Pronator Teres Syndrome

Symptoms of this syndrome are quite similar to that of carpal tunnel syndrome. They include numbness or tingling in the thumb, palm and fingers. There is often an aching sensation in the forearm and a tenderness when pressing or feeling the pronator teres muscle in the arm which is located just below the elbow crease on the inside of your elbow. Strength is often decreased in the first three fingers and the thumb, as well as when turning the forearm or bending the wrist.

This condition is over-shadowed by the more common carpal tunnel syndrome, and may also be misdiagnosed as this too. Due to repetitive movements of the elbow and wrist, the pronator teres and biceps aponeurosis can become thickened or contracted which can cause nerve compression.

Pronator Teres Syndrome Anatomy

The pronator teres is a muscle located on just down (distal) from the elbow crease. The median nerve passes through the elbow crease (known as the cubital fossa) and passes between the pronator teres muscle as it travels into the forearm. The nerve can become compressed just below and around the elbow crease by the pronator teres muscle.

The key symptom is numbness in the thumb, and first two digits of the hand.

How to Treat Pronator Teres Syndrome:

1. Recover

Refrain from any activities that might be contributing to the condition. Allow your body the time it needs to heal from any activities that you have recently participated in. Look carefully at your posture at work and make sure your work station ergonomics are good. Ensure correct placement of your computer, laptop or tablet. Check your keyboard and mouse position.

2. 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 on the skin. The ice will help to alleviate swelling and pain in the inflamed area. You may need to ice for 2-4 weeks each day.

3. Anti-Inflammatory Medication

Often the doctor will prescribe an anti-inflammatory medication to help reduce inflammation and alleviate some of the pain that you are feeling in the arm. Although as therapists we prefer to recommend ice or heat, you can certainly try some anti-inflammatories but short term use is advised.

4. Physiotherapy

One of the most important treatments is therapy. This can reduce symptoms of nerve compression without the need for an injection or surgery. Therapy included sports massage and soft tissue therapy (discussed below), mobilisation to the elbow and wrist, and looking at the biomechanics of the neck, shoulder and upper arm. Postural re-training can also prove very beneficial, as well as checking work ergonomics and computer set-up.





5. Sports Massage

If your muscles and tendons are tight, sports massage can help to loosen them up for you and allow for a greater range of motion and flexibility.

6. Acupuncture

If you currently have a significant amount of tension in the arm, acupuncture can help to relieve tension and eliminate pain.

7. Corticosteroid Injection

If symptoms aren't improving, a corticosteroid injection might be used to help improve upon the condition.

8. Surgery

On rare occasion, decompression surgery is used to help release any abnormal or tight structures.

Tips:

- Pronator teres syndrome is four times as common in women as it is in men.
- Working as a mechanic or carpenter tends to increase the chance of sustaining an injury to this muscle.
- When lifting weights, exercise caution and only do what your body is capable of handling. Overdoing it will cause this injury to ensue.
- For those who participate in racquet sports and rowing, make sure you are properly warmed up before heading out and engaging in the activity.
- Trauma, tumors and bony abnormalities in the forearm are other known causes of the condition.