

PHYSICAL MEDICINE

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# *Auto Accident*

## **Treatment of Whiplash**

# **Personal Injury**

# **Clinic**

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Before surgery, consider this!

## Definition:

Injuries to the neck caused by a sudden movement of the head, backward, forward, or sideways, are referred to as "Whiplash." Whether from a car accident, sport, or an accident at work, whiplash or other neck injuries warrant a thorough chiropractic



check-up. The biggest danger with whiplash injuries is that the symptoms persist for years particularly if not treated appropriately. Even after whiplash victims settle their insurance claims, some 45% report they still suffer with symptoms two years later.



## Discussion:

In the past a typical whiplash injury where no bones were broken was difficult to document. Soft tissue injuries did not show up on normal x-rays/radiographs and insurance companies would deny coverage. New imaging devices (CAT Scans, Magnetic Imaging,

and Ultra Sound) now show soft tissue injury and insurance companies now cover most whiplash injuries.





When no bones are broken and the head doesn't strike the windshield, typical symptoms are as follows: 62% to 98% complain of neck pain, which typically starts two hours up to two days after the accident. This is often the result of tightened muscles that react to either muscle tears or excessive movement of joints from ligament damage. The muscles tighten in an effort to splint and support the head, limiting the excessive movement. 66 to 70% of those suffering from whiplash complain of headache. The pain may be on one side or both, on-again-off-again or constant, in one spot or more general. These headaches, like the neck pain are often the result of tightened, tensed muscles trying to keep the head stable and, like tension headaches, they are often felt behind the eyes. Shoulder pain, often described as pain radiating down the back of the neck into the shoulder blade area, may also be the result of tensed muscles. Muscle tears are often described as burning pain, prickling or tingling. More severe disc damage may cause sharp pain with certain movements, with or without pain radiation into the arms, hand and fingers.

## Common Symptoms:

Neck pain and/or stiffness - 92%	Impaired Concentration - 26%
Headaches - 57 %	Blurred Vision - 21 %
Fatigue - 56%	Irritability - 21%
Shoulder Pain - 49 %	Difficulty Swallowing - 16%
Anxiety - 44%	Dizziness - 15%
Pain on Shoulder Blades - 42%	Forgetfulness - 15%
Low Back Pain - 39%	Upper Limb Pain - 12%
Sleep Disturbance - 39%	Upper Limb Weakness - 6%

