

MEDICOLEGAL NEWS

VOLUME NINE, NUMBER SEVEN

ALAN M. IMMERMANN, D.C.

JULY 27, 2005

NEW 2005 JOURNAL ARTICLE: "A REVIEW OF THE LITERATURE REFUTING THE CONCEPT OF MINOR IMPACT SOFT TISSUE INJURY"

A new article recently appeared in the peer reviewed indexed medical journal *Pain Research Management*: "A review of the literature refuting the concept of minor impact soft tissue injury." This article is an absolute MUST READ for any attorney handling low speed impact automobile accidents.

The article notes: "Minor impact soft tissue (MIST) is an insurance industry concept that seeks to identify late whiplash as a psychosocial phenomenon. However, the medical literature in this area has not been systematically reviewed since the Quebec Task Force's review in 1995." The article's objective was "To review the medical literature which claims that late whiplash is an organic phenomenon causing significant disability." The conclusion: "A review of the literature did not support the validity of MIST." Sixty-three medical journal articles were reviewed.

The authors note that one study examined "the relationship between real-world Delta V, as measured by 'black boxes' installed inside vehicles, and chronic injuries. While one would expect a linear relationship, none was found. For instance, chronic injury rates at Delta Vs of 5-10 km/h were twice that of 10-15 km/h! In addition, chronic injury rates at 15-20 km/h were twice the rates seen at 20-25 km/h. These rates likely relate to the stiffness and elasticity of the vehicle and the complex interplay between seat design, occupant mass, occupant position and vehicle dynamics." In other words, a low Delta V does not automatically mean that the risk or severity of injury was low.

The authors then note: "If late whiplash is a short-term, mild muscle pull that should always resolve on its own with only supportive care, then the MIST policy would seem reasonable. However, if there were data showing this injury is more serious, then MIST would be called into question." The authors then list the literature which documents injury to the dorsal root ganglia, facet joints and ligaments.

The presence of a neurological injury is supported by the fact that "numerous researchers (found) that late-whiplash patients have different sensory thresholds than normal controls (42-47) . . . This means that they feel things differently than someone with a normal sensory system . . . the prevailing opinion is that this is due to sensitization of the CNS."

What about long-term prognosis for late-whiplash injury? The authors reviewed a study which found that "Seven years after the crash, there was a 160% to 370% increased risk for headache, thoracic and low back pain, fatigue, sleep disturbances and ill health for those who were in a rear-end crash." Another researcher studied a group that was followed for 15.5 years.

Over 70% of the patients continued to report symptoms related to the original crash at the end of the study. Between years 10 and 15.5, 18% had improved, while 28% had worsened and 54% had stayed the same. A third study found that “when patients who sought specialty care for injuries reported in an emergency room were compared with patients also seen in the emergency room but with no motor vehicle crash-related complaints, the disability rate in the injury group was 30-35%, while the non injury group reported an injury rate of only 6%.”

The conclusion: “Is MIST still scientifically valid? While many authors have published studies that would seem to support the MIST hypotheses, the vast majority of work published in the past 10 years would not support MIST.”

Christopher J. Centeno MD, Michael Freeman, PhD MPH DC, Whitney L. Elkins MPH: “A review of the literature refuting the concept of minor impact soft tissue injury,” *Pain Res Manage* 2005;10(2):71-74.