6</sup> Included in the record is a copy of the warning sheet dispensed with Tegretol, which indicates that "aplastic anemia" and "agranulocystosis" are associated with the use of the drug.

<sup>7</sup> Tegretol, quinine, omeprazole, hydrochlorothiazide and fluconazole were reported to occasionally or rarely produce hematologic side effects.

The decisions of the Office of Workers' Compensation Programs dated September 29 and April 27, 2000 are affirmed.

Dated, Washington, DC  
March 5, 2002

David S. Gerson  
Alternate Member

Willie T.C. Thomas  
Alternate Member

Michael E. Groom  
Alternate Member