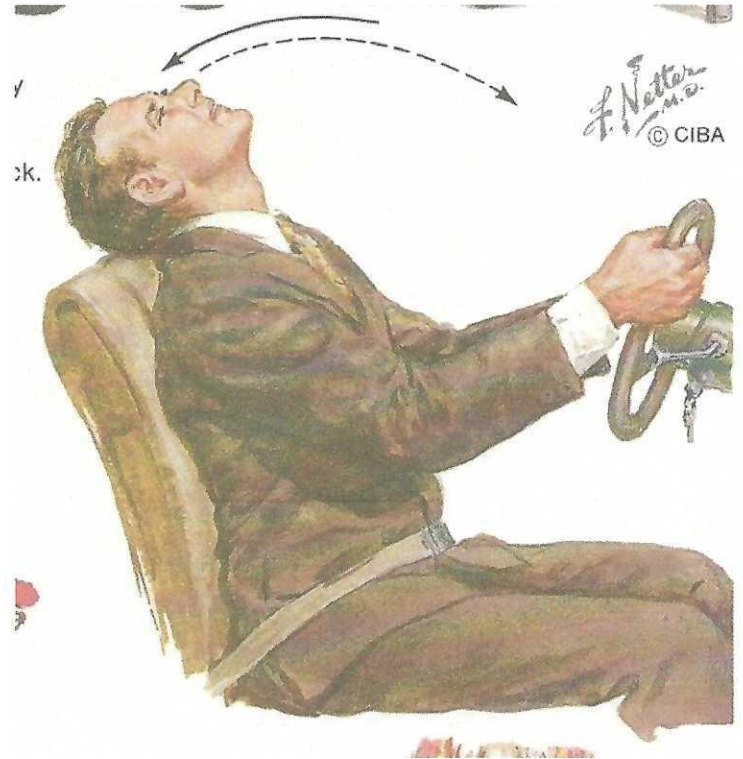


Arm Numbness/Tingling - 30%  
Sensitivity to Noise - 29%

ringing in Ears - 4%  
Jaw/Facial Pain - 4%

## How Does Whiplash Happen?

Whiplash is most commonly received from riding in a car that is struck from behind, or collides with another vehicle. When the head is suddenly jerked back and forth beyond its normal limits, the muscles and ligaments supporting the spine can be overstretched or torn. In a rear end collision for example, the victim's car is first pushed or accelerated forward and then, because their foot is on the brake, or their car hits the vehicle in front, their car is rapidly slowed down, or decelerated. As the vehicle accelerates forward, it pushes the body forward too, but the head remains behind momentarily, rocking up and back, until some of the muscles and ligaments are stretched or torn. Too often, the injury occurs before the head rebounds off the headrest (Providing there is one. If not, the injuries sustained are much worse as there is no method to prevent hyperextension from occurring). These muscles, in a reflex action, contract to bring the occupant's head forward again, and to prevent excessive injury. This overcompensates because at this point the head is already traveling in a forward direction as the car decelerates. This violently rocks

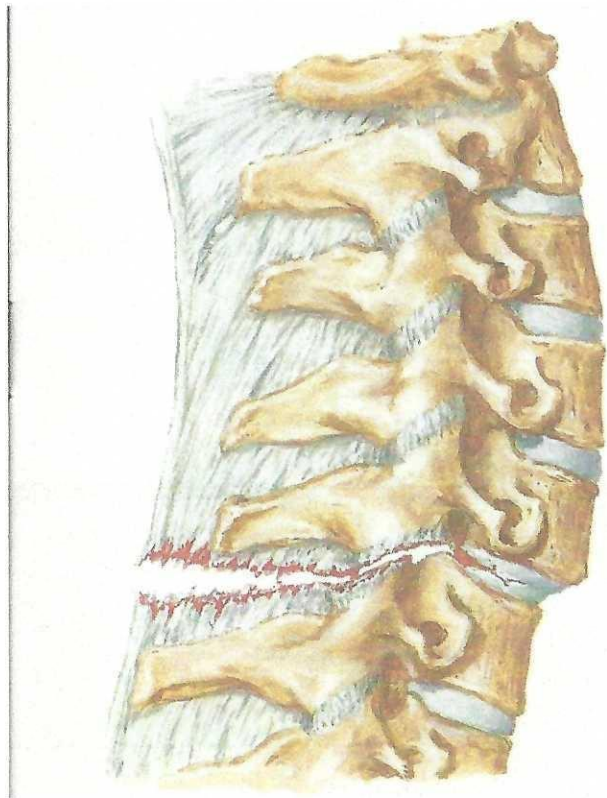




the head forward, stretching and tearing more muscles and ligaments, where the joint can become "jammed" and swollen. The soft pulpy discs between the vertebrae can bulge, tear, or rupture. Vertebrae can be forced out of their normal position, reducing range of motion. The spinal cord and nerve roots are stretched, irritated, and choked. If the victim is not properly restrained the occupants head may strike the steering wheel or windshield, possibly causing a concussion.

## Stages of Healing and Treatment

The soft tissues that are traumatized will go through four stages of



healing: \* The first stage involves simply the immediate effects of injury, including bleeding, blood-clotting, and cellular breakdown. The inflammatory response is the primary means that the body uses to respond to the injury. \* The purpose of the inflammatory stage is to surround the area of injury in an attempt to protect it. The effect of this response is usually proportional to the severity of injury sustained.

