
The Personal Injury Clinic

SPECIAL WHIPLASH EDITION

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What You Should Know About

Acute Cervical Spine Injuries

Common Causes of Whiplash - Resulting Injuries - Complications

What to do if you have a Whiplash Injury?

Contact the Personal Injury Clinic - 272-8471

What Is A Whiplash Injury?

A whiplash injury is the involuntary thrust of the head and neck in any direction, and the resulting elastic recoil of the head and neck in the opposite direction, with injury to the surrounding and supporting tissues. Although the proper term for this type of injury is a cervical sprain or strain, the term whiplash was coined to include all aspects of the injury.

Common Causes Of Whiplash!

Common causes are automobile collision, a sudden jerk on one or both arms, a violent blow to the head or chin, a reflex jerking of the head due to fright of sudden noise, and any kind of fall that causes sudden forceful movement of the head and neck.

The Golden Period

The first three weeks after the injury is called "The Golden Period of Treatment." If the treating physician does not fully understand the whiplash type of injury, serious consequences may follow.

Unfortunately, some doctors may not understand the special threat that whiplash holds for the victim. Too often he only treats the victim for muscle spasm.

Whiplash is the type of injury that requires special knowledge and experience, and requires more of a doctor's time than other types of injuries.

Without proper care and understanding, severe and permanent injury may result.

However, recent developments in manipulative practice show that uncared for cases may still obtain a great deal of benefit even years after the injury.

WHAT TO DO

If you are the victim of a whiplash injury consult a conservative health care practitioner as quickly as possible. He is a specialist in structural and spinal disorders. He will advise you frankly, sincerely and honestly. Follow his directions to obtain maximum results at the lowest cost.

Should your case require radical care, your board certified chiropractic orthopedist will so inform you and arrange for consultation with any specialists you might need.

Insurance

Conservative care is recognized as the treatment of choice for whiplash by more than 1000 insurance companies. These include automobile liability, medical and health, on-the-job, and managed care organizations. In the State of Utah, personal injury protection laws require coverage for initial care of an injury regardless of who may be at fault.

The Injury

The forces causing the whiplash may result in concussion, contusion or lacerations to the soft tissues and may produce strains, sprains, subluxations and dislocations. Joint injuries and fractures to the bones are also common.

Whiplash injuries may involve the nerves, arteries, spinal discs, bones, spinal cord, ligaments, muscles, tendons, cartilages, sympathetic nerves, parasympathetic nerves, nerve ganglia, nerve plexes, and the brain.

Degree of Injury

The degree of injury depends mostly on the forces and direction involved. For example- a car weighing 3000 pounds traveling only 25 miles per hour creates a force equal to 3, 450 pounds. This means that several tons of force are exerted on the victim's neck at the moment of impact.

The research crash council of the USAF demonstrated that the normal neck can withstand a forward snapping acceleration of 50 times the force of gravity before producing major injury, whereas a backward snapping acceleration of only 5 times the force of gravity can be tolerated. Thus, the speed vehicles at impact is not the critical determining factor on the nature of sustained injuries.

Other factors affecting the degree of injury and disability are the length of the neck, weight of the head, age, sex, congenital anomalies and pathology.

NECK—The longer the neck the greater the possibility of injury.

HEAD—The heavier the head the more likelihood of injury.

AGE—The elasticity of the neck structures decreases with advancing age. The same injury tends to be more serious in the adult patient than in the spine of children or teenagers. In general, the older the victim the more likelihood of injury and disability.

SEX—The sex of the victim is important since the female autonomic nervous system (supply to glands, blood vessels and internal organs) is more complex and sensitive than in the male.

PATHOLOGY—Disease and aging processes affect the degree of injury. For instance, a whiplash type of injury to a pre-existent arthritis in the neck would tend to be more serious than the same injury imposed on a normal neck.

Complications

Strains, Sprains & Fractures

Ligaments are both flexible and elastic...allowing freedom of movement. However, if stretched beyond their elastic limits, injury occurs. If the muscles only are involved, the condition is called a strain. If the ligaments are involved, the condition is called a sprain. When the ligament itself does not tear but the bone to which it is attached tears, an avulsion fracture occurs. These conditions are very different and require different methods of treatment. The healing time for each condition varies accordingly.

Injured joint ligaments heal with scar tissue, in which the elasticity is lost, resulting in a loosened spinal joint. This loose joint becomes unstable and may result in traumatic arthritis.

Immediate disability follows injury to ligaments. Healing from the functional viewpoint, is seldom perfect.

Traumatic Arthritis

Any injury that stretches into a joint usually threatens the joint with traumatic arthritis.

The cartilage covering the touching surface of the joints may be torn by any violent twisting motion or impact. The cartilaginous surfaces may become devitalized, disappear, or become incongruous as a result of the severe backward and forward snapping movements of the whiplash.

The incongruity or loss of apposition of a neck joint is very painful and is known as traumatic arthritis. This, a sprain or strain of surrounding soft tissue of the joints can cause a relaxed or loose joint, resulting in degenerative (arthritic) changes at a later date.

Muscle Spasm

Muscles can be bruised or torn or over-stretched by a whiplash. This results in muscle spasm, loss of the normal neck curve, and limitation of motion. Hemorrhages within the muscle may occur, and usually dissolve spontaneously.

Muscle injury should improve within several weeks. If it continues beyond a normal period, then myofascitis sets in, which is an inflammation of the muscle and the adjacent covering (called fascia, which is an inelastic binding

tissue). This causes a thickening of the fascia and additional limitation of movement.

