Carpal Tunnel Syndrome

Disclaimer: This case study was prepared by Patrick Flanagan under the supervision of Dr. Frances Tuer, DeGroote School of Business, solely for the purpose of discussion. While the injury in the case actually took place all details of person(s) and organization(s) have been disguised.

**The Injury/ Illness:**

Chris Paul, a Sr. Software Developer for ABC Bank, was milling over a complaint from one of his direct reports on his way home from ABC’s head offices in Toronto. Kevin, one of the interns, had submitted a formal complaint citing that he had been experiencing extreme discomfort in his wrists and hands when he had to write code for more than a few hours at a time. Chris found this strange as he had numerous direct reports that were 5-10 years Kevin’s’ senior that had never once made such a complaint during his 6-year tenure with ABC Bank. This was also not the first time Kevin had mentioned this discomfort, as he had mentioned numbness in his hand and wrist joints on numerous occasions throughout his summer tenure, but Chris didn’t think much of it.

**Who and What:**

Kevin Santos, a Jr. Software Developer intern for ABC Bank, had been working on a big cyber security development project for Chris, his job consisted of putting his head down at his desk and typing out dozens of lines of code, sometimes for more than 4 hours in one sitting. Kevin had been punctual, dependable, and had demonstrated very sharp skills as a software developer all of which made him a great fit for his job.

Kevin was 1 month away from completing his 4-month internship and returning to his normal life as a 23-year-old fourth-year undergraduate student attending Brock University for computer programming. Kevin had developed a passion for computers from a young age and has accumulated over a decade of experience learning different coding languages and developing software programs both in a professional setting on a short-term internship at Mac Computers, as well as doing fun projects in the comfort of his own home.

Chris himself had been in Kevin’s’ position as a Jr. developer intern just 4 years prior and neither he or his older direct reports ever experienced enough discomfort that he deemed worthy of a complaint.

**Background on this type of injury:**

Carpal Tunnel Syndrome is a condition affecting the hand and wrist that causes feelings of numbness, tingling, weakness, and other problems due to pressure applied to the median nerve in your wrist (CCOHS 2018). The carpal tunnel is a space in the wrist that the flexing tendons of the fingers and thumb and the median nerve pass through. Carpal Tunnel Syndrome is caused by the swelling of the tendons surrounding the median nerve, which in turn pressures and damages the nerve (CCOHS 2018). People with CTS experience difficulty performing tasks such as unscrewing bottle tops, fastening buttons, or other motor skills requiring hand dexterity.

Carpal Tunnel Syndrome falls into the category of an overexertion injury, defined as injuries resulting from excessive physical effort, awkward working positions, or repetitive motions. More specifically, CTS is classified as a repetitive strain injury (RSI), which is caused by unnatural posture or joint positions, force application to hinge joints, activity repetition, and/or pre-existing health conditions (Kelloway 2017). There are also personal risk factors contributing to the development of CTS, such as Arthritis and Diabetes (CCOHS 2018).

Some of the most common occupations associated with the development of CTS include manufacturing workers (e.g. assembly line), gardeners, farmers, construction workers, and janitors (CCOHS 2018). Although the link between CTS and computer use is uncertain, researchers agree that the repetitive movements involved in keyboarding and curser control place people at risk of muscoskeletal injuries, meaning that CTS may very well stem from extensive computer use (Kelloway 2017).

CTS is a strong driver of workers’ compensation costs, lost wages, lost productivity, and disability in the workplace. Studies have concluded up to 50% of CTS cases are caused by work and could have been prevented (Dale 2013). There are plenty of factors encouraging businesses to implement preventative measures such as redesigning of work stations and tools, worker training and education, and job redesign (CCOHS 2018).

**What to do next?**

Following the submission of his complaint to Chris, Kevin visited a doctor after work to try and get to the bottom of what was causing his pain and discomfort. The doctor informed him that he was experiencing symptoms of Carpal Tunnel Syndrome (CTS). Kevin was surprised at this as he thought only older people got CTS, but was relieved to confirm his suspicions that something was wrong. He went to work on Monday with a doctor’s note citing his recent diagnosis. Chris was a little surprised given his lack of knowledge of CTS but knew that something should be done.

On one hand, Kevin had developed great rapport with the team in his short tenure. Kevin was a hard worker, staying late into the night in the early months of his contract, coding diligently to meet the tight deadlines. Chris thought there was certainly a link Kevin’s work regimen for ABC Bank and the development of his condition. If Kevin’s job did in fact contribute to his development of CTS, Chris knew ABC bank should take every reasonable precaution to help minimize developing CTS and accommodate those who have it.

On the other hand, Chris wasn’t sure that ABC Bank was responsible for helping Kevin, considering Kevin’s development of Carpal Tunnel Syndrome could be attributed to his lengthy programming experience before joining ABC. Chris also didn’t see any aspect of Kevin’s job as a real hazard to his health, as the context of the position had remained unchanged during his tenure and had no reported instances of CTS on record. Besides Kevin was an intern, were they even supposed accommodate him?

Chris had some decisions to make. The first option he had was to do nothing but express empathy to Kevin and have him handle all CTS treatment and accommodations after-hours with his doctor. The second option would be for Chris to do the bare minimum in accommodating Kevin’s issue – maybe a new ergonomic keyboard would be enough for Kevin comfortably finish his contract. The final option would be for Chris to take every reasonable precaution to accommodate Kevin by not only changing the how he did his job as a Jr. developer, but also by trying to minimize CTS risk factors that ABC employees were exposed to enterprise-wide. The potential downfalls not only include the possible backlash he could receive from superiors, but also that it required the most resources ABC considered a laundry list of potential changes. Some of the changes might include the use of voice recognition technology or ergonomic keyboards, redesigning the tasks and schedule of the job, and orchestrating training activities for ABC employees. But what was the right decision?