This phase can last up to 3 days. At

this time the doctor may discuss with you the importance of utilizing ice packs, as this is important to reduce swelling and control pain. Other therapies that will aid in the healing process include electrical stimulation, ultrasound and eventually computerized axial distraction. \* The repair stage is the process



following and is dictated by the severity of the injury. The injury will heal by regeneration, which is essentially the replacement of the surrounding tissues by fibrous tissue, resulting in scarring or adhesions. This phase can last from 2 days to 6 weeks. In this phase of healing, the doctor may recommend such things as alternating heat and ice to create a "flushing effect" in the blood supply and surrounding tissues. He may begin you on a stretching and/or strengthening exercise program, or recommend that you get a soft tissue massage for tightened muscles. Adjustments may be performed on, above, or below the site of injury. The goals of your adjustments are to relieve nerve irritation and pressure, relieve pain and spasm, restore the normal motion of your neck, and increase



its strength and stability. \* The body's response to stress constitutes the remodeling stage. This occurs when the residual scar tissue undergoes reorganization and reorientation along the lines of stress. This phase is significant to the patient. The importance of continuing with the prescribed exercises and use of moist heat on

tight and sore muscles will be stressed by the doctor. The resulting instability of the spine and soft tissues are noteworthy and depend on several FACTORS. The aforementioned does not exclude children. In fact, children involved in automobile accidents are often neglected in these types of injuries when in actuality, they suffer from the same symptoms and are at a 2/3 risk for damages. \* VEHICLE SIZE. Obviously, the heavier and faster the rear car is moving, the more severe the forces placed on the occupant in the front car. A large truck going 5 mph can do much more damage than a small car going 20 mph. \*



**HEADREST POSITION.** This can make an injury much worse if too low, and even at the right height, it must be close enough to catch the head in time (about 2 inches). A seat that is reclined will likely increase this distance, as will poor posture and driving habits if leaning forward.

\* **THE POSITION OF THE HEAD** is important. When turned to the side, for instance, it can only move about half as far as a straightforward position. Hence, the mechanism of injury can occur much sooner and substantially increase the severity of injuries.

\* **AGE** plays an important role because as the body becomes older, ligaments become less pliable, muscles weaker, less flexible and range of motion decreases.

\* **WOMEN** seem to be injured more seriously than men. This is most notable due to the fact that they tend to be shorter, have less muscle mass and less bone structure. Because of this, they are either too close to the steering wheel/airbag and/or have an improper fitting shoulder harness/ seatbelts.

\* **PRE-EXISTING HEALTH PROBLEMS** such as arthritis, lend to the severity of the injuries.

## **Treatment Frequency:**

The frequency of treatment has been set based on the outcome measurements following a study of a variety of protocols. We use the frequency that produces the best long term results and thus the least amount of cost for the patient. When any patient is qualified for the treatment following the intake examination, it means that



we expect that patient to respond very favorably by strictly following the protocol completely. Once any patient begins the treatment, we expect complete compliance to the treatment schedule. Partial compliance has shown to produce limited results, extended time in treatment, increased cost of treatment and frustration. It is critical to understand the treatment protocol and frequency in order to commit to it. When followed completely, our results are extremely good.

We have been successfully managing these kinds of injuries here for 42 years. The major objective is to reduce the residual injury effects and prevent long term neck, back and head symptoms. The natural course of progression for a soft tissue injury is the onset of disc disease which leads to eventual bone remodeling, spur formation, foraminal encroachment and then radiculopathy or nerve disease and dysfunction. All of these are painful to one degree or another and when the process advances, it becomes debilitating.

Proper treatment frequency has proven to reduce this disease progression and virtually eliminate the risk of chronic pain and dysfunction. Early intervention is also important as the repair process the body employs begins during the inflammatory phase. The key to this is patient compliance. It is important to be evaluated by a qualified chiropractic specialist who both understands the ramifications of the disorder and is well trained and experienced in the complete management of these injuries. The treatment is set in three phases as follows:

Phase I – Evaluation, Diagnosis and Acute stage treatment which is 3 times each week for about 8 weeks;



Phase II – Re-alignment and disc disease prevention which will now include our disc protocol and is 3 times each week for 4 weeks;

Phase III - Rehabilitation, which will include resistive exercise and is 2 times each week for 4 weeks.

