

Pectoralis Minor Syndrome

Pectoralis minor syndrome is a numbness, pain, weakness or tingling in the hand and arm resulting from an increased amount of pressure against the blood vessels or nerves supplying the arm. It is often due to a tight pectoralis minor muscle, within the upper chest, which lies just behind that of the collar bone. Pressure on the nerves is often the problem more than 90 percent of the time, but on occasion, a vein or artery is involved.

Most of the time, the condition is the direct result of a hyperextended neck injury. Whiplash injuries resulting from car accidents and repetitive stress at work are two of the most common reasons why individuals suffer with the syndrome. Common occupations dealing with this condition are assembly line workers, 10-key workers and stockers. In certain instances, the condition develops without warning.

However, increasing numbers of people are suffering with this condition as a result of poor posture. One of the primary causes is forward head posture, due to smart phone and tablet use. This causes the pectoralis minor muscle to shorten and become tight, causing pressure on the surrounding nerves and blood vessels. Breathing problems and asthmatics can also experience similar issues.

Pectoralis Minor Syndrome Anatomy

Pectoralis minor syndrome involves a compression of the superior thoracic outlet that results from excessive amounts of pressure being placed on the neurovascular bundle that passes between the middle and anterior scalene muscles. It can either affect one or multiple nerves innervating the upper limb as well as the blood vessels passing between the upper extremities and the chest, generally in the subclavian artery, brachial plexus and even the subclavian artery, which don't normally pass through the scalene hiatus.

How to Treat Pectoralis Minor Syndrome:

1. Therapy

Any manual therapist will be able to help this condition by stretching and lengthening the pectoralis minor muscle, and the surrounding chest muscles. They will also help to improve posture, and prescribe exercises to strengthen the neck and upper back. Postural re-training is key, so looking at your work set-up and office ergonomics is important. If therapy is unsuccessful then you could look at more invasive options.

2. Acupuncture

Acupuncture for pectoralis minor syndrome can be useful for reducing tightness in the pectoralis minor, scalenes, and surround neck/chest muscles. Reducing the tension will help to reduce referred pain into the arm. Acupuncture can also help with pain relief. The needles will most likely be placed around your upper chest, and front of your neck, not going deep enough to affect the lungs, but just into the muscle.

3. Injections or Medication

Cortisone is often injected into the muscles or joints to help reduce inflammation and provide you with pain relief. Botox injections can help to bind the nerve endings and prevent neurotransmitters from being released into the body to activate the muscles. A small amount of Botox can provide you with months of relief while the muscle is paralyzed temporarily. Relief can last for 3-4 months at a time. However, many consultants may be unwilling to inject here as it is not very commonly performed. Physiotherapy is far more likely to be recommended.

4. Surgery

In instances where the first rib is compressing an artery, vein or nerve bundle, you might have to undergo surgery to have the fibrous tissue removed. The first rib will have to be removed to allow blood flow to resume and reduce nerve compression. In certain instances, a cervical rib or rudimentary rib causes the compression, which can be removed in the same manner.

Physical therapy is often used both before and after the procedure to decrease the length of time it takes to recover and improve the overall outcome. Surgery is rare for this condition.

Tips:

- If you are overweight, you might want to try losing a few pounds to help alleviate this condition. Excessive weight often contributes to symptoms in those who are predisposed to this condition.
- Try to maintain proper posture throughout the day.
- Improving sleep habits can help to reduce symptoms in those who are suffering from the condition. Avoid sleeping on the stomach as it tends to worsen the syndrome.
- For those who have weak shoulder muscles and drooping shoulders, increased muscle strength can provide a world of benefits for those with the syndrome.
- Certain occupations, postural flaws, sleep conditions and behaviors can all contribute to the formation of this syndrome.

