

“Why do I still have pain, I thought it was just whiplash?”

These words are spoken to doctors on a daily basis by patients that have lingering or recurring pain after being involved in a car crash. Unfortunately, most people and doctors are unaware of the severe ligament injuries that can occur with motor vehicle collisions (MVC), even those considered “minor impact”.

Understanding the Problem

Whiplash is a term people commonly use to describe a cervical acceleration deceleration (CAD) injury. I will use the word “whiplash” because it is what most people are familiar with when speaking about these injuries. Whiplash injuries are estimated to cost the US \$346 billion dollars per year, close to the cost of heart disease, the leading cause of death in the US. Injuries relating to motor vehicle collisions are a major public health risk, and cost insurers, employers, and most importantly individuals, significant time and money. *The larger problem is that in many cases the injured person loses the ability to work and enjoy life as they had in the past.*

Are Whiplash Injuries Real?

A common misperception is that whiplash injuries are not real, and that many people reporting they have whiplash are just trying to get a settlement or payment from the insurance company. Fraud has been estimated at less than 10% of all MVC claims, and can be spotted by a physician experienced in

treating these types of injuries. The threshold for potential injury in a MVC has been documented to be under 5mph and is dependent on “risk factors” of the person in the car, (age, body position, presence of other diseases or conditions, etc.) and on something called (delta V), or change of velocity. Change of velocity depends on the relative masses and stiffness of the cars involved.

Low Speed Collisions

One of the most common misperceptions in motor vehicle collisions is that car damage is related to occupant injury. It appears to be common sense that if the car is damaged more, then the occupant is more likely to be injured, right? Wrong, every high quality study that has been done to test the idea that car damage equals occupant injury has proved that *no relationship exists*. The reason is due to the fact that at lower speeds, cars tend to bounce, or spring off of each other, transferring energy to the occupants. In higher speed collisions, cars crumple, and the crumpling absorbs energy from the collision, and decreases the change of velocity (delta V), decreasing the probability of injury. There is not a single research study that shows a relationship between car damage and occupant injury, not one. If there was a relationship, then everyone whose car is totaled would be more severely injured, and we know that people walk away from major collisions every day.

Injuries More Than Whiplash

How many people are involved in motor vehicle collisions that are told, “You have a little whiplash, take some Tylenol and you should be better in a few days”? This scenario happens thousands of times per day across the country. Granted, in the emergency room they are trying to save your life if you are dying, so they tell you to follow-up with a physician. Your primary care physician will do everything they can to help you, but they likely do not specialize in the assessment of injured spinal ligaments. Many peoples’ pain will go away in the short-term, only to return when they try to work, clean, play with their children, participate in recreational sports, or exert themselves physically. Why then, does back pain frequently return after the initial soreness from a whiplash injury is gone?

Spinal Ligament Injuries

A sprain is an injury to a ligament that results in a degree of tearing. A spinal ligament sprain is the most common diagnosis in a MVC, but spinal ligaments are not routinely tested and measured with stress, or bending x-rays due to the tediousness of measuring the position of every vertebra by hand. Computer technology now allows physicians to very accurately (with less than 2% error) quickly measure spinal sprain injuries and determine the degree of ligament injury. We have a board certified medical radiologist perform all of

our spinal ligament tests. Spinal sprains are *permanent* injuries that can cause spinal joints to become loose, and can result in significant long-term pain, spinal arthritis and potentially fusion surgery to stabilize the spine. Spinal sprains can carry a whole person impairment rating according to the AMA Guides to Impairment 5th edition of up to 25%. Assessment of the degree of spinal ligament sprain is something everyone should demand when injured in a MVC, no matter the amount of car damage. Don’t take the chance of suffering with pain for a lifetime, and get your spinal ligaments checked if you are in a car crash.

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Dr. Brad Shook’s practice focus is on treating soft tissue injuries of the spine related to motor vehicle collisions. He is an expert in spinal ligament assessment, has extensive training in biomechanics, accident reconstruction, injury triage, diagnosis and rehabilitation of soft tissue injuries sustained in MVCs. Dr. Shook works with a team of medical specialists to make sure injured patients get the best care possible. View Dr. Shook’s curriculum vitae at HickorySpine.com, or call (828) 324-0800 to schedule an appointment at one of two office locations in Hickory.