

Medical-Legal Report

Trauma Series #94

Bodily Injury is NOT Proportional to Vehicle Damage

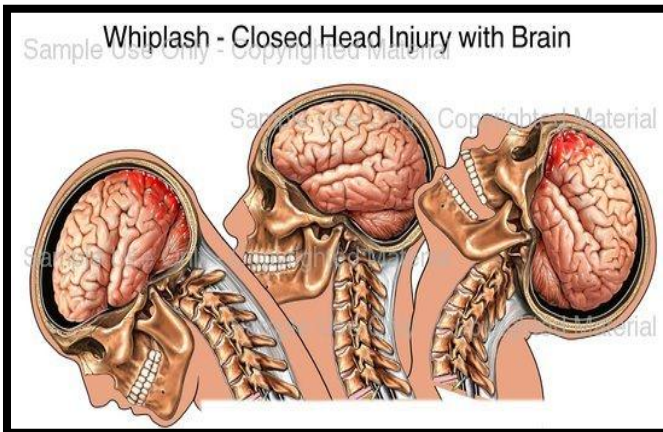


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The argument that property damage correlates to bodily injury has been a controversy for many years. The article discussed here, written by Elbel, Kramer, Huber-Lang, Hartwig and Dehner (2009) was published in *Patient Safety in Surgery*. The authors, after reviewing the research prior to writing this paper, stated, "The results of these studies are rather inconclusive and sometimes contradictory. Thus the scientific community has not yet reached consensus regarding the threshold value for cervical spine injuries after whiplash. Nonetheless, ΔV threshold values [ΔV equals change in velocity of the occupied vehicle as one factor to determine forces] were adopted very early in the history of insurance law as a criterion to accept or deny the claim settlement for whiplash-associated disorders (WADs)" (Elbel et al., 2009, p. 2). The authors realized that laboratory and real life situations are often very different and stated "...this

study analyzes the correlation between ΔV and cervical spine injuries in real-life accidents and questions whether ΔV is a valid predictor for cervical spine injuries following whiplash" (Elbel et al., 2009, p. 2).

In regard to low delta-v impacts they stated, "This study provides evidence that, in real-life accidents, cervical spine injuries may occur at low ΔV values, while it is possible to escape unscathed from collisions with high ΔV values...Therefore it is impossible to make meaningful statements about the existence of WAD based solely on assessment of the ΔV value. This finding might be of importance for the surgeon's assessment and patient's safety after a car accident. Diagnostic and therapeutic management should not be based solely on information related to trauma impact" (Elbel et al., 2009, p. 3).

The information in this research paper is critical to understand and to help show that each and every injury case stands on its own. It is up to an experienced clinician to be able to properly correlate causality to bodily injury and any persistent functional losses.

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