The injured muscle and surrounding ligaments may be replaced by scar tissue—a condition which is called myofibrosis.

The inter-relationship of injuries should be realized. When damage occurs such as a hemorrhage, swelling, sprain, or strain, almost always the nerve supply is affected. Likewise, if there is a compression of the spinal nerve root as it emerges from between the vertebrae there may be interference either with the motor or sensory function of the muscle.

So you can see that muscle injury may cause nerve damage...and nerve injury may cause muscle damage.

Ruptured Disc

The violent movements of a whiplash may result in a ruptured disc. Conservative health care should be pursued extensively before the victim undergoes surgery for a ruptured disc in the neck. The reason being that the closer one approaches the brain, the more dangerous the operation.

Approximately 70 to 80 percent of ruptured disc cases respond to chiropractic care. Twelve to eighteen months is the average disability.

Some cases involving whiplash injury do not affect the disc in the early stages. Left untreated; however, the resulting instability and spinal dysfunction becomes the cause of disc degeneration and disease.

Nerve Root Compression

Impingement or compression of the nerve root is one of the most common complications in whiplash. Nerve root pain is different from other types of pain. It is felt in the entire area that is serviced by the particular spinal nerve. It is known as “radiculitis” or radiating pain. Almost all whiplash cases involve nerve root compression. Nerve root irritation may also be caused by arthritic spurs digging into the nerves when the neck vertebrae are misaligned from whiplash, and the resulting muscle spasms. Other factors causing nerve root compression are fractures, swelling of the capsular structures and misalignment of the vertebral arteries.

Nerve Injuries

There are two types of nerve stretching injuries that result from whiplash. The first is that of an over stretching which does not interrupt the pathway of the nerve, but may cause interruption of the nerve impulses. This type of injury will usually recover without complication.

The second type of nerve injury is where the actual nerve fibers are over stretched to the point of tearing. This may require as long as a year or more to heal and the nerve seldom recovers completely.

Brain and Spinal Cord Injury

Whiplash may cause concussion, contusion or laceration of the brain. Brain injury should be suspected in all cases where the victim is unconscious following the accident.

Damage to the spinal cord within the spinal canal results in injury to the body only below the point of damage. Concussion to the spinal cord causes a transient disturbance to spinal cord function, with no permanent or local signs. The spinal cord may be injured by a contusion - in this instance residual signs remain ranging from slight motor signs to complete loss of brain function.

SYMPTOMS OF WHIPLASH

Chiropractic and Medical Research now link many symptoms with whiplash injuries.

One or more of these symptoms often occur immediately. However, others may not develop until hours, weeks, months or even years following the injury.

Many patients having these symptoms are unaware or have forgotten about their accident: Headache(one or both sides), Head and neck pains, tension, muscle spasms, stiff neck, restriction of neck motion, Black-outs, fatigue(tiredness), extreme nervousness, mental dullness, muscle swelling, heaviness of head, neck & shoulders feel tired, light blindness, loss of balance, equilibrium problems, loss of hearing, pinched nerves, slipped discs, muscle tearing, neuralgia,(nerve pain) neuritis, ringing in the ears, nausea, gastro-intestinal symptoms, light headedness, shortness of breath, low back pains, pain between the shoulders, cold hands or feet, excessive sweating, numbness of arms, hands, shoulders feet or legs, loss of normal spine contours, increased reaction to drugs, anxiety, irritability, poor memory, inability to concentrate, periods of depression, fractures, dislocations, heart

palpitation, eye strain, tremors, pallor, insomnia (can't sleep), muscle atrophy, or rapid heart beat.

Understanding and Management

Before you choose a health care provider to help you with this problem, you must select one with a complete understanding of the soft tissue injury. If you have been told by a friend or other health care provider to **"....go home, take some muscle relaxants and anti-inflammatory drugs and not to worry about it, it will go away soon," don't believe it.**

Soft tissue injuries may be very simple and short lived if they are managed correctly and completely from the onset. If they are left alone, or managed incompletely with only drugs or physical therapy, they may be the source for chronic pain and spinal dysfunction causing repetitive episodes with the symptoms mentioned above.

The Best of All Worlds

The board certified chiropractic orthopedist is the best qualified health care provider to manage the whiplash case. He has the skill and training in conservative chiropractic medicine along with the advanced training to deal with complicated cases. He has ready access to all branches of health care and can consult with and refer to all other medical specialties if necessary. He is the only one fully trained and certified in soft tissue management.

At the Personal Injury Clinic, we provide such a specialist with the complete facilities to handle this type of injury including all the necessary examination, x-ray and testing equipment, all necessary types of treatment modalities including

physical therapy, supports, braces, casting, adjusting and manipulative measures, monitored exercise rehabilitation, work restrictions and ergonomic structuring, home and lifestyle analysis and recommendations.

A four year research program has shown that the key to complete recovery from a whiplash injury is the monitored exercise rehabilitation. Many doctors often recommend exercises to be done at home but do not train and follow patients with precise instructions and safeguards. Care must be taken to begin only certain exercises at the correct point in the recovery phase.

Patients often require some kinds of pain medication. If you prefer to avoid the dangers of prescription drugs, we offer a full and effective line of homeopathic and natural pain relievers and remedies for most symptoms and conditions. If your condition requires the use of prescription medications for any reason, consultation with the appropriate medical specialists will be arranged for the best and safest prescription drug for you.

If you have been in an accident, or if you have any of the symptoms described, you should strongly consider calling today for the necessary attention.

If you are already seeing a conservative health care provider, we encourage you to follow his advice and remain under his care. Be sure that the management plans for your condition include all the aspects described above.

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