BEFORE THE IOWA WORKERS' COMPENSATION COMMISSIONER

THOMAS HILDRETH (Deceased) By JANE HILDRETH, (Surviving Spouse), Claimant, vs. DES MOINES PUBLIC SCHOOLS, Employer, Self-Insured, Defendant.	File No. 5062082 A R B I T R A T I O N D E C I S I O N Head Note Nos.: 1805; 2500

STATEMENT OF THE CASE

Jane Hildreth, the surviving spouse of Thomas Hildreth, decedent, filed a petition in arbitration seeking death benefits, medical expenditures, and costs arising out of Mr. Hildreth's death on October 16, 2013. The defendant, Des Moines Public Schools, self-insured employer, denied there was a causal link between Mr. Hildreth's accepted work injury of August 26, 2011, and his subsequent death.

This case was heard on June 21, 2017, in Des Moines, Iowa, and was considered fully submitted on the same. The parties were offered the opportunity to brief, but declined.

The record consists of Joint Exhibits 1-14, claimant's exhibits 1-7, defendant's exhibits A-E, and testimony from Jane Hildreth and Marc Jacoby, M.D.

ISSUES

1. Whether the August 26, 2011, work injury was the cause of Thomas Hildreth's death on October 16, 2013;

2. Whether claimant is entitled to repayment of medical expenses itemized in the attachment to the hearing report in the amount of $1,718.07.

3. Both parties seek an assessment of costs.

STIPULATIONS

The parties agree decedent sustained an injury on August 26, 2011, which arose out of and in the course of his employment. The dispute arises over the cause of decedent's death on October 16, 2013.

The parties agree that Jane Hildreth is the surviving spouse qualified under provisions of section 85.42.

At the time of the injury, decedent's gross earnings were 1320.90 per week. He was married and entitled to two exemptions. The benefit rate based on the foregoing numbers is $832.57.

FINDINGS OF FACT

On or about August 26, 2011, decedent slipped and fell on a wet floor while at work. He suffered a right rotator cuff tear, a lumbar disk injury and post-concussion syndrome. (Joint Exhibit 10) Following this injury, he continued to have pain and discomfort in his shoulder and low back. He also had vision complaints, tinnitus, and headaches. Those post-concussion headaches progressed into migraines. (JE 8:12) He received physical therapy and medication treatment for the headaches ordered by Donna Bahls, M.D., Marshall Greiman, M.D., of the Mercy Ears, Nose and Throat clinic suggested that the tinnitus was the result of the head trauma. (JE 12:3)

A psychological evaluation was conducted on April 11, 2012. He scored well and showed no evidence of any cognitive dysfunction. (JE 9:1)

In July 2012, decedent reported to Dr. Bahls that his headaches had abated. She found him to be at maximum medical improvement (MMI) on July 10, 2012. (JE 8:4)

Throughout 2012 and 2013, decedent continued to receive treatments for various ailments arising out of his August 26, 2011, injury including injections, steroid bursts, physical therapy, and surgery. (JE 1:6; 6) He had surgery on March 8, 2013, but continued to report problems, relating that his conditions appeared to be worsening. (JE 7:5, 7:3)

On or about October 11, 2013, he presented to Mountain Vista Medical Center with signs of a stroke. He had slurred speech and right eyelid droop. (JE 5:1) A CT of the brain showed "possible acute right basal ganglia infarct." (JE 5:6; 5:8) There was also some suggestion that there was an old injury, or rather, a sign of a previous stroke in the right parietal and left cerebellar region. (JE 5:8)

Treatment was provided but ultimately decedent died as a result of this stroke on October 16, 2013. (Ex. A:1) The death certificate identified the immediate cause of death as an "acute basilar artery infarction" with the "etiology uncertain." (Ex. A:1)

There are four opinion letters regarding the question of whether the stroke was related to the concussion. Francis Miller, M.D., is a national and international expert in vascular biology. (JE 2:2) For the past twenty-five years, he has routinely cared for patients in the coronary care unit, general medicine wards, outpatient clinics, and cardiac catheterization lab. (Ex. JE 2:2) He opined that decedent did not have the traditional risk factors for stroke:

> Mr. Hildreth did not have the traditional risk factors for stroke. For example, review of records show his documented blood pressures ranged from 108-132 mmHG systolic and 78-87 mmHg diastolic. These are within a normal range. Furthermore, he had no history of tobacco use and no hypercholesterolemia. There was no clinical evidence of coronary or peripheral vascular disease. Moreover, review of the electrocardiograms at the time of his stroke shows no evidence of atrial fibrillation or other conditions associated with cardioembolic events.