During each phase, assessments are made to ensure progress and patient participation in the process includes graduating exercise routines, life style changes, behavior modification and of course, nutritional support.

## **Nutritional Support:**

During the first two weeks after injury it is critical to create an optimal healing environment for the various damaged nerves, ligaments, and muscles. They need adequate minerals, vitamins, water, and amino acids to heal properly. A balanced diet with abstinence from dehydrating substances such as alcohol, caffeine, hot dogs and too much hormone grown red meat can be beneficial. During the first day after trauma, the body is in its injury-shock phase. Nutritional changes are not advised for the first day because of the potential for disturbing the body's preprogrammed metabolic balance system. Mega-doses of synthetic vitamins and minerals are not suggested. A well balanced, digestible whole food concentrated multivitamin supplement will suffice. Supplement to facilitate the growth of ligaments, muscle and cartilage can be found on one of our [Absolute Health links](#) page. These are:

- **Catalyn – 3**
- **Tuna Omega 3 oil – 3-6**
- **Ostrophin PMG**
- **Calcium Lactate – 12**
- **Min-Tran – 6-12**
- **Calcifood - 3**



- **Betacol – 2**
- **Ostarplex - 3**
- **Glucosamine Synergy – 2**
- **Ligaplex I - 3**

Patients who use whole foods and these whole food concentrates have responded much faster to treatment and have had much less chronic residual problems recur after 5 years post injury.

You should begin each of these now to realize the best results from your treatment.

After the first week of treatment as the symptoms begin to subside, it is critical to continue with the indicated treatment procedures and then focus on the addition of the nutritional items and the switch over to whole foods. The combination of these items will aid in the improvement of circulation to the area surrounding the disc, help control the inflammatory process and stimulate regeneration of disc cells. It takes several weeks for nutritional treatment to affect the cellular level in the normal individual. In cases where discs are inflamed and muscle spasm is present, cellular metabolism may be slowed considerably in order to deal with the inflammatory process. Thus, nutritional support for this kind of condition is a long term process. It does, however; make long lasting changes. If lymphatic function is hampered at all in these damaged areas, some systemic detoxification may be necessary. It is critical that lymphatic drainage is fully functioning in the area of injury or disease in order for the process to work properly and completely.

**OF SPECIAL NOTE:** Cigarette Smoking during the first few weeks following an injury may interfere with the normal healing process. If you smoke during this time you may slow your recovery down or end up with pain that you would not have otherwise. This may result in you requiring more treatment and a

worse outcome. Cigarette smoking, which results in oxygen deficiency to already injured tissues, can deplete Vitamin C supply in your body and so Vitamin C should be increased. Smoking is not recommended for 4-6 weeks after a traumatic injury.

First, go to our website: [www.holladayphysicalmedicine.com](http://www.holladayphysicalmedicine.com) and select “Making New Cartilage” on the home page. This is a video that will take about 40 minutes. You may need to watch parts of it several times to understand what you need to do. Also refer to the Regenerative Medicine link in the Absolute Health Clinic page for information on Ozone injections for this condition.

Next, from the home page, select “Forms” then “Absolute Health Clinic,” select the Health Questionnaires. On this page, there are three linked (underlined) forms, select each, print each, complete each and then return them to the doctor as soon as you can. This will begin the process of evaluating your current level of nutritional health and provide a scientific basis from which additional advice can be given.

As you can see, there are many options to help you learn about overall health which is a key component to growing new cartilage and improving your immune system as well.

The above evaluations will determine if any additional ingredients may be necessary, but to begin, a considerable shift in nutrition will need to take place in your body.

