

## WHIPLASH UPDATE

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- The cause of this fluctuation is "important in medico-legal reporting since patients' outcome can only be predicted at 3 months and not confirmed until 2 years." **[Very Important]**
- "Therapeutically, the greatest potential for influencing the natural history of whiplash is within 3 months before symptoms become established."

I believe that in an effort to reduce chronic pain and disability from whiplash injuries, we should treat the patient intensely in the first 3 months following injury. I suggest that we treat the patient daily for 2 weeks and then 3X per week for 10 weeks.

The assertion that all whiplash-in-

jured patients should recover in 6-12 weeks is absurd.

### A Review of the Literature Refuting the Concept of Minor Impact Soft Tissue Injury

*Pain Research and Management* 2005 Summer;10(2):71-4.

Centeno CJ, Freeman M, Elkins WL. This article cites 63 references.

These authors note:

"In the mid 1990s The United States automobile insurance industry launched a new concept in claims handling called MIST, an acronym for minor impact soft tissue."

"The theory behind this claim stance was that it is virtually impossible to sustain permanent or serious injury in a low-damage car crash."

"This new concept has expanded to almost all major American car insurers, yet little has been published regarding its scientific validity."

For patients with objective physical examination findings but little automobile property damage, this policy has led to a loss of insurance coverage for their injuries. [Insurance companies are basing a patient's injuries on the examination of the car rather than on the examination of the patient. This is absurd.]

The key points noted in this article include:

- Minor impact soft tissue (MIST) is an insurance industry concept that seeks to identify late whiplash as a psychosocial phenomenon rather than an organic injury.
- There are a significant number of studies that refute the MIST concept, and a review of the literature does not support the validity of MIST.
- Well-done studies show that lower delta Vs increase the chronic injury rate by a factor of between 2 to 4 times.
- Stiffer vehicles (with a tow-hitch on the rear) when struck, increase patient injury while reducing vehicle damage. MIST programs do not take this into account when determining injury risk.
- Well-done studies have documented "objective clinical deficits" in both men and women subjects at collisions that produced a delta V as low as 2.5 mph.
- The duration of symptoms in women is significantly longer than in men.
- There is no connection between delta V and injury. **[Very Important]**
- One of the main reasons that MIST is flawed is because "studies presented at international congresses [on whiplash] show that vehicle stiffness has increased to reduce property damage in low-speed crashes." **[The KEY Point]** [Stiffer vehicles have less property damage in a collision, but move more, resulting in greater occupant injury.]
- Also, whiplash injuries are increasing because seats have been made stiffer to avoid rearward occupant ejections [a byproduct of making vehicles stiffer]. As seats are made stiffer, the shear forces that injure the neck increase. **[Key Point]**
- "The lack of a direct link between delta V and long-term neck injury rates calls into question the validity of a no damage, no injury policy."
- Whiplash is proven to injure the dorsal root ganglion, cause fractures of the facet joints, tear the anterior longitudinal ligament, and injure the

facet capsules. These injuries cannot be detected on advanced imaging.

- Significant joint and ligament injuries occur at low speeds, and these injuries have been confirmed in live volunteers. **[Very Important]**
- Numerous studies have proven that the facet joints are the primary source of chronic whiplash pain, and that the chronic pain is not coming from self-limiting muscle injuries.
- Chronic whiplash patients have different sensory thresholds than normal controls, indicating that these patients feel pain that others do not.
- Another cause of chronic whiplash injury is serious, permanent injuries to the ligaments of the upper cervical region, including the alar and transverse ligaments, the posterior atlanto-occipital membrane and tectorial membranes. These ligament injuries can be visualized with high resolution [proton density weighted] MRI.
- Whiplash injured patients have a 160% to 370% increased risk for headache, thoracic and low back pain, fatigue, sleep disturbances and ill health compared to controls.
- Whiplash injured patients have a 3-fold increase of neck and shoulder pain 7 years after rear-end crash exposure, compared to controls.
- 70% of whiplash patients report symptoms related to the original crash 15.5 years later.
- 30-35% of patients reported that they were disabled 17 years after whiplash injury, while only 6% of controls were disabled.
- The vast majority of work published in the last 10 years does not support MIST.

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