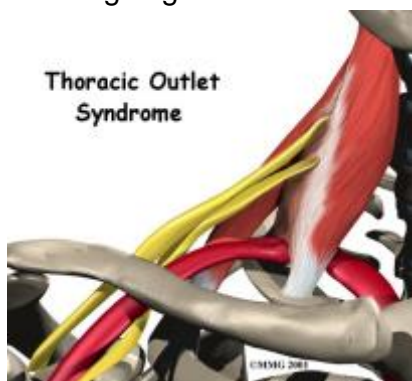


Thoracic Outlet Syndrome (TOS)

The nerves and blood vessels that supply your arms and hands exit from your neck in an area called the thoracic outlet, which is located at the angle between your neck, your shoulder and your collarbone (or clavicle). The nerves and blood vessels pass through the muscles of the thoracic outlet (called the scalenes) before going under the clavicle (collar bone). TOS occurs when these muscles and blood vessels are squeezed, either due to trauma (such as a fractured clavicle), muscle tightness or genetic variations (such as an extra rib).



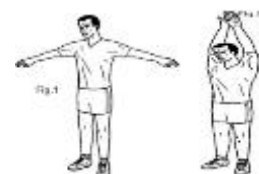
The symptoms of TOS vary from person to person, and can include pain, tingling, numbness, weakness, swelling and changes in colour of the affected limb. The symptoms can often be aggravated by prolonged periods with the arm over the head, poor posture while working at a desk or computer and driving or lifting.

Treatment of TOS involves exercises to loosen up tight muscles and joints around the compressed nerves and blood vessels, as well as exercises to strengthen the muscles of your shoulder and upper back and to stretch the muscles in the front of the chest and shoulders. It is also important to work on your posture, as correct posture is very important in the management of TOS. Some simple exercises to help are shown below:

Exercise 1: Stand tall with your arms at your side. Bend your head to the left and try to touch your left ear to your left shoulder. DO NOT move your shoulders as you do this exercise. Repeat to the right.



Exercise 2: Stand tall with your arms straight out from your side at shoulder level. (Fig. 1) Raise your arms to the side until they meet over your head (Fig. 2). Keep your elbows straight and your palms down while you are doing this exercise



Exercise 3: Stand facing a corner of the room or within a door frame. Put each hand (with your palms flat) on the wall at shoulder level. Bend your elbows about 90 degrees. Tighten your stomach muscles. Slowly breathe in as you bring your chest toward the wall (Fig. 1). Return to the starting position by pushing back with your hands, breathing out as you do this.



Exercise 4: Lie down on your back and put a rolled towel between your shoulder blades. Start with your arms at your side, then raise them up in front of you and over your head. Breathe in as you do this. Breathe out as you return to the starting position.



Exercise 5: Lie on your stomach and hold your hands in the small of your back. Slowly lift your head off the ground and squeeze your shoulder blades together. Hold for 5 seconds then slowly relax your shoulders and lower your head. Repeat 5 – 10 times.

