# **Neck Sprain**

Neck sprains are stretched ligaments or muscles in the neck. Sprains can occur without having any obvious injuries, but at times, they might be caused by a sudden impact with an object. Impacts can force the neck to extend beyond its normal range rather quickly. It then snaps back into position quite forcefully. This is quite common of a whiplash injury. A rear-end automobile accident, head jerking when riding on a ride at the amusement park or being kicked are the most common types of impact related to a neck sprain.

You might have pain that grows worse with movements. At times, the pain might not appear until at least a day or two after the event that caused the injury. You will more than likely have stiffness in the neck that prohibits your ability to move the neck properly. The back of the head can end up hurting. Pain can also occur in the upper back and shoulders. Other common symptoms include dizziness, fatigue, ringing in the ears and patchy numbness in the arms or hands.

Often the terms neck sprain and neck strain are interchangeable. But generally most medical professionals classify a neck sprain as a ligament injury in the neck, and a neck strain as a muscle injury in the neck.

#### **Neck Sprain Anatomy**

Inside of the spinal column, there is a tube for the spinal cord. This thick bundle of nerves starts at the base of the brain. It relays information between the brain and the body. Nestled between the vertebrae are the discs. Each individual disc is attached to the bottom of the vertebra that lies above it and the top of the one below it. Muscles and strong ligaments keep the column together. All of the structures work together to surround, protect and support the spinal cord.

There are many important muscles of the neck. The trapezius and levator scapulae both attach the neck to the shoulder blade. They are commonly painful in people with poor posture and easily get fatigued in computer users. The scalenes are muscles at the front of the neck and commonly get tight or painful in people with poor posture, or people with poor breathing mechanics. While they don't tend to cause pain at the front of the neck, they contribute to pain at the back of the neck and can also aid the chronicity of the neck problem. At the top of the neck are the suboccipital muscles (sub = under, occipital = base of the skull).

### **How to Treat a Neck Sprain:**

#### 1. Ice

Apply ice to the affected area for 5-10 minutes at a time three to five times per day. Make sure to wrap the ice in a thin towel to prevent an ice burn from occurring. Ice can help to reduce the inflammation and pain associated with the sprain. Ice is best used in the acute stage for the first 48 hours, but can be used at later stages if the inflammation has become chronic. You can also use contrast bathing, i.e. using a mix of ice and then heat. This can be done by wrapping a hot water bottle in a tea towel and straight after using the ice, place the heat over your neck. Heat can feel quite comforting and help with movement to the neck. Hot showers can also help and just standing with the water running over your neck for 5-10 minutes each morning can give some relief.



#### 2. Anti-Inflammatory Medication

Using an anti-inflammatory medication can help to lessen the inflammation and pain to the affected area. As the inflammation diminishes, the amount of pain associated with it will decrease as well. Try to limit anti-inflammatory use to only two weeks.

## 3. Stretching Exercises

Performing gentle movement exercises for the neck is encouraged. Movement exercises are often prescribed by a physical therapist. As you exercise the neck, it will help the neck to maintain flexibility and strength.

### 4. Therapy

Chiropractic, osteopathy, physiotherapy, and sports massage therapy can all benefit neck sprains. Practitioners will establish what the diagnosis is before commencing a treatment program. Treatment will often consist of soft tissue massages to the muscles, and mobilization or manipulation techniques to the neck and upper back to improve mobility to your spine.

#### Soft Collar

When the neck is very painful, sometimes a soft collar might be recommended. This will help limit movement and can provide support to the neck. Some patients find they help, and some do not. You can usually buy a soft collar from a pharmacist.

# Tips:

- Avoid slouching or slumping over in a head-forward posture. Sitting straight in a chair with the lower back supported, shoulders relaxed and feet firm on the floor is important.
- Adjust computer monitors so that the top part of the screen is equal to your eye level.
- If you are on the phone a lot, use a speaker phone or headset. Avoid cradling the phone on your shoulder.
- Avoid long laptop or tablet use. Use a laptop stand to raise the screen.
- Make sure to use proper lifting techniques. Lift with the knees and not the back.
- Adjust your car seat into an upright position that will support the head and lower back. Don't reach for the steering wheel when driving.