

RSI Treatment should include work on the Shoulder.

By David Hall, Qualified Massage Therapist

Repetitive strain injury (RSI) in the past 10 years or so has become a buzzword among computer operators. It can leave some people feeling almost crippled in the forearms if they do not receive proper treatment early enough.

But what is the appropriate treatment? One has to wonder, because different branches of health care have varying ideas and techniques - some with much more success than others.

A common denominator is to remove the "repetitive" action by resting the injured limb as much as possible. But if your livelihood depends on data processing or other computer operations, that's often easier said than done.

I think you have to take a "big picture" approach to the problem.

It's easy to take an anti-inflammatory pill and hope the pain goes away (which it rarely ever does). If this is the only treatment you try, your doctor's certificates granting time off work or reduced duties will be enough to decorate a wall - by which time the problem usually has become chronic or acute.

In the meantime, you may have wasted hundreds or thousands of dollars of taxpayers money in Medicare and workers' compensation payments.

Massage Success.

However, if you try remedial massage from the time the problem is first noticed - instead of just popping a pill - you should enjoy significant success. In this article, I don't intend to canvas all the reasons, symptoms or possible treatments for RSI. My aim is to highlight what a lot of non-massage practitioners often overlook in treating the problem - the vital role of the **shoulder**.

But firstly, the obvious. RSI is usually a painful condition felt mainly in the wrist and forearm through to the elbow and usually caused by repetitive computer keyboarding and mouse-clicking work.

Full blown RSI, or symptoms eventually leading to RSI, are fairly common in staff of major government and national organisations with "call centres" where most of the day is spent completing electronic forms



or accessing information on computer.

Look deeper into the problem and you may find a southern-based information technology bureaucrat with a big chequebook should take some of the blame. To cut costs by "standardising" equipment nationally, the bureaucrat might have bought possibly thousands of one type of computer mouse or keyboard for their so-called "ergonomic" qualities without considering that design might not be suitable for everyone.

Because pain is usually felt in the ARM and wrist, some health practitioners restrict treatment for RSI to the arm.

Shoulder Movement.

What is not so obvious, however, is that most computer work also involves moving the entire arm, which means considerable movement of the **shoulder**. You cannot effectively treat or prevent RSI unless you consider both the **arm** and the **shoulder**.

A competent remedial massage therapist will not only use techniques to loosen and stretch tight muscles in the arm, wrist and hands, but also look at the **big picture** of the effect the whole shoulder girdle has on the problem.

This includes the impact of nerves going down the arm from the shoulder, particularly the "brachial plexus" (group) of nerves. These can be (and often are) impinged by the Pectoralis Minor muscle in the top of the chest which attaches to the top of the shoulder blade and is across the brachial plexus.

(I know of one youth whose parents were given a medical diagnosis that the boy's ongoing pain in his arm may be caused by a tumor in the neck. In fact, after a battery of tests and scans - and worry for the parents - failed to show the cause, it was

subsequently discovered his brachial plexus of nerves was simply being impinged by tight "Pec Minor" muscles and only required a massage to fix the problem.)

Consider this: If you buy a fancy car with all the mod cons like power windows, power steering, central locking, CD player, tilting seats, airbag, automatic transmission, cruise control, etc., there's more chance of something going wrong.

Shoulders are like that too. The shoulder is the most mobile of all the joints in the human body and as such it is also one of the most complex - with more to go wrong.

Every time you move your arm to reach for your computer mouse or return to the keyboard, you are in fact moving your **shoulder**.

Because of the complexity of the shoulder girdle, a competent therapist needs to take a range of factors into account when treating ailments directly or indirectly associated with the shoulder.

In the shoulder girdle alone, as well as the main shoulder joint (glenohumeral joint) there are four other different joints on both the left and right sides of the body. Each of these are mobilised by different combinations of muscles in the back and around to the sternum (breastbone) and right down to the base of the spine.

Interaction.

Understanding the interaction of the muscles, joints and nerves is important to properly treat or alleviate shoulder problems and associated ailments like RSI. Here's just one example of the complexity of some of the actions of the shoulder and why it is important to consider and treat ALL the relevant areas.

For example, there are three separate actions involving many different muscles just to lift your arm straight out from the side of your body and up over your head to point vertically upwards - called abduction.

(For those familiar with the terms abductor and adductor muscles but don't know what they mean, think of a person being ABducted - or taken away, but in this case muscles assisting limbs or joints to move away from the centre of the body.

Similarly, think of ADDuction as adding or bringing limbs and joints closer to the body).

Muscles in the upper arm and top of shoulder (Deltoid and Supraspinatus) initially raise your arm out from your body to level with your shoulders (90 degrees).

But before the arm can go any higher, the shoulder blade (scapula) must rotate (eg anti-clockwise when raising the right arm) and two of the smaller joints in the shoulder girdle (Sterno-Clavicular and the well known AC joint - Acromio-Clavicular) must also rotate.

Movements of the Trapezius muscles in the top of the shoulder ("upper traps") and mid back, and the Serratus muscles (from the base of the scapula across ribs to the side of the breast) allow these joints to rotate.

This enables the arm to move between 90 degrees and 150 degrees, but to move fully vertical (up to 180 degrees) the spine also must bend to one side in the mid to lower back. The inward curvature of the spine in the lumbar region (lower back) also must increase.

So properly treating a problem in the top of your shoulder - including as part of a treatment for RSI - may also mean working on muscles right down to and possibly even including the hips.

Computer Muscles.

A whole range of other shoulder muscles come into play in the top of your arms, your back, along your ribs and in your chest just to elevate and draw your arms around to the front - such as to work at a computer.

Once seated at your computer, rotator muscles on the shoulder blade help in the various twisting and turning movements of your arms while working the computer.

The above are just some of the dozens of movements involving the shoulder.

A qualified remedial massage therapist can effectively treat a large number of problems associated with the shoulder and arms by systematically working through the range of muscles and muscle groups likely to be involved.

If you'd like to know more about remedial massage, call one of our qualified therapists today.