(JE2-2)

He went on to state "[a]s a vascular biologist who investigates the vascular response to injury, it is my opinion that traumatic brain injury can result in functional and structural damage to the vasculature. This opinion is supported by clinical observations that individuals with traumatic brain injury have an increased risk of stroke." (JE 2:3) In conclusion, "based on the clinical presentation and the medical literature," Dr. Miller wrote, "it is my opinion that the traumatic brain injury suffered by Mr. Thomas Hildreth on August 26, 2011 was a substantial contributing cause of his stroke on October 11, 2013." (JE 2:3)

The claimant also included medical literature in support of the causation argument. One is from the American Academy of Neurology and the other is from the International Journal of Research and Public Health. (Hereinafter known as "Taiwanese Study) (Ex. 6 and 7) Neither article is authored by any of the experts in the case, but Dr. Miller does cite to these two research papers as a "high quality stud[y] published in peer-reviewed journals" that provide "growing evidence that a prior history of traumatic brain injury increases the subsequent risk of stroke." (JE 2:3)

Michael Jacoby, M.D., is a stroke specialist. He is the director of the Ruan Neurology Clinical Research Center and Mercy Stroke Center. (Ex. D) He is the director of medical education at Mercy Neuroscience Department. (Ex. D) Dr. Jacoby was not able to identify a direct correlation between any injury and the stroke. "No reasonable evidence exists to support a relationship between trauma of any sort and stroke years later," he writes in his May 1, 2017, letter to defendant. (JE 1:8) "There is significant medical literature to support the increased risk of stroke through a natural process of aging that increases to its greatest degree after one reaches the age of 55 even in an otherwise healthy individual." (JE 1:8) Dr. Jacoby continues, "In addition, Mr. Hildreth was not as healthy as claimed. He was obese and the MRI done at the time of his demise showed an old stroke which is also a very strong risk factor for subsequent stroke." (JE 1:8)

During Dr. Jacoby's examination at hearing, he took issue with the aforementioned studies. He felt that a records review was not as scientifically rigorous as following concussion patients and then documenting their deaths as opposed to sampling records of already deceased patients. He also felt that the sample pool in the studies failed to contain sufficient information to adequately support the hypothesis. In

other words, the sample group's medical history was not precise enough to rule out other causes for the individual's death. For instance, the severity of the head trauma was not noted.

The Taiwanese Study concluded that concussion was an independent risk factor and recommended diagnostic and clinical treatment protocols be implemented to treat the concussion as a risk factor. (Ex. 7) The US article's conclusion was that TBI was associated with ischemic stroke and more studies needed to be concluded. "Prospective cohort and/or population-based, cross-sectional studies are needed to confirm the association," the article stated. (Ex. 6:6)

Dr. Jacoby testified that at this time he remained unconvinced that the research is sound enough to draw a causal line between the traumatic brain injury and the stroke.

Dr. Jacoby pointed to other factors as being contributors to decedent's stroke. Age is a primary risk factor as is smoking, high cholesterol, hypertension, diabetes, prior stroke. Once individuals reach the age of 55, there is a doubling in the risk of stroke because of age according to Dr. Jacoby.

Decedent was 66 years of age at the time of his stroke. There was evidence of a prior stroke. His medical records do not contain precise tracking of decedent's high blood pressure, cholesterol or diabetes risk. Decedent's weight was 269 pounds in November 2011 and around 250 pounds in September 2013. (JE 8:20; JE6:5) His blood pressure was elevated per Dr. Jacoby's review of the records, but not so high decedent needed a prescription to manage the blood pressure. Dr. Jacoby did not recall or remember that the decedent was a non smoker or non drinker.

Jane Hildreth testified that her husband was in generally good health but she acknowledged she did not attend his physicals nor review the medical records.

In a follow up letter from Dr. Miller, he agreed with some of the points made by Dr. Jacoby in that decedent was at risk for stroke because of his age and that individuals with prior strokes have an increased risk of a subsequent stroke. (JE2:1) However, Dr. Miller maintained the causal connection between the stroke and the traumatic brain injury.

