The hand-arm vibration syndrome experience in BC

Individuals who work with vibrating hand tools frequently and for prolonged periods are at risk of developing hand-arm vibration syndrome (HAVS), a syndrome previously reviewed in this journal.[1]

HAVS is costly for affected workers as well as for their employers. A worker who develops HAVS has secondary Raynaud phenomenon and finger neuropathy that can significantly diminish hand function. This worker can develop debility due to abnormal digit sensation and reduced finger dexterity and hand strength. HAVS can limit the worker's vocational abilities and the activities of daily living, and significantly affect his or her livelihood. When a worker develops this syndrome, his or her employer may lose a valuable, skilled, difficult-to-replace experienced employee.

From 1999 to 2008 WorkSafeBC accepted 136 HAVS claims. Loggers, exposed to vibration from chainsaws, accounted for nearly 40% of these claims; mechanics, exposed to vibration from pneumatic tools, accounted for about 25%. Other affected workers included miners, auto-body technicians, glaziers, and cement workers.

The average age of claimants with accepted HAVS claims was 50 years, with a standard deviation of 10 years. The mean duration of exposure to vibrating hand tools was 25 years, but ranged widely from 2 to 55 years. Mean latency—the time from first exposure to onset of symptoms—was 18 years, and again ranged widely from 1 to 41 years. The mean latency period for loggers who developed HAVS was 17 years, significantly shorter than the 24-year mean latency period for mechanics.[2] This likely relates to differences in the duration of exposure to hand-arm vibration between these two occupational groups. Loggers spend most of their working days using chainsaws to cut wood because this is their main task, while mechanics do a multitude of tasks that may not require the use of pneumatic tools.

BC workers seem to defer making claims. Loggers, on average, wait 6 years from the onset of symptoms before making a claim, while mechanics wait 3 years.[2] WorkSafeBC claims data do not provide an explanation for this delay. However, anecdotal evidence based on clinical interviews with affected workers indicates that they delay making claims because the typical medical recommendation, once a claim is accepted, is to eliminate further exposure to vibrating hand tools, and the elimination of this exposure implies termination of the worker's career.

Many of these skilled workers are reticent to end their career and to accept the commonly associated income loss and lifestyle changes. Many workers treat HAVS symptoms as part of the job—a nuisance they learn to live with. The problem with delaying making a claim is that the worker's disease progresses; hence, the majority of workers making claims have more advanced and debilitating disease.

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The role of primary care physicians is crucial in identifying disease early and advising patients on the best course to take. This includes using low-vibration tools, decreasing the use of vibrating hand tools, or stopping their use altogether. Encouraging workers to make claims early can reduce long-term morbidity and provide access to vocational rehabilitation services to assist in their return to work.

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This article is the opinion of WorkSafeBC and has not been peer reviewed by the BCMJ *Editorial Board.*

References

1. Youakim, S. Hand-arm vibration syndrome (HAVS). BCMJ 2009;51:10.
2. Youakim, S. The compensation experience of hand-arm vibration syndrome in British Columbia. Occupational Medicine 2012;62:444-447.