Dynamic Chiropractic

PERSONAL INJURY / LEGAL

A Reasoned "Cognitive" Approach to Work-Related Injuries

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This is in response to Dr. Paul Hooper's June 16, 1997 Industrial Consulting column in *DC* ("A Reasoned Approach to Work-Related Injuries").

Dr. Hooper attended a conference, "Advanced Topics in Medical Disability Management," and reported his qualified support of a position put forward by a presenter at that conference, Dr. Nortin Hadler, a rheumatologist from the University of North Carolina, Chapel Hill. Dr. Hadler presented "Arm Pain in the Workplace, an Iatrogenic Concept." His basic position states: "There is no evidence to support the idea that cumulative trauma disorders, particularly carpal tunnel syndrome, are work-related."

Dr. Hadler evidently dissected some of the more well-known articles regarding work-related upper extremity disorders with great finesse and cogent arguments. I have not personally had the pleasure of hearing Dr. Hadler speak, nor have I read any of his specific publications, but it is evident that he espouses some of the same arguments that have been directed against the recently enacted ergonomic regulations in California. I do hope he did not stoop to using the much overused and bandied about term, "junk science."

Dr. Hadler pointed out the illogic of a high incidence of carpal tunnel syndrome cases being identified in one particular facility or location, when a low incidence of CTS is concurrently reported at another facility or location using the identical keyboards. Dr. Hadler says that "arm pain is a natural phenomenon, much like back pain, and it has very little to do with the work that we do." He states: "It is not ergonomic problems, but psychosocial factors that take arm pain and transform it into carpal tunnel syndrome." He concludes that it is the workers' compensation system which creates claimants where none should exists.

I am in complete agreement with the opinions of Drs. Hadler and Hooper that psychosocial factors produce a major impact on injured workers. I told the Calif. Dept. of Industrial Relations OSHA Standards Board (at the 1994 and 1995 public hearings for the proposed 5110 regulations) that if the standard ignored the mental or psychological aspects of CTDs, it would be inadequate at best, and useless at worst. I am also in more sensitive agreement with Dr. Hooper's further concern that some of the people in the audience who are responsible for managing claims at companies across the country may actually believe Dr. Hadler.

Dr. Hadler's premise that psychosocial issues are important determinants of CTDs is true, but his conclusion that such claimants' symptoms are not work-related is not only false, but dangerous. He sates: "... there is no CTS unless it is confirmed by electodiagnosis." Dr. Hadler's unfortunate attitude mirrors that of many health care practitioners I have met over my years of practice in pain management who imply or state openly that a patient's pain is "all in the head." Not only does such an attitude insult the patient, but such Cartesian dualism has long been shown to be archaic, inadequate, and "unscientific."

Has not Dr. Hadler learned that the mind and the body are not separate? Has he not heard about

the famous Boeing study (Bigos, et al., 1991)? Mental factors do affect pain, and especially litigation. To relegate such symptoms or "dismiss" causation to mental factors is a dead end, a cop out, easily opted for by those who can't understand or don't want to take the time and energy to account for the admittedly complicated factors of the mental side of work. Such a simplistic and myopic approach to a massive and widespread phenomenon ignores and obstructs the opportunity for real science to assist in the resolution of a great deal of human suffering.

I agree with Dr. Hooper that the ergonomic and epidemiological literature clearly demonstrates a significant relationship between the factors of force, repetition, vibration, awkward hand positions or hand intensive activity in the development of CTS. Such factors also include not only obesity, pregnancy and medical history, but even wrist dimensions. I would add, and I'm sure that in principle both Dr. Hadler and Dr. Hooper would agree, that such mental factors as job satisfaction, fatigue, usability, locus of control and organizational stresses (Jackson, Martin, 1996) are also relevant to the development of not only CTS symptoms, but perhaps even more importantly, the initiation of litigation in particular cases. On the simplest level, an employee's attitude about a job is an extremely important issue in not only the onset of symptoms, but treatment and disability management. Although my evidence is only anecdotal to date, I believe that carpal tunnel plagues are a real phenomenon.

The solution is not as Dr. Hadler seems to imply to dismiss the psychosocial aspects and ignore the problem, because it is thus "not work-related." As Dr. Hooper has long pointed out, it is necessary for the individual to take responsibility for their condition and treatment; that health care providers should not overindulge in diagnostic tests and unnecessary procedures which reinforce the picture of a sick and disabled person.

I would also suggest, as I have been doing for many years, that employers come to acknowledge the importance of nonphysical factors in the precipitation of CTDs in their employees. The very same ergonomic principles that are applied to the physical aspects of work can be applied to the mental or "cognitive" aspects of work. Those familiar with the vast body of knowledge which has evolved in the area of human factors research know the precision and depth of understanding we have developed around how people think and reason while performing work. This knowledge is readily applied to increased usability and efficiency of work processes and job productivity. I would suggest that we now go the next step and apply the principles of ergonomics (i.e., proactive interventions) into the arena of how people think about their work.

As Dr. Hooper states: "It is clear that individuals who do not like their jobs, their co-workers or their supervisors have a higher reported incidence of CTS." It is time to stop avoiding the obvious. In the language of TQM, the internal customer's job satisfaction is affected by such mental cumulative traumas as harassment, discrimination, stress, job-person matching, and corporate culture.

Dr. Judith Erickson has recently published her research, "The relationship between corporate culture and safety performance," which indicates that of the three factors identified in her study, positive employee setting was most predictive of safety performance. I would also recommend that Dr. Hadler and anyone concerned with such issues to familiarize themselves with Dr. Hal Hendrick's concepts of macroergonomics, and/or the techniques of participatory ergonomics. Cognitive ergonomics simply refers to the fact that mental injuries are the neglected CTD (Lindsey, 1991).

The application of ergonomic principles to the mental (cognitive and psychosocial) workplace will increase task usability, enhance safety performance, and truly decrease the incidence of all CTDs.

References

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