Dr. Miller felt that the prior stroke could have happened after the head trauma given the normal results of the CT taken in 2011 shortly after the concussion occurred. Further, Dr. Miller was frustrated that Dr. Jacoby would not acknowledge the literature that suggests a connection between traumatic brain injury and subsequent stroke. He mentions this twice in his five paragraph letter. (JE 2:1)

The other two experts providing opinions were Marc Hines, M.D., a neurologist in Waterloo, Iowa who provided more of a medical literature review and Joe Hawk, M.D., at the Iowa Clinic. (JE 3 and 4)

Dr. Hines, after a summary of various medical articles, opined that decedent was "at risk of stroke as a result of his mild traumatic brain injury" and that according to the studies, a mild traumatic brain injury carries the same increased risk for stroke as does hypertension. "It is therefore my opinion to a reasonable degree of medical certainty that [the mild traumatic brain injury] is a significant risk factor for the subsequent stroke in Mr. Hildreth." (JE 3:4)

Dr. Hawk agreed that "research into TBI and its long term medical complications is in its infancy." (JE 4:2) However, "although Mr. Hildreth would be classified as obese, he did not have the other common risk factors for stroke such as hypertension, atrial fibrillation, diabetes mellitus, hyperlipidemia." (JE 4:3) Dr. Hawk also agreed that decedent's TBI/concussion "likely would have played a significant part in contributing to his stroke." (JE 4:3)

CONCLUSIONS OF LAW

Iowa Code section 85.43 provides for apportionment of death benefits as follows:

> If the deceased employee leaves a surviving spouse qualified under the provisions of section 85.42, the full compensation shall be paid to the surviving spouse, as provided in section 85.31; provided that where a deceased employee leave a surviving spouse and a dependent child or children the workers' compensation commissioner may make an order of record for an equitable apportionment of the compensation payments.
>
> If the spouse dies, the benefits shall be paid to the person or persons wholly dependent on deceased, if any, share and share alike.

The claimant has the burden of proving by a preponderance of the evidence that the injury is a proximate cause of the disability on which the claim is based. A cause is proximate if it is a substantial factor in bringing about the result; it need not be the only cause. A preponderance of the evidence exists when the causal connection is probable rather than merely possible. George A. Hormel & Co. v. Jordan, 569 N.W.2d 148 (Iowa 1997); Frye v. Smith-Doyle Contractors, 569 N.W.2d 154 (Iowa App. 1997); Sanchez v. Blue Bird Midwest, 554 N.W.2d 283 (Iowa App. 1996).

The question of causal connection is essentially within the domain of expert testimony. The expert medical evidence must be considered with all other evidence introduced bearing on the causal connection between the injury and the disability. Supportive lay testimony may be used to buttress the expert testimony and, therefore, is also relevant and material to the causation question. The weight to be given to an expert opinion is determined by the finder of fact and may be affected by the accuracy of the facts the expert relied upon as well as other surrounding circumstances. The expert opinion may be accepted or rejected, in whole or in part. St. Luke's Hosp. v. Gray, 604 N.W.2d 646 (Iowa 2000); IBP, Inc. v. Harpole, 621 N.W.2d 410 (Iowa 2001); Dunlavey v. Economy Fire and Cas. Co., 526 N.W.2d 845 (Iowa 1995). Miller v.

Lauridsen Foods, Inc., 525 N.W.2d 417 (Iowa 1994). Unrebutted expert medical testimony cannot be summarily rejected. Poula v. Siouxland Wall & Ceiling, Inc., 516 N.W.2d 910 (Iowa App. 1994).

"Expert testimony is ordinarily necessary to establish a causal connection between the injury and the disability for which benefits are sought." Grundmeyer v. Weyerhaeuser Co., 649 N.W.2d 744, 752 (Iowa 2002). The commissioner determines the weight to be granted to an expert's opinion. Thus, the commissioner may accept or reject the opinion in whole or in part. Sherman v. Pella Corp., 576 N.W.2d at 321 (Iowa 1998). However, the commissioner must consider all the other evidence speaking to the issue of causation and the commissioner must bear in mind the completeness and accuracy of the experts' opinions given the contextual wholeness. Id.

The underlying facts of this claim are undisputed. Decedent sustained a fall at work on August 26, 2011, wherein he suffered a mild concussion. Two years later, on October 16, 2013, decedent died of a stroke. In the intervening years, decedent underwent surgery, injections, physical therapy and medication therapy to treat his injuries arising out of the August 26, 2011 injury.

