DECISION OF THE WORKERS' COMPENSATION APPEAL TRIBUNAL

WCAT Decision Number: A1801732
WCAT Decision Date: September 11, 2018

Introduction

[1] The worker has appealed *Review Reference #R0233362*, a decision of the Review Division of the Workers' Compensation Board (Board), to the Workers' Compensation Appeal Tribunal (WCAT).[1] The Review Division decision confirmed a decision in first instance dated December 21, 2017. The Board's decision denied that the worker's diagnosed right-handed carpal tunnel syndrome was an occupational disease due to the nature of her employment.[2]

Issue(s)

[2] Is the worker's diagnosed right-handed carpal tunnel syndrome an occupational disease due to the nature of her employment?

Jurisdiction and Procedure

[3] Section 239(1) of the *Workers Compensation Act* (Act) permits appeals from Review Division decisions to WCAT, subject to the exceptions set out in section 239(2) of the Act.

[4] WCAT reviews the record from previous proceedings and can hear new evidence. WCAT has the discretion to seek further evidence. WCAT may reweigh the evidence and substitute its decision for the appealed decision or order. WCAT may confirm, vary, or cancel the appealed decision or order.

[5] The worker is not represented. The employer was invited to participate in the appeal but did not respond to that invitation. The worker asked that the appeal proceed by written submissions and a WCAT Registry officer granted that request. The worker was invited to provide written submissions but did provide any beyond what she included in her notice of appeal.

[6] Under section 246 of the Act, I am able to consider the appeal through a different procedure, including an oral hearing, if I consider it necessary. I have considered the evidence on record, the worker's notice of appeal, and the criteria in Rule #7.5 of the WCAT *Manual of Rules of Practice and Procedure*. There are no significant credibility issues, significant factual disputes, or other matters that would be better decided with an oral hearing. I am satisfied that an oral hearing is not necessary.

[1] The Board operates as WorkSafeBC.
[2] The Board previously concluded, on November 8, 2017, that the worker's diagnosed carpal tunnel syndrome was not a personal injury arising out of and in the course of her employment.

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Background and Evidence

[7] In the week leading up to October 13, 2017, the worker, was busy at work, using a computer to do drafting and design work. She routinely missed taking breaks and worked three hours of overtime. She operated her mouse with her right hand and typed with both hands for 7.5 hours per workday. This was the whole of her shift. She typed at roughly 110 words per minute. She had done drafting and computer work for eight years, five of which were spent with the employer.

[8] On October 13, 2017, the worker was mousing and keyboarding when she experienced an onset of pain in the middle of her right hand, radiating into her thumb. There was no specific incident. She continued typing for another hour to finish her shift. That night, her right hand swelled.

[9] On October 17, 2017, the worker reported the development of her right hand condition to the employer and to her regular family physician, Dr. Marazzi. Dr. Marazzi diagnosed the worker with a sprain/strain injury and recommended she take time off from work.

[10] The worker went off work briefly and returned to part-time work on October 19, 2017. She took more frequent breaks and started mousing with her left hand. She continued to report activity-related right hand pain.

[11] On December 5, 2017, the worker saw an orthopaedic surgeon, Dr. Patel, who examined her and diagnosed her with developing carpal tunnel syndrome.

[12] On December 18, 2017, a Board officer carried out a jobsite assessment. According to the Board officer, the worker's job demands involved minimal to low forces. Hand/wrist motions were frequent and regular, but not repetitive and awkward.

[13] Wrist postures were typically in ergonomic ranges, with rare and brief movements into awkward ranges of motion. The Board officer defined those awkward ranges of motion as flexion of 25 degrees or more from 0 degrees, extension of 25 degrees or more from resting posture of 20 degrees, and radial/ulnar deviation of 10 degrees or more.

[14] The Board officer stated there were no local mechanical stresses, unaccustomed activities, exposure to vibration, or exposure to cold or outdoor elements.

[15] The worker reported she did not do much at home, not even housework. She stated she was in good health, did not smoke, and was a social drinker. Her hobbies included hiking, bicycling, kayaking, playing guitar, and playing drums.

[16] The Board officer took pictures and videos during the jobsite visit. For those pictures and videos, the worker demonstrated her usual job duties while mousing with her right hand. During the videos and for some of the pictures, the worker was wearing a splint on her right wrist. She stated that she drafted more than she typed.

[17] Also on December 19, 2017, Dr. Maharaj, a Board medical advisor, reviewed the worker's claim file and the evidence taken during the jobsite visit. Dr. Maharaj stated non-occupational hobbies

could be clinically significant. Dr. Maharaj stated the worker's job duties did not give rise to sufficient occupational risk factors for the development of carpal tunnel syndrome.

[18] In June 2018, the worker sent her notice of appeal to WCAT. She stated that she had worked on computers for years, but experienced a significant increase in her workload in February 2017. At that time, she transitioned from four to five workdays per week. She described persistent pain after it onset in October 2017, although she had reduced her work hours and attended physiotherapy.

