



Conditions helped

Chiropractic is renowned for its success in treating low back pain but chiropractors can help people to manage a range of other conditions. This does not necessarily mean that joint manipulation is used, but that the package of care given by the chiropractor provides relief. Our chiropractors may use a number of different procedures in the course of patient care such as heat, cold, "dry needling" (acupuncture), postural support, exercise programmes and dietary management as well as providing advice on ergonomic factors at work and adjusting lifestyles to get the most lasting benefits from care.

Sports injuries

Sports injuries may be defined as injuries that occur to athletes during sporting activities or training. They are often due to overuse of a part of the body when participating in their sport. Examples would include "runner's knee", a painful condition generally associated with running, and "golfer's elbow" or "tennis elbow", forms of repetitive stress injury at the elbow that do not necessarily have to occur with golf or tennis. Other types of injury, such as torn ligaments, torn tendons or bone fractures, can occur during contact sports when colliding with other players or taking hard tackles.

Injuries are a common occurrence in professional sports and teams often have their own trainers and sports physiotherapists to take care of their star players. Even though you may not be up to club level in your sport you will still want to enjoy it and to do your best in it. Most of us do not have access to the same level of care as professional players, but the practitioners at Healthcare 2000 Clinics are qualified to provide a quality service in the management of sports injuries.

A "pulled" muscle or some other niggling injury can hamper your ability to enjoy your sport, reach peak performance and stay fit. Ignoring pain and persisting too long with your sport without treatment can lead on to a chronic injury. We often see people with:

- Hamstring strains
- Calf strains
- Groin sprains

- Thigh sprains
- Cruciate Ligament injuries
- Achilles tendon injuries
- Shoulder sprains (such as rotator cuff injuries)
- Tennis elbow
- Golfers elbow
- Tendonitis
- Back pain
- Neck pain

Our chiropractors have all been trained to manage a wide variety of sports injuries, our physiotherapist at Wingfield has worked with professional cricket and rugby teams and our sports and rehabilitation therapist at Wingfield has cared for top level marathon runners, canoeists and cyclists.

What are sports injuries?

Sports injuries may be broadly classified as either traumatic injuries or overuse injuries. Traumatic injuries account for the majority in contact sports such as football or rugby because of the forceful, high collision nature of these sports. Such injuries can range from muscle strains, ligament sprains and bruises, to fractures, dislocations and head injuries.

A muscle strain involves a small tear in the muscle fibres, a ligament sprain a small tear in the ligament tissue and a bruise or contusion refers to damage of the small blood vessels that leads to bleeding within the tissues. During the first five days after the trauma the body's response to all these types of sports injuries is inflammation.

The symptoms of inflammation are local swelling, heat, redness and stiffness as the damaged cells within the soft tissues respond to the trauma. Dead and damaged cells release chemicals that initiate an inflammatory response.

Damaged blood vessels create bleeding within the tissue and the body responds by forming a small clot of blood to stop the bleeding. New cells called fibroblasts are formed from the clot and begin the healing process, laying down scar tissue.

If the initial "inflammatory stage" is prolonged beyond the usual 5 days it can slow down the healing process, delaying a return to activity. Sports injury treatments are directed to minimise the inflammatory phase of an injury accelerating the healing process.

Treatment and prevention

The inflammatory stage typically lasts about 5 days. Treatment at this time addresses the cardinal signs of inflammation – pain, swelling, redness, heat and stiffness - and will usually include “RICE” (Rest, Ice, Compression, Elevation), as well as special exercises, other forms of therapy such as ultrasound and “dry needling” (acupuncture).

Research has shown that a comprehensive warm-up programme will reduce the frequency of injuries. More and more professional and amateur athletes are turning to compression sportswear as these garments are thought to reduce the risk of muscle injury and to accelerate muscle recovery. A full assessment by one of our Healthcare 2000 clinicians may show up problems which, if treated correctly, will not go on to cause injury. We will also be happy to advise on specific exercises and stretches that may be of help in enabling you to reach peak performance.

RSI – repetitive strain injury

Repetitive strain injury (RSI), is a loose term that can be used to describe a wide range of ill-defined syndromes. It is usually associated with hand and arm pain thought to arise from chronic occupational overuse, such as using a computer, but can be linked to other problem areas. All RSI syndromes tend to tie in with both physical and psychosocial stressors.

The following symptoms are typical in a diagnosis of RSI:

- Arm pain that is typically diffuse, over a number of areas.
- The pain increases with activity.
- Weakness and lack of endurance in normal activities.

Unlike carpal tunnel syndrome, which is much more specific, the symptoms tend to be spread widely and are unrelated to the anatomical pathways of tendons, nerves and other defined structures.

A study published in 2008 reported that 68% of workers in the UK experienced some form of repetitive strain injury. The commonest problem areas were the back, shoulders, wrists, and hands.

Problems lie in defining RSI because the term is usually used to refer to patients who lack any discrete, objective, pathophysiology and their pain patterns often fail to correspond with any recognised pathological pattern. It can sometimes be used as a broad term incorporating other diagnoses that have often intuitively, but often

without proof, been linked to activity-related arm pain, such as Thoracic Outlet Syndrome, Carpal tunnel syndrome, Tennis elbow (lateral epicondylitis), Golfer's elbow (medial epicondylitis), Stenosing tenosynovitis/Trigger finger/thumb, DeQuervain's syndrome, Cubital tunnel syndrome, Intersection syndrome, and Focal dystonia.