## **INDICATIONS:**



Patients who have been in any kind of vehicular accident and have any of the following symptoms may qualify to be admitted to this clinic. Specific measurements and findings will be evaluated to see if your condition will respond favorably. Only patients with conditions that are very likely to respond are admitted into the centers for treatment.

- Neck Pain
- Arm Pain
- Headache
- Dizziness
- Cervical Disc Disease
- Low Back Pain
- Sciatica
- Leg Pain and Numbness
- Lumbar Disc Disease

Our clinical findings suggest the treatment using this protocol will create a relatively quick initial response. Patients who will do well tend to feel a sense of relief (which can be direct pain cessation or a centralization of pain) within 2-6 treatments. Full relief, if attainable will usually not exceed 18 sessions. (Rarely a stubborn pain syndrome may continue to improve slowly over 18+ sessions). Often patients will be treated 4-6 sessions and be relieved enough to start active rehab. Their treatments may continue for several further sessions before discontinuing or reducing the frequency. Some patients will improve initially then experience a worsening for a while.

## **CONTRA-INDICATIONS:**



Some conditions do not respond to the process and some would be aggravated. These conditions are offered other avenues of care. Current plain film x-rays are required to rule out contraindications before admission to the centers.

- Spinal Tumors
- Spinal Infections
- Vertebral Fractures
- Ankylosing Spondylitis
- Spondylolisthesis (for lower back)
- Severe Medical Conditions
- Spinal Fusion with Retained Hardware

Complete compliance to the protocol described can create an environment for best results. Adherence to the entire nutritional protocol is necessary to make this a reality. There are three basic steps in the nutritional protocol: First, elimination of toxicity; Second, proper consumption of whole foods and supplements as needed and Third, correction of the autoimmune response reaction. The nutritional recommendations are a critical element to completing the reversal of the disc disease, growing new cartilage and preventing a chronic problem. As this is a process involving many life style changes, you will need to commit time each day to study this concept. You need to do it. If you did not, you would not have disc disease.

You should begin each of these now to realize the best results from your treatment.



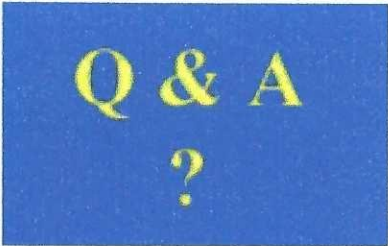
In the area where the disc space has been decompressed and detoxified, growth and healing can begin to occur. Patients who employ all 5 areas of treatment have much better results with the initial healing process and have far less recurrence of the problem.

## **COSTS:**

This therapy is covered by most insurance policies, either in whole or in part. Generally, the cost of all three phases of care is usually considerably less at our facility and is less than one half the cost of similar management at the hospital or large traditional medical facilities. The main difference between treatment and management at our facility and treatment by others is our outcomes are much better. We track our success with state-of-the-art outcome assessment measurement tools. Not only do our patients receive faster and more lasting relief during the initial phases of treatment but the long term chronic symptoms are much less.

The cost for our program is simple and straight forward. The procedures used in the treatment portion of the protocol are commonly accepted physical medicine modalities usually included in most insurance health care policies to some degree. Most carriers use a set fee schedule for these procedures that we are obliged to use by policy. Our prepaid group discount plan is considerably lower and some patients choose to use our contracted fees for the entire protocol.



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## *Questions and Answers*

Most people have many questions about the protocol and its management by a board certified chiropractic orthopedist producing an extremely high success rate. We recommend that anyone who is interested in this protocol investigate all the options when it comes to you and your family's health. Here are some of the common questions that we hear from our patients.

### **What is a board certified chiropractic orthopedist and why should I go to one?**

The chiropractic orthopedist is a chiropractic physician holding a license by the state to practice chiropractic medicine. He has extensive, specialized training in physical examination and treatment procedures emphasizing primarily the neuromusculoskeletal structures of the body including the spine and the extremity joints. This involves conditions affecting bones, joints, muscles, tendons, ligaments, cartilage and related nerve structures.

