

# Repetitive Strain Injury

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## Introduction

Repetitive strain injuries are a condition which affects the joints and muscles when they are overworked or strained. Once your doctor identifies the activity which is causing the strain, it should be ceased or modified. Your doctor may use drugs or surgery to treat your condition.

Repetitive strain injuries are fairly common among active adults. Repeated stress from work or from sports can inflict damage to the tendons and muscles. Most often the upper body is affected. Pain, stiffness, numbness, cramping and sometimes tingling are felt in the affected area. Your physician will diagnose your condition by determining the cause and severity of your condition. Ceasing or altering the offending activity is recommended. If the activity straining your body is work, your employer must modify your workstation and or duties. Medications, cold/hot compresses and supportive wrappings can alleviate the pain. Surgery may be called for in cases where the nerves or tendons are thickened, pinching a nerve, or otherwise malformed.

## Causes

Repetitive strain injuries are caused by inflicting excessive repeated stress to muscles and joints. Most often this occurs at work.

Repetitive strain injury (RSI) is a condition affecting mostly the upper body. Overworking a specific area of the body will result in damage to the muscle and connective tissues. Most cases affect the muscles and joints used for working, such as the arms and hands, neck, and back. People perform a variety of activities which cause RSI: Working at a machine which requires the same motion to be performed at length Sports which require a specific motion such as rowing Working a muscle too hard without rest Typing or sitting at a computer habitually Performing work in a misaligned position or posture. Working with vibrating equipment like a jackhammer. Working with cold muscles

## Summary

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Repetitive strain injuries develop over time. Symptoms of RSI: Stiffness Aches and pains Numbness Tingling Weakness Throbbing Muscle cramps Symptoms can come on mildly or severe. Symptoms can occur while you are performing the action at first. With time the affected area can show symptoms all of the time.

## Diagnosis

Diagnosing repetitive strain injury requires examining a variety of symptoms and causes. The doctor must identify the specific type of RSI as well as the cause of injury.

To diagnose repetitive strain injury, the physician will ask about symptoms and the nature of any labor work you perform and recent activities or injuries. Oftentimes, eliminating the suspected activity and waiting to see if the condition improves is the only way to be sure what is causing the symptoms. Type 1 repetitive strain injuries are when the doctor is able to form a clear diagnosis based on pain and inflammation of the muscles and tendons. Specific types of RSI have been identified: Rotator cuff syndrome is inflammation of the shoulder. Bursitis is inflammation of the bursa, or the sac of fluid inside of joints. Carpal tunnel syndrome and other forms of nerve entrapment. Dupuytren's contracture is thickening of tissues of the palms and fingers. Tendinitis or

Tenosynovitis, inflammation of the tendons or the tissue surrounding it. Epicondylitis also known as “tennis elbow”. Trigger finger is swelling of the finger-bending tendons. Ganglion cyst is fluid surrounding a joint, usually in the fingers or wrist. Raynaud’s disease is a disorder causing limited blood supply to the limbs and digits. It is aggravated by cold. Writer’s cramp results from over use of the arms and hands. Thoracic outlet syndrome is when the vessels delivering blood to the armpit are compressed at the neck. Type 2 repetitive strain injury is also called non-specific upper limb pain. This is when the doctor is unable to make a certain diagnosis. The physician may order imaging studies (X-ray, MRI, etc.) or blood tests to look for evidence of arthritis or osteoarthritis.

## Treatment

Treating repetitive strain injury can be achieved by eliminating or modifying the motion causing the injury, physical therapy, and using painkiller drugs.

Treatment for repetitive strain injury depends upon the severity of the condition and if a specific cause has been identified. Your physician may recommend lifestyle modifications, drugs and possibly surgery. If one particular activity has been identified as the cause of RSI, it is best to cease doing this activity. If the activity is work and not a hobby, it may be possible for your employer to accommodate you with a more ergonomic workstation. Take regular stretching and movement breaks to relieve built-up tension. Adjusting furniture to the correct alignment for your body and arranging your work equipment to be more easily reached are simple, low-cost ways to prevent further injury. Reassigning your duties may also be necessary in some cases. If pain persists after the offending motion has been eliminated from your routine, the doctor may prescribe medication. NSAID painkillers like naproxen (Aleve) or ibuprofen (Advil) are effective for relieving pain and reducing swelling. Antidepressants and sleeping aids help in cases where the pain interrupts your sleep. Corticosteroid drugs are used for stopping inflammation. Steroids can be injected directly into affected joints. Wrappings like a splint or elastic bandages can offer support and stability to aching limbs. Try heat or cold packs on the injured area for relief. Surgery can correct tendons or nerves which are pinched, oversized or otherwise problematic. Other therapies such as massage or acupuncture are popular with some RSI patients. Your insurance may or may not cover such treatments.

## Prevention

You can prevent repetitive strain injuries if you avoid overworking joints and muscles. Take regular breaks from strenuous activity and request your workstation be adjusted to reduce repetitive stress. Prevent repetitive strain injuries by eliminating repetitive motions which are stressful to muscles and tendons. Adjustments to your workstation may be necessary. Your employer is mandated to provide a safe work environment, including providing an adequately arranged workstation. All types of workers can modify their workstations to be the least stressful to the body. If leisure activities like basketball or rowing are causing your injury, you might need to play in a more recreational setting or find a lower impact activity to reduce your stress.