Submissions

[19] In submissions to the Review Division, the worker emphasized that she experienced symptoms after working overtime, which she did not normally do, in a period of increased workload. She described the effects of her carpal tunnel syndrome and emphasized that she was a dedicated worker. She understood her condition to relate to repetitive motions.

[20] As noted previously, the worker provided additional evidence in her notice of appeal. She did not provide further, substantive argument.

Reasons and Findings

[21] Subject to section 250(4) of the Act, the standard of proof in an appeal is the balance of probabilities. Section 250(4) provides that in a matter involving the compensation of a worker, if the evidence supporting different findings on an issue is evenly weighted, the issue must be resolved in a manner that favours the worker.

[22] Section 6 of the Act states that a worker is eligible for compensation where he or she experiences an occupational disease due to the nature of his or her employment.

[23] Section 250(2) of the Act requires WCAT to apply published policy of the board of directors of the Board, subject to the provisions of section 251 of the Act. The *Rehabilitation Services and Claims Manual, Volume II* (RSCM II) contains the published policy applicable to this appeal.

[24] Occupational diseases can be recognized as an occupational disease by various processes, including by a regulation of general application. Carpal tunnel syndrome is recognized through that process. There is no assumption in favour of causation for carpal tunnel syndrome, in any industry or with the performance of any particular job duties.

[25] Policy item #27.00 of the RSCM II states that the compensability of an occupational disease which is not listed in Schedule B of the Act involves considering various factors. Those factors are the mechanics of the employment activity in question and its congruence with symptoms, any changes that took place in the worker's employment or non-employment activities prior to or at the time of onset of the worker's activity-related soft tissue disorder (ASTD), the potential combined effect of activities in more than one employment, and whether the worker has any pre-existing conditions that may be associated with the onset of and the cause of the ASTD at issue.

[26] Policy item #27.00 goes on to state that risk factors for the development of an ASTD may be present at work or away from work. The policy also recognizes that an ASTD may be idiopathic, arise over hours or years, exist alongside another ASTD, or even arise as a result of adjusting to or compensating for another one. The policy also indicates that some people are more susceptible to ASTDs than others and that such conditions are often caused by an exposure to a combination of risk factors, rather than a single one.

[27] Policy item #27.00 lists risk factors generally considered by the Board as being: exposure to cold temperature, the intensity of the risk factor over a specific duration, the length of exposure to a risk factor, the force required to perform a particular movement or activity, the frequency of the activity, the grip type involved, the presence of vibration, the presence of local contact stresses, the magnitude of the risk factor, the posture of the worker, the degree of repetition, static loading, task variability, whether activities are unaccustomed, the work/rest ratio of the relevant work cycles, and the availability of rest time.

[28] Policy item #27.32 of the RSCM II discusses carpal tunnel syndrome in greater detail, recognizing that repetitive compression or entrapment of the median nerve in the carpal tunnel could result in carpal tunnel syndrome. The Board recognizes that work with the hand/wrist that involved high repetition coupled with high force, prolonged wrist flexion, high repetition associated with cold temperatures, and the use of vibrating tools is more likely to be associated with the development of carpal tunnel syndrome. The performance of frequent, repetitive, forceful, employment-related movements of the hand/wrist could suggest a strong likelihood that occupational carpal tunnel syndrome exists.

[29] Policy item #27.32 also recognizes that carpal tunnel syndrome can develop as a natural effect of aging. Non-occupational risk factors for the development of carpal tunnel syndrome include diabetes mellitus, rheumatoid arthritis, thyroid disorders, gout, ganglion formation, other rheumatic inflammatory diseases, and obesity. Bilateral carpal tunnel syndrome is noted to be more likely to be due to a non-occupational cause, as is carpal tunnel syndrome that continues to progress or worsen when away from work.

[30] The Board's Practice Directive #C4-2 is a non-binding adjudicative aid published by the Board and most recently amended in November 2017. Its aim is to foster consistency and quality in decision-making. I consider it helpful and I have considered it in that light.

[31] The practice directive provides guidelines for the adjudication of ASTDs. It provides guidelines to help decide if possible physical demands constitute risk factors for the development of ASTDs. These possible risk factors may be implicated at a different threshold where there are more than one risk factor present. The individual circumstances of an individual worker will be considered.

[32] According to the practice directive, heavy force requirements are present where weights of 55 pounds or more are lifted more than ten times per day, where weights of 25 pounds or more are lifted more than 25 times per day from below the knees to above the shoulders or at arm's length, or where weights of 10 pounds or more are lifted more than twice per minute for more than two hours. Pushing or pulling 20 pounds for more than two hours, further than 60 metres is also an indication of forceful exertion. Maintaining a power grip of 10 pounds or more or a pinch grip of 2 pounds or more is also considered forceful, where such a grip is maintained for more

than four hours. These risk factors are guidelines only, acknowledging the risk factors are greater where there is prolonged lifting and carry, pushing/pulling on rough or inclined surfaces or with unstable loads, or where gripping is with poor fitting or low friction gloves.