The chiropractic orthopedist handles both acute health problems such as automobile accidents and sports injuries as well as more chronic conditions including arthritis, scoliosis, and fibromyalgia.

Advanced procedures of x-ray, magnetic resonance imaging (MRI) and computed tomography imaging (CT), electro diagnostic studies, diagnostic ultrasound, nerve conduction studies (EMG) and clinical laboratory procedures are used to assist in the diagnostic process.

In the course of treatment, the chiropractic orthopedist applies manipulative/adjustive procedures along with other treatment options such as physiologic therapeutics, nutritional counseling, structural supports, corrective devices, exercise and rehabilitation regimens, preventive care advice and home therapy programs for patient health.

### **Is this protocol better than seeing a regular chiropractor, physical therapist or medical doctor?**

In most cases, seeing a chiropractic orthopedist is better than seeing a regular chiropractor, physical therapist or medical specialist because the chiropractic orthopedist is trained with the necessary skills of all three of those providers. He has the diagnostic skills not possessed by the physical therapist, has the manipulative skills not possessed by the medical specialist, has the diagnostic and management skills not generally possessed by the regular chiropractor and he has the skill and experience to enlist the skills of each of these others should a need arise.

### **If I've already seen a chiropractor, physical therapist or medical specialist, can I still see the chiropractic orthopedist?**

Starting with any of these providers or having been to the Emergency Room at the hospital only makes your visit to the chiropractic orthopedist that much easier. He will request your



records and simplify your intake process so that you can get on the path to recovery and prevention of disc disease. He will work well with any of these other providers to take advantage of everything they provided for you and increase the effectiveness and outcome of any program you may have already started.

### **Will this protocol help a whiplash injury?**

The complex nature of the whiplash injury requires the advanced training and experience of the chiropractic orthopedists to integrate all aspects of physical medicine that may be needed to relieve the pain, repair the injured tissue, restore the lost function and provide complete rehabilitation.

### **If I go on this protocol, how many treatments will I need, and how quickly can I expect to get better?**

The number of treatment sessions required depends upon the diagnosis and the overall severity of your injuries. One treatment session is about 20 minutes long. The total number of treatments averages between 24 and 38 sessions during the initial phase. Some difficult cases may require some additional sessions. Relief from pain varies with each individual and their physiology. However, most patients will experience some pain relief within the first few treatments.

### **Why should I consider seeing the chiropractic orthopedist?**

The chiropractic orthopedist focuses practice primarily to neuromusculoskeletal structures, and remains up to date of the latest research and developments through continuing education and recertification by attendance at chiropractic orthopedic conventions and seminars.

The chiropractic orthopedist is often used by medical practitioners for consultation, by the legal profession and the insurance industry for evaluation and treatment of patients, and the courts for the giving of expert testimony.

Patients who have suffered from conditions that have not responded favorably to previous treatment may seek a doctor with specialized training in advanced non-surgical orthopedic procedures and diagnostic methods.....**That doctor is the Chiropractic Orthopedist.**

## References:

References: Chiropractic Health and Rehabilitation Group. P.C. Copyright @ 1996 Langlitz Krames Communications @ 1989, 1991. Randanov BP, et al. Long-term outcome after whiplash injury: a two-year follow-up considering features of injury mechanism and somatic, radiologic and psychosocial factor. *Medicine* 74(5):281-297, 1995. Randanov BP, et al. The role of psychological stress in recovery from common whiplash. *Lancet* 338: 712-715, 1991. Nordhoff, L.S. Motor Vehicle Collision Injured. Mechanism. Diagnosis and Management. @1996, Aspen Publishers, Inc. Melton MR. The complete guide to whiplash. Body-Mind Publications @1998 Balch PA, Balch JF. @ 1997. Avery Publishing Group. Academy of Chiropractic Orthopedists Website: [www.dcorthoacademy.com](http://www.dcorthoacademy.com)