



## Thoracic Outlet Syndrome

A group of conditions that result from compression of the nerves or blood vessels that serve your arms. Usually affects otherwise healthy, young and active people.

**TREATABLE, USUALLY NO LONG-TERM EFFECTS**

Once treated, ideally by combining medical treatment with physical therapy, you should be able to return to an active lifestyle.

### SYMPTOMS

**PAIN, NUMBNESS, TINGLING**

You may feel pain, sometimes suddenly, in your neck or arms along with numbness and tingling in the arm and hand. Usually the pain gets worse when you lift your arms or with repetitive overhead motion.

**SWELLING, BLUE DISCOLORATION, FATIGUE**

Your arms and hands may be swollen and appear blue, and easily tire.

**SORES THAT RESIST HEALING**

You may develop sores on your fingers that are slow to heal and could lead to gangrene.

### CAUSES

Compression of nerves, the subclavian artery or subclavian vein on the side of the throat or upper chest

Injury to the artery due to an abnormality in a neck rib or other bony irritation

Injury or compression of the vein. This could lead to a progressive narrowing of the vessel and eventual clot formation.

### DIAGNOSIS

**SEE A VASCULAR SURGEON IF YOU HAVE ANY OF THE SYMPTOMS ABOVE**

You will be asked questions about symptoms and medical history, including questions about family members. The vascular surgeon will also perform a physical exam.

### TESTS MAY BE RECOMMENDED

Several type of tests are used to detect thoracic outlet syndrome and determine how to treat it:

Computed tomography (CT) scan

Magnetic resonance imaging (MRI)

Catheter-based arteriography or venogram

Stress maneuver testing—placing the arm or head in certain positions—may be done with any of the above tests.

An anesthetic block injection can temporarily improve symptoms and aid diagnosis.

## TREATMENTS

Best results come from a combination of medical treatment and physical therapy. Specifics will vary depending on the source of the condition.

### NERVE-RELATED

Specialized physical therapy and injections to relieve muscle spasm may resolve your symptoms.

If symptoms are severe and persist and you are a good candidate for surgery, a procedure called thoracic outlet decompression is the next step.

If surgery is not suitable for you or does not relieve your symptoms, you will want to consider ongoing medication to manage pain.

### ARTERY-RELATED

If arterial compression is diagnosed, a surgery called thoracic outlet decompression is the next step. Depending on the damage to the artery, an arterial bypass may be part of this surgery.

### VEIN-RELATED

If arm swelling or a blood clot in the vein is due to thoracic outlet compression, thoracic outlet decompression is the next step.

If there is a clot in the vein, you may be directed to have thrombolytic therapy.

You may also benefit from some type of vein reconstruction: angioplasty, patch angioplasty, or venous bypass.

## STAYING HEALTHY

Maintain a healthy diet and lifestyle, including physical activity.