



# Medicine for Managers

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## Repetitive Strain Injury

**RSI is essentially pain or stiffness or limitation of movement in a part of the body subject to repetitive activities resulting in some damage to muscles, tendons or nerves. Any recurrent motion or activity, such as typing at a computer keyboard, or practising a musical instrument may cause such an injury. The condition is also known as *Overuse Syndrome* or *Work Induced Upper Limb Syndrome***

**C**learly many of us undertake activities that are repetitive but not all of us develop the symptoms of the disorder. It is thought that a number of factors may contribute to its genesis, including:

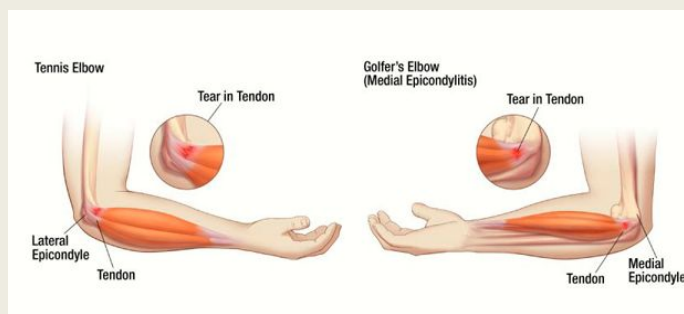
- Working out without preparation
- Sports activity requiring the same motion repeatedly
- Poor posture when sitting or standing
- Using a vibrating tool
- Working in the cold

Because the strain develops gradually, often over a prolonged period of time, sometimes sufferers experience the symptoms with no clinical evidence of muscular or tendinous injury.

Most cases affect the hand, wrist or arm, although sometimes it may be the shoulders. Those most affected are predictably typists and musicians but it also affects people with repetitive tasks in factories, supermarkets and in a range of other industries.

In some cases, the actual damage sustained may be mild, but in others the consequences may result in other complications including:

- Tendinitis and Ganglion cysts
- Carpal Tunnel



### Syndrome

- Tennis Elbow (lateral epicondylitis or Golfer's Elbow (medial epicondylitis)
- Trigger Finger and Trigger Thumb
- Back Strains and Sprains
- Stress fractures in more severe cases

Repetitive Strain injuries are very common and estimated to affect about half a million people in the UK. Common features are:

- Variable pain, which may be dull and aching, throbbing or persistent
- Swelling and stiffness
- Tingling or numbness
- Weakness
- Sensitivity to heat or cold

Diagnosis depends on a good history and examination. There is no specific test.

The diagnosis is therefore made on establishing the activities which might be described as repetitive combined with a tendinitis, tenosynovitis, nerve entrapment or muscle damage.

A number of conditions such as tennis elbow or golfer's elbow, trigger finger, writer's cramp and Raynaud's disease (where digits exposed to cold become white and painful) may be associated with RSI but can also be produced as a result of other causes.

Treatment can be a problem, depending on whether it is possible to modify the work activities involved in the induction of the symptoms. If the repetitive action can be avoided, a full recovery is normally the outcome with no long-term impact.

If the activity concerned cannot be modified, employees may be able to consult occupational health with a view to seeking a work station review. Sometimes the problem can be overcome with good posture, often achieved by appropriate positioning of the keyboard and screen and ensuring regular short breaks.

Other general advice includes:

- Wearing appropriate protective clothing if applicable
- Not working or playing through if suffering pain during intense activity
- Resting after intense activity
- Stretching and warming up before sport or working out and cool and stretch after such activity

For some, avoidance or minimising effects of activities do not eliminate the symptoms. In such circumstances treatment may take many forms:

- Pain relief (with paracetamol, ibuprofen or codeine)
- Muscle relaxants (rarely)
- Heat packs, ice packs, splints or elasticated bandages
- Physiotherapy with exercises, ultrasound or infra-red therapy or the use of a TENS (transcutaneous electrical nerve stimulation) machine which blocks pain signals using low voltage electric currents
- Regular activities such as swimming
- Steroid injections may sometimes help
- Antidepressants may assist if stress is a significant factor

Occasionally, despite everything, the symptoms persist and do not resolve. It is the case that a few very unlucky people have to change their whole working practice or profession because the symptoms are relentless.

For most, however, the symptoms settle with or without treatment after a few weeks or months. [paullambden@compuserve.com](mailto:paullambden@compuserve.com)