



## THORACIC OUTLET SYNDROME

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**Thoracic Outlet Syndrome** is a condition whereby symptoms are produced from compression of soft tissues on nerves or blood vessels, or both. Because of this pressure, passage through an area (thoracic outlet) between the base of the neck and the armpit can be compromised. The wide variability of symptoms and signs in patients with thoracic outlet syndrome can make correctly identifying patients with thoracic outlet syndrome difficult.

Therefore, determining its exact incidence remains elusive; Estimates in its incidence range from 3-80 cases per 1000 population. Thoracic outlet syndrome is more common in women, those with poor muscular development or poor posture.

Symptoms of **Thoracic Outlet Syndrome** consist of the following:

- Pressure on the nerves (brachial plexus) may cause a vague, aching pain in the neck, shoulder, arm, or hand. It may also cause pain, numbness, or tingling on the inside of the forearm and the fourth and fifth fingers of the hand. Weakness may make your hand clumsy.
- Pressure on the blood vessels can reduce the flow of blood out of your arm, resulting in swelling and redness of your arm. Less commonly, pressure can reduce the blood flow into your arm and hands, making them feel cool and easily fatigued.
- Overhead activities are particularly difficult because they worsen both types of compression.
- There may be a depression in your shoulder, or swelling or discoloration in your arm.
- Your range of motion may be limited.



Thoracic Outlet Syndrome can be caused by poor posture, awkward and repetitive motions, overhead athletic activity, obesity, tumors in the chest and extra ribs extending from the seventh vertical vertebra at the base of the neck. Treatment of Thoracic Outlet Syndrome can be successful with conservative measures. AlignMed products as an adjunct to physical therapy, and exercises can help strengthen the muscles and soft tissues surrounding the shoulder to create a neutral anatomy and to support the collarbone.

AlignMed products are a wearable therapy that applies biomechanical support to lessen the pressure on the nerves and blood vessels; without being restrictive or uncomfortable. The products also provide feedback to encourage muscle activation, muscle retraining and postural retention. We call this technology 'touch-tension' interaction and it is accomplished with variable stretch of NeuroBands™. The therapeutic goal is to relieve compression in the thoracic cavity, reduce blood vessel and nerve impingement by a realignment of the bone, muscle, tendon and ligament complex causing the problem.

The recovery process is relative to the condition of the pathology but it is always important to practice good posture techniques to prevent and recover from Thoracic Outlet Syndrome.