[33] The practice directive distinguishes between activities that involve low, medium, or high degrees of repetition on a ten-point rating system that has six defined benchmarks. Zero on the scale (low repetition) involves an individual with his or her hands idle most of the time, without regular exertions. Two on the scale (low repetition) involves consistent, conspicuous long pauses or very slow motions. Four on the scale (medium repetition) involves slow, steady motion or exertion and frequent, brief pauses. Six on the scale (medium repetition) involves steady motion or exertion with infrequent pauses. Eight on the scale (high repetition) involves rapid, steady motion or exertion with infrequent pauses. Ten on the scale (high repetition) involves rapid, steady motion or continuous exertion characterized by a difficulty keeping up with work demands.

[34] The practice directive also describes wrist activities as repetitious where they involve working in a range of motion in excess of functional normal at a rate of two movements per minute when moving through the full range of motion or ten movements per minute otherwise. Finger movements are considered repetitious where they occur 200 times per minute the equivalent of typing 100 words per minute for more than four hours.

[35] The practice directive quantifies awkward postures of the wrist and forearm. It indicates that pronation and supination of over 80 degrees constitutes a risk factor for the development of an ASTD, as does wrist flexion more than 25 degrees from anatomical neutral, wrist extension more than 25 degrees from functional neutral, and ulnar or radial deviation of more than 10 degrees.

[36] I have considered the adjudicative principles in policy item #27.00 with respect to the risk factors identified in the same policy. I will set out my findings with respect to those risk factors.

[37] The worker had no exposure to several risk factors. She performed her work indoors, without exposure to cold temperature. Her job duties did not involve heavy-force demands as described in Practice Directive #C4-2 because they did not meet the guidelines set out in that practice directive and do not involve any reason to otherwise consider her job demands to be forceful.[3] This includes consideration of grip types involved in the performance of the worker's job duties. The worker was not exposed to vibration, local contact stresses, or static loading. Her job duties did not involve any awkward postures of the wrist and forearm, as set out in Practice Directive #C4-2. These conclusions are the same as those described by the Board officer.

[38] Unlike the Board officer, I conclude that the worker's job duties were highly repetitive, as set out in Practice Directive #C4-2. Her typing speed and her demonstrated computer use in the videos taken during the jobsite visit support that finding. Her job duties were in keeping with a degree of repetition rated at eight out of ten, satisfying the definition of repetitive activity.

[3] I have considered the examples in the practice directive that discuss situations where the guidelines may be too strict a standard for forceful physical demands. None of them apply. The worker did not identify any of those reasons or any other reasons why the guidelines would represent too strict a standard and no such reasons are apparent to me.

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[39] The worker's job duties were not varied and there was not a favourable work-to-rest ratio or much rest time available to her. Her description of spending her workdays steadily working at a computer indicate as much.

[40] The worker, while accustomed to the sort of computer work that she was doing on October 13, 2017, was working more than she typically worked. She had worked three hours of overtime that week and missed her designated breaks. She also had increased her hours of work from four days per week to five days per week in February 2017, roughly one month before her symptoms developed.

[41] I have considered the risk factors in the worker's job: repetition, lack of task variability, lack of rest time, an unfavourable work-to-rest ratio, and a degree of unaccustomed physical demands. I have weighed those risk factors by weighing their intensity over the worker's job days, her prolonged and frequent exposure to those risk factors, and the magnitude of those risk factors. I have done so with reference to policy item #27.32, with its guidance specific to the adjudication of the compensability of carpal tunnel syndrome.

[42] That policy stipulates that work involving high degrees of repetition and high force is associated with the development of carpal tunnel syndrome. So too is work involving prolonged wrist flexion, the use of vibrating tools, high degrees of repetition coupled with cold temperatures, and activity that is frequent, repetitive, and forceful. My assessment of the worker's risk factors does not meet any of those requirements. According to policy item #27.32, repetitive work is not enough to allow a conclusion of work causation, even where there is an increase in the hours of work and workdays per week, without taking breaks. I conclude that, at least based on the risk factor analysis permitted under Practice Directive #C4-2, the worker's carpal tunnel syndrome is not an occupational disease due to the nature of her employment.

[43] The individual circumstances of the worker still need to be considered, however. That consideration comes from Dr. Maharaj, who had the opportunity to assess the worker's job duties through consideration of the file evidence. He reviewed the information from the worker's claim file, including video evidence of her performing her work, and concluded that her job duties were insufficient to give rise to occupational carpal tunnel syndrome. I accept his opinion, relying on his expertise and his thorough review of the claim file.

[44] While Dr. Maharaj explained that the worker may suffer from non-occupational risk factors for the development of carpal tunnel syndrome, I do not need to make any finding on that point. As noted in policy item #27.00 of the RSCM II, an ASTD, including carpal tunnel syndrome, may be idiopathic or related to a natural aging process. I do not need to pinpoint any particular cause, given that the evidence indicates that the condition was not due to the nature of the worker's employment.

Conclusion

[45] I deny the worker's appeal and confirm *Review Reference #R0233362*.

[46] I find that the worker's diagnosed right-handed carpal tunnel syndrome is not an occupational disease due to the nature of her employment.

[47] The worker did not request reimbursement for any appeal expenses. No such expenses are apparent and, consequently, I make no order regarding expenses.

Darrell LeHouillier
Vice Chair

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