

Repetitive Strain Injury (RSI)

by Martine Cooper

A repetitive strain injury (RSI), also called cumulative trauma disorder (CTD), occupational overuse syndrome, or work related upper limb disorder (WRULD), is any of a loose group of conditions resulting from overuse of a tool, eg. computer, guitar or knife, or other activity that requires repeated movements. It is a syndrome that affects muscles, tendons, nerves in the in the hands, arms and upper back.

There are two types of RSI:

Specific conditions - including tenosynovitis and tendonitis (inflammation of a tendon), bursitis (inflammation within the tissue), carpal/cubital tunnel syndrome (pain and tingling in the fingers), epicondylitis (inflammation of the bone).

Diffuse RSI- includes aches, pain, swelling, numbness, tingling and weakness.

Occupational Risk

- The type of work and other activities you do can trigger RSI.
- Repetition - performing repeated movements with the same body part.
- Posture - holding a joint towards its extreme.
- Force - performing an activity with excessive muscular exertion.
- Static Exertion - holding part of the body still.
- Contact Stress - direct pressure on nerves or tendons.

Medical Conditions Increasing Risk

These include: thyroid disease, gout, obesity, hormone conditions (such as pregnancy, hysterectomy), fluid retention (such as pregnancy, birth control, sudden weight gain), previous injuries, drug interactions.

Environment

Your working pattern can also affect your chances of developing RSI. Things to be aware of are:
Infrequent or inflexible breaks.

Working long hours.

- Monotonous work (repetitive activity eg typing, mouse work, little variety and fast pace).
- Limited autonomy (lack of control).
- Perception of intensified workload and work pressure (deadlines, monitoring, bad management).

Long Term Solution for RSI

An inter-disciplinary approach is required. The problem cannot be resolved until the cause is found and eliminated. This may include medical screening, physiotherapy, ergonomic intervention and specialist equipment. A GP or specialist's opinion may be required to exclude any medical causes.

Physiotherapy Management

The physiotherapist uses techniques including acupuncture, correction of posture and muscle imbalance, stretching, mobilisation, manipulation and exercise.

The physiotherapist can also offer advice and education about:

- The correct posture.
- Importance of breaks - at least five minutes every hour.
- How to create movement in the work environment (including work-station set-up) or during a hobby activity which may be causing the symptoms.
- Liaise with other professionals and departments: occupational health, health and safety, ergonomists and your G.P.

Ergonomic Assessment

An ergonomist assesses the design of the work-station in relation to the operators' specific needs and makes sure it complies with the Display Screen Equipment Regulations (1992). They may suggest how to adapt the chair, desk, keyboard and desk accessories to maximise efficiency and reduce strain.

Specialist Equipment

There are specialist pieces of equipment that can be provided to alleviate symptoms for example: specialist chairs, mice, keyboards, software, lap top raisers and foot rests.

Resources

Martine Cooper is a Chartered Physiotherapist and an I.O.S.H. recognised workstation assessor (Institute of Occupational Health and Safety). And is available in your workplace for ergonomic assessments by arrangement.