

### Thoracic Outlet Syndrome

#### RSI Conditions

The term Repetitive Strain Injury is an umbrella term used to describe a number of specific musculoskeletal conditions, as well as 'diffuse' RSI, which is more difficult to define but which recent research attributes to nerve damage. These conditions are often occupational in origin. There is some doubt about the reality of Thoracic Outlet Syndrome as a work-related injury, but lack of adequate diagnosis or access to appropriate treatment can exacerbate the condition and can certainly lead to increased problems at work.

#### What is Thoracic Outlet Syndrome?

Thoracic Outlet Syndrome is the general term used to describe the symptoms produced from compression of nerves or blood vessels running through an area (thoracic outlet) between the base of the neck and the armpit.

#### The Symptoms

These include neck, shoulder and arm pain, weakness, tingling and numbness. Often symptoms are reproduced when the arm is positioned above the shoulder or extended.

#### The Causes

The thoracic outlet is surrounded by muscle, bone and other tissues. Any condition which results in enlargement of movement of these tissues can cause thoracic outlet syndrome. Work activities involving prolonged, restricted postures such as carrying heavy shoulder loads, pulling shoulders back and down or reaching above shoulder level can cause the inflammation of tendons and muscles. When swollen they can compress the nerves between the neck and shoulders.

Some people have an extra first rib which squeezes the space available. In other patients a violent injury may tear the muscles in this area, leading to the formation of scar tissue and compression of blood vessels. Often, however, it is extremely difficult to identify the exact root of the problem.

#### The Doctor's Examination

In the UK, GPs receive little training in the diagnosis and treatment of musculoskeletal disorders. Ideally your doctor will ideally refer you to a specialist who has taken an interest in RSI-type conditions, usually a rheumatologist or neurologist. Even then it is still difficult to prove Thoracic Outlet Syndrome as there is no accurate test for all versions of this condition. Usually the diagnosis is made after all other causes of the symptoms have been ruled out. This can be a slow and frustrating process.

## **Treatment**

Most commonly you will be advised to return to work after a period of rest. You may be prescribed anti-inflammatory medication or painkillers, but the best results are obtained from an exercise programme designed to stretch and loosen muscles and joints around the thoracic outlet. Good posture and overall conditioning are very important in treating all cases of Thoracic Outlet Syndrome, but symptoms caused by abnormalities in the bones will be not cured by physiotherapy and occasionally surgery is recommended to spare the affected area from ongoing compression.

Though each case has to be considered individually and non-occupational factors should also be investigated, generally some changes will be needed at work. Areas to consider include pacing, rest breaks, reducing repetition and force, posture, and the use of ergonomically designed tools and equipment to reduce the risk of further injury.