Dr. Robert Golden D.C. Oldsmar Chiropractic Center 3906 Tampa Rd. Suite A, Oldsmar, Fl. 34677 813-855-5986

10 Facts you should know about Whiplash

- 1. Pain is not the only symptom: Although neck and/or shoulder area pain is the most common symptom associated with a whiplash injury, look for other symptoms such as (but not limited to) headache, numbness/tingling in the arms, nausea, difficulty swallowing, dizziness, poor concentration, jaw pain, blurred vision, ringing in ears, and more. Many of these symptoms may not manifest until days, weeks, or months after your collision.
- 2. Cervical spine injury can occur at low speeds: It doesnt take a lot of force to inflict injury to the neck. In fact, speeds of only 5-10 mph can generate significant G-forces to injury to the soft tissues (muscles, tendons, ligaments, and discs) in the neck. Factors influencing injury include (but are not limited to) vehicle size/weight and speed differential, location of impact direction, head restaint location, seat failure, seat back angle and "spring", seat back height, surface slipperiness, and more.
- 3. **No vehicular damage does NOT mean no injury:** As stated in #2, low-speed collisions can generate enough force to cause injury to the neck. It is important to know that an 8 mph rear-end collision may result in a 2 g-force acceleration of the impacted vehicle and a 5 g force acceleration acting on the occupant's head, all within 250-300 msec. after impact. IF the metal of the car crushes, energy is absorbed and LESS is transferred to the occupants and VICE-VERSA! So, to avoid injury, it's better to have vehicular damage. Studies show a 10 mph impact can produce a total collapse of only 2.5 inches (mostly to the bumpers) Often you have to crawl underneath the vehicle to see the damage.
- 4. An unusual S-shaped curve has been identified during the rear-end impact: These are seven cervical or neck vertebrae which form a 35-40 degree curve called a lordosis, which is "C-shaped." In the initial 50-75 milliseconds after the impact during a rear-end collision, the head remains stationary while the seat moves the torso and rest of the body forwards and for and instance, an "S-shaped" curve is created (flexion in the upper half and extension in the lower half). This abnormal curve occurs BEFORE the head hyperextends backwards POSSIBLY hitting the headrest and then springing forwards (like "cracking a whip").
- 5. **X-ray can prove soft tissue damage:** X-rays are often used to "rule-out" a fracture and as a result, they are often initally read as "normal" as radiologists dont often report on the subtle findings found on the x-ray that may support the presence of a soft tissue injury. As chiropractors, we OFTEN take "stress views", or a flexion and extension x-rays, after the initial painful symptoms improve. Stress x-ray can yield a much better image of how well the ligaments are holding the vertebrae together. When ligaments are stretched or torn (just like ina sprained ankle), excessive movement and/or angles can form between the bones, which are often only be seen at the extreme end-points of movement. We can measure the angle formed between

- the vertebrae and the amount of translation or "slip" that occurs to determine if there is a loss of ligament control which results in excessive motion, increasing the likelihood of future problems.
- 6. "Rest = rust" when it comes to whiplash: when we hurt, we often instinctively choose rest over activity, as we may be afraid that any activity will make the pain worse. But after just a few days of rest, both our injured AND healthy muscles become stiff and weak, which prolongs the healing process. Most studies show that returning to normal activity as soon as possible results in faster healing and resolution of pain. Also, the longer you remain inactive, the greater chance for chronic pain to develop, which can result in permanent problems. Your doctor of chiropractic will guide you GRADUALLY back to normal, desired activities. DONT LET PAIN OR THE FEAR OF PAIN keep you from getting on with life! This is both physically and mentally harmful!
- 7. You dont have to be in a car to get whiplash: Even though car craches account for the majority of whiplash injuries, a slip and fall or participating in a high-impact sport such as football, snowboarding, skiing, boxing, soccer or gymnastics can result in head/neck trauma, which is more common than you think! With this said, other conditions, such as concussion, can occur in car crashes even if you dont hit your head! the term, "mild traumatic brain injury" or MTBI is frequently used when it pertains to car craches. Here, common symptoms include difficulty finding words to express yourself, losing your place when talking, and difficulty concentrating, focusing, and communicating. Many people are self-conscious about these types of problems and often do not discuss them with their doctor, make sure you do!
- 8. Aging increases the risk of whiplash injuries: The elderly are more likely to suffer from a whiplash injury compared to younger individuals. This is because as we age, we lose flexibility in the joints, muscles, and tendons in the neck. This REDUCES the ability for these tissues to stretch, making them MORE likely to be injured during the whiplash process. Also, the shock-absorbing cushions between our vertebrae lose their water content and literally dry up and crack as we age. This, along with the gradual onset of osteoarthritis in our joints, results in a reduced cervical range of motion.
- 9. **Females are at a greater risk of injury than males:** This is because there is simply less neck muscle mass and strength among medium built females vs. males. This difference is even more dramatic in slender-necked females. Add the add component to this and the older slender female neck is particularly vulnerable to a cervical spine injury duee to whiplash.
- 10. **DO NOT IGNORE SYMPTOMS:** Although most neck-injured crash victims experience immediate pain, some do not. This delay in symptom onset can be hours, days, and even sometimes weeks! Although it's "Human nature" to procrastinate and NOT seek immediate chiropractic care, you should! Studies show that the longer you wait, the longer it may take to help you! Also, in most cases, neck pain should gradually improve within the first month or twom but this does not always happen. The longer pain persists, the lower the odds for resolution, especially if the pain has lasted more than six months. Persisting symptoms may include (but are not limited to) headache, fatigue, shoulder pain, blurred vision, dixxiness, difficulty concentrating, communicating, sleeping and/or swallowing. BOTTOM LINE: consult with a doctor of chriopractic ASAP after the crash as prompt care yeilds the best results!