RSI has also used to cover other non-specific illnesses or unverifiable pathology. Examples of these might include Radial tunnel syndrome, disputed Thoracic Outlet Syndrome, Reflex sympathetic dystrophy syndrome (RSDS), Blackberry thumb, "Gamer's thumb" (a thumb swelling from overuse of a gamepad), "Rubik's wrist" or "cuber's thumb" (tendinitis or other ailments associated with excessive repetitive use of a Rubik's Cube), "Stylus Finger" (hand swelling from repetitive use of mobile devices) and "Raver's wrist", (from repeated hand rotation over for many hours as when holding glow sticks during a rave).

Physical examination and diagnosis

The physical examination seeks to assess diminished performance and tenderness using effort-based tests such as measuring grip and pinch strength. Muscles are often shown to be weak during tendon stress tests and chiropractors frequently find spinal joint problems are often found by chiropractors in patients with RSI. Diagnostic tests such as x-ray are commonly undertaken.

Treatment

Ergonomics

It is important to review working conditions to determine any physical factors that have contributed to the pain patterns or which are perpetuating the problem by preventing full recovery. Modifications of workstation posture and corrections to the way the arm is used at work are usually recommended. It may in some circumstances be necessary to consider the use of adaptive technology, such as special keyboards, hi tech mouse replacements, speech recognition software and pen tablet interfaces.

Break Timers

It is so easy to get engrossed by the monitor when working behind a computer and pause software will interrupt to remind the user to pause and perform exercises. Workrave is an open-source free program that can assist in recovery from and prevention of Repetitive Strain Injury. It is designed to alert the user to take micro-pauses and rest breaks and it restricts computer use to a pre-set daily limit.

Mice, keyboards and other alternatives

With increased awareness of RSI a variety of ergonomic mice have been designed to minimise strain, such as the thumb trackball, vertical mouse, joystick or RollerMouse. There is also the option of switching from a mouse to a stylus pen and graphic tablet. These may provide an answer in relatively straight-forward cases but sometimes they can move the problem elsewhere in cases of chronic RSI. Work surfaces are not required for inertial mice and the user's arm is held with the thumbs up position, a position that is much less stressful than the conventional mouse when the thumb is rotated inward. As "air mice" do not need a surface they operate by using small, forceless, wrist rotations and the arm and wrist can be supported by an armrest or by the desktop. Another option is to switching to a trackpad so that gripping or tensing of the arm muscles is avoided.

Some sufferers have found that switching to Tablet computers such as the an iPad has been helpful, since overall strain is much reduced by the keyless nature of the device and the minimal finger movement involved, as well as the much greater variety of body postures while using the device and the replacement of the mouse by a touch screen.

Dictation software is improving day by day. One of the most popular software programmes is Dragon NaturalSpeaking. Some sufferers opt for hiring human typists. There are alternative keyboard designs, such as the specially contoured or split keyboards manufactured by OrbiTouch, DataHand Kinesis and Maltron. Other keyboards, such as Colemak or Dvorak, can provide a better, more ergonomically suitable layout to the conventional QWERTY keyboard.

Physiotherapy

Low Level Laser has been found very effective in managing RSI. Ivor Field, our physiotherapist, combines laser treatment with specific exercises and results are encouraging. Relief often begins within the first few sessions and once sound ergonomic advice has been taken up progress will often continue until permanent improvement has been attained.

Chiropractic

Malfunctioning of vertebral joints in the neck and upper back can often exacerbate underlying RSI symptoms. These spinal problems can not only cause neck pain and headaches but muscle spasm and referred pain can extend into the arms. Once they are irritated, the

nerves that leave the spine can lead to weakness in the arm and hand muscles, thereby increasing the risk of RSI.

Medical

Often non-steroidal anti-inflammatory medication will be prescribed in an effort to rid the arms and hands of the inflammation at the heart of RSI. This is often accompanied by the prescription of braces to prevent the wrist and hand from adopting positions that leave them vulnerable to RSI. Hot, cold, alternating hot and cold, and a TENS machine may also be applied to the forearm and hand. Biofeedback, which measures and “feeds back” to the patient information on the tension in specific muscles, can help make them aware of aggravating factors. It may also be used to make the patient aware of overall stress levels. Awareness of both these factors may help patients train themselves away from pain.

Effective therapy must be started early to secure to minimise the risk of chronic long-standing) pain developing. Once established, symptoms can take many months to ease off and any stressful activities that could trigger the symptoms have to be avoided.

Exercise for RSI

Exercise decreases the risk of developing RSI:

- Opening out the fingers against the tension of an elastic band
- Gently extending and pulling the fingers back
- Massaging into the soft tissues of the forearms
- Shaking out the hands
- Squeezing a soft ball
- Drawing the shoulder blades together
- Rolling the shoulders with controlled breathing
- Gently stretching out the neck in a number of directions

RSI prevention

Prevention is easy. If you are at risk learn the following simple procedures before RSI develops. if you do start to feel symptoms spring into action before the condition gets any worse.

These are the important rules to follow:

- Make sure you have set up your working equipment properly
- Make sure you take breaks regularly
- Make sure that your overall stress levels are being adequately managed

- Make sure you get treatment early before the RSI can get any worse

Psychosocial factors

Studies have related RSI and other upper extremity complaints with psychological and social factors. A large amount of psychological distress showed doubled risk of the reported pain, while job demands, poor support from colleagues, and work dissatisfaction also showed an increase in pain, even after short term exposure. Women of menopausal age are at a higher risk. Depression and anxiety, obesity or lack of fitness, diabetes or having a family history of diabetes, osteoarthritis of the carpometacarpal joint of the thumb, smoking, and lifetime alcohol intake are other factors considered to play a role.