

Whiplash

What is whiplash and can it become chronic?

Whiplash is the term for a neck injury that results from sudden and abrupt movement of the head back and then forward. It is the motion of the head and neck that results in a 'whipping' type movement. The harsh motion pushes and pulls the neck muscles beyond their normal range of motion and results in significant pain and discomfort. It is called Whiplash Associated Disorder to encompass the symptoms that may result.



Whiplash may result in injuries and pain that ranges in severity, from mild to extreme. While treatment usually begins with anti-inflammatories and other medications to provide pain relief, therapy and pain management may be required for chronic conditions.

Whiplash pain may become chronic when the pain does not subside for extended periods of time. According to statistics, nearly 10% of the 3 million yearly whiplash patients suffer from a severe and chronic condition in which long-lasting neck pain is experienced for months at a time.

Chronic whiplash syndrome, as described by the medical journal *Archives of Neurology*, is a pain in the neck that is so extreme that the person affected is unable to carry out a normal lifestyle. Both work and daily activities are disrupted due to this kind of severe pain and tenderness in the neck.

What are the common causes of whiplash?

The most common causes of whiplash are rear-end automobile accidents, where the collision occurs by another party rear-ending the vehicle or by the person doing the rear-ending. During this type of collision the neck muscles are usually relaxed and upon impact jerks the neck back and forth, exceeding the neck's standard range of motion. This type of movement places a severe strain on the muscles in the neck and the result is painful whiplash.

Those involved in contact sports and athletics may experience whiplash symptoms because of the impact with other players. Football injuries often result in whiplash and chronic neck pain due to the impact of the head and body, which causes the neck to jerk back abruptly.

According to statistics, women are more likely to experience whiplash than men. This is primarily due to the fact that men have stronger neck muscles overall than women (*Anderson, SE et al., 2011*). Age and body mass index are not typically a risk factor, as anyone is subject to whiplash pain; however, women are more commonly diagnosed with the condition and experience longer periods of pain and tenderness than men because of the strength of the neck muscles.



What are the symptoms associated with chronic whiplash?

The most common symptom associated with whiplash or chronic whiplash is pain in the neck muscles. A burning and inflamed sensation may arise immediately following the injury, typically within 24 hours. Other symptoms besides pain may include:

- Headaches, along the base of the skull and radiating pain into the temples at times
- Blurry vision
- Fatigue and tiredness within 12 hours of injury
- Stiffness in the neck and limited range of motion
- Dizziness
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Chronic whiplash may result in pain for several weeks with no relief. Some patients have reported pain and stiffness in the neck that lasts for several months at a time.

Restricted range of motion and neck pain can result in a difficulty to carry out daily activities, such as housework, employment, caring for children and any activity that requires a person to be on their feet for any length of time.

In severe cases of whiplash, a person may experience a ringing sensation in the ears, moodiness and irritability, and difficulty in focusing and remembering mundane things. Memory problems may indicate something more serious is going on. It is important to seek medical care right away if your condition is chronic and you suspect other problems following the injury.

What are the diagnostic tests for whiplash?

Diagnostic tests help to rule out other problems associated with whiplash, beyond the painful neck muscles. These tests may include x-rays to determine if there is a fracture, dislocation or other problem. In chronic whiplash conditions, it is not uncommon for arthritis to settle into the cervical spine region resulting in prolonged discomfort. Your pain management specialist can help diagnose if arthritis is a factor of the pain.

A CT scan may also help in determining damage to the soft tissue and bone. The doctor may order a CT scan in combination with x-rays to gain a clear view of the cervical spine and neck region.

An MRI may also be ordered so that the pain doctor can review the soft tissue injuries in greater detail. An MRI provides a clear view of the cervical spine, nerve roots and complete spinal cord.

What is the treatment plan for whiplash?

Pain management is needed for chronic whiplash and may involve a combination of treatment options, including medications, spinal manipulations, injections, physical therapy and strengthening exercises. Short term narcotic medications may be necessary to control the pain.

Interventional pain treatments may consist of trigger point injections, facet injections, medial branch blocks, or radiofrequency ablation. A study presented at the 2012 American Academy of Pain Management showed that pulsed radiofrequency ablation for whiplash had excellent outcomes for pain relief.

When the symptoms are chronic and long lasting, the goal is to minimize the pain as much as possible until the neck muscles strengthen and repair themselves. Following a pain management treatment plan may be the only effective way to provide relief and allow you to carry out daily activities with minimal pain.

In order to prevent acute whiplash from turning into chronic neck pain, seeking treatment sooner may help.