

Whiplash – Injury to Recovery

-Tailletha McClinton, PT, MPT

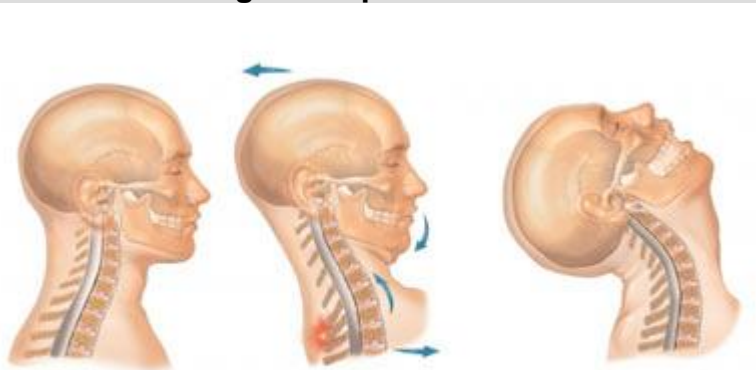
Mechanism of Injury

Whiplash is usually a soft tissue injury to the neck caused by sudden hyperextension and hyperflexion. The most common mechanism of injury is automobile accidents resulting in a rapid acceleration (rear-ended) or rapid deceleration (head-on). The severity of the injury is not always well correlated by the damage to the vehicle. Research has shown that the speed and damage to the vehicle are not indicators of how much physical injury may have occurred.

Other causes of whiplash include athletic injuries, falls, and assault and amusement park rides.

Severe whiplash can include injury to the muscles and ligaments (myofascial injuries), intervertebral joints, discs, ligaments, cervical muscles and nerve roots.

Process Leading to Whiplash



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Symptoms Include

- Neck pain
- Neck stiffness
- Headache and dizziness (symptoms of a concussion)
- Hoarseness and difficulty swallowing and chewing and eating (could indicate injury to the esophagus and larynx)
- Abnormal sensations such as burning or pins and needles in the arm or inner sides of the hands (this is called paresthesias)
- Shoulder pain
- Low back pain
- Blurry vision
- Ringing in the ears
- Tingling in the face
- Fatigue
- Problems with balance
- Weakness and heaviness in the arms
- Pain in the shoulder or between the shoulder blades
- Difficulty concentrating or remembering (could be symptoms of mild head injury)
- Irritability
- Sleep disturbances

TREATMENT

Physical Therapy

Most injuries of this sort resolve within a few weeks, and after the first week you should begin to notice consistent improvements.

However, if the pain is continuing, or even getting worse, (such as the appearance of headaches), it is appropriate to ask your Doctor for a referral to physical therapy. Therapy can help decrease the inflammation, relax the muscle spasms, and support your healing by teaching you about posture, body mechanics, exercise, and stretching. Often muscles that go into spasm can create asymmetry and stress on your spine. Physical therapists are trained in gentle, noninvasive techniques to bring your spine and muscles into alignment so your healing can progress smoothly and without complications. A visit to a physical therapist will allow you to receive a personal exercise program and treatment plan. Physical therapy and exercises may help strengthen neck muscles and improve neck motion. While exercise used to be recommended later in the recovery period, current recommendations suggest that maximum

benefit is obtained from beginning prescribed exercises within a day or two of injury.

After a diagnosis has been made, your physical therapist may choose from a range of treatment options, including exercises for flexibility, strength, stability, and restoration of range of motion. Other options include ice, heat, electrical stimulation, traction or mobilization, and massage. Your physical therapist may also analyze your home and work environment in order to ensure that you're not re-injuring yourself.

Much evidence suggests that low-impact aerobic exercise such as swimming, walking, low-impact aerobics, and stationary bicycling may also be helpful in decreasing neck pain. A physical therapist can design a pain-free exercise program just for you.

Once your physical therapy goals are met, your physical therapist will help you continue therapy on your own with a home program designed to fit your needs. The goal of physical therapy is to return you to normal activity as quickly as possible, with the knowledge you need to minimize or eliminate your problem.

Strength training is necessary to develop sufficient muscle strength to be able to hold the head and neck in positions of good posture at rest and during activity. Strengthening the muscles will also improve their range of motion.

Body mechanics describes the interrelationship between the head, neck, upper body and low back during movement and at rest. Training in proper posture decreases the stress on muscles, discs and vertebrae, giving damaged tissue the chance to heal. Poor posture and body mechanics unbalances the spine and creates high stress on the neck, which may impede healing.

Medications

These may include:

- Pain relievers
- Anti-inflammatories
- Muscle relaxants

Restricted Activity

While activity restriction used to be a common recommendation, current understanding of whiplash suggests that performing prescribed exercises is preferable.

Neck (Cervical) Collar

Previously, whiplash injuries were treated with immobilization in a cervical collar. However, the current trend is to encourage early movement, rather than immobilization. The soft collar may be used for a short term and on an intermittent basis.

References

www.apta.org

www.spine.org

www.orthoinfo.aaos.org

www.ninds.nih.gov

www.healingbridge.com

<http://sportsmedicine.about.com/cs/neck>

www.healthgate.partners.org

www.spineuniverse.com