He suffered a mild, undiagnosed stroke at some point prior to October 16, 2013. He struggled with his weight and was 66 at the time of his death.

While four experts provided opinions, those of Dr. Jacoby and Dr. Miller carry greater weight. Dr. Hawk and Dr. Hines did not display the medical knowledge and experience of Dr. Jacoby and Dr. Miller.

These two experts that have weighed in on opposites sides of the medical fence. Dr. Miller buys into the newly developing medical theory that traumatic brain injury increases the risk of stroke. Dr. Jacoby feels that the studies are in their infancy, retrospective instead of prospective, and may be lacking in rigor as it relates important conclusions drawn as to the subjects' injury and past medical history.

There is no medical consensus on the connection between TBI and stroke. At best, the literature relied upon by Dr. Miller suggests that there should be further study and that patients with TBI should be followed for increased possibility of stroke. Dr. Miller believes, as does Dr. Hawk and apparently Dr. Hines, that traumatic brain injury increases the risk for stroke.

Dr. Jacoby argues that there is no need to always find a cause, particularly when it comes to strokes as the number one cause of stroke is idiopathic regardless of the patient's risk factors. He is also troubled by the span of time between the incident of injury and the subsequent stroke.

This is a very difficult decision. Dr. Jacoby's in person testimony was convincing. The medical literature does not draw a definitive conclusion.

However, the standard in these cases is by a preponderance of the evidence or rather, more likely than not. Further, the TBI does not have to be the sole cause of decedent's stroke, only a significant contributing factor. Decedent's age and other co morbidities could also contribute to the stroke, but that does not preclude the TBI from being a significant contributing factor.

The studies, while new, are based on a large population. The Taiwanese study was nationwide, population-based. The US study involved over a million subjects.

Dr. Jacoby's points that these studies are not prospective and therefore lack some direct correlation to the decedent's circumstances, the studies did take into account demographics, vascular risk factors, comorbidities, trauma severity, and trauma mechanism.

While decedent was older and overweight, he did not have any documented hypertension; history of blood sugar issues, smoking or drinking. Based on the normal 2011 CT study, the prior strike likely happened after the 2011 concussion.

The decedent's medical condition at the time of his death, combined with the concussive incident on August 26, 2011, most closely aligns with the opinions of Dr. Miller and the subsequent medical literature. It is found that the concussive incident of August 26, 2011 was a substantial contributing factor in decedent's stroke and ultimate death.

Both parties seek an assessment of costs. It is customary to award costs to the prevailing party, but the hearing officer is allowed discretion. See Iowa Code section 86.40. Both sides presented compelling arguments. The in-person testimony of Dr. Jacoby was appreciated, even if in the end the undersigned chose to adopt the opinions of Dr. Miller. As stated earlier, it was a close, difficult decision. Therefore, I choose not to assess costs to either party, and instead order each party to be responsible for his or her own costs.

ORDER

THEREFORE IT IS ORDERED:

Defendant shall pay unto the dependent Jane Hildreth, at the rate of eight hundred thirty-two and 57/100 dollars ($832.57) commencing October 16, 2013 and continuing until such time benefits under Iowa Code section 85.31 shall be terminated.

Defendant shall pay and/or reimburse the medical bills attached to the hearing report.

Accrued benefits shall be paid in a lump sum together with interest as allowed by law.

Defendant shall take credit for all benefits previously paid to Thomas Hildreth.

Defendant shall file all requisite reports in a timely manner.

Each party is responsible for own costs.

Signed and filed this 1st day of November, 2017.

JENNIFER S. GERRISH-LAMPE
DEPUTY WORKERS'
COMPENSATION COMMISSIONER

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JGL/kjw

Right to Appeal: This decision shall become final unless you or another interested party appeals within 20 days from the date above, pursuant to rule 876-4.27 (17A, 86) of the Iowa Administrative Code. The notice of appeal must be in writing and received by the commissioner's office within 20 days from the date of the decision. The appeal period will be extended to the next business day if the last day to appeal falls on a weekend or a legal holiday. The notice of appeal must be filed at the following address: Workers' Compensation Commissioner, Iowa Division of Workers' Compensation, 1000 E. Grand Avenue, Des Moines, Iowa 50319-0209.