

BSSH

The British Society for
Surgery of the Hand

Wrist sprains

What is a wrist sprain?

The wrist is the most complex joint in the body. It is comprised of multiple bones and ligaments (fibrous tissues that hold the bones together). Several muscles are attached to these bones. The most common cause of a wrist sprain is a fall onto the outstretched hand. This bends the wrist backwards. This means that all of the ligaments are stretched causing microscopic tears. It is these tears that are the source of pain. In a wrist sprain no bones are broken and none of the ligaments are fully torn.

No bones are broken. A wrist is distinguished from more severe injuries in the wrist. Ligaments These microscopic tears can take weeks to months to heal. In a wrist sprain and none of the ligaments are fully torn and none of the bones are broken. They vary in severity with the most minor injuries simply requiring resting and painkillers for a few days and the more severe injuries taking months to recover.

How is it treated?

Wrist sprains are treated like sprains of other joints in the body. Firstly, the wrist should be elevated to reduce the swelling. Applying ice, such as a packet of frozen peas wrapped in a cloth, is helpful in the first 24 hours. Painkillers such as paracetamol and ibuprofen will relieve most of the pain. The wrist should be rested and this may mean modifying work activities or taking time off and avoiding exercise involving the wrist. Driving is best avoided until the pain improves. A mild wrist sprain does not need medical attention but if pain is severe or prolonged then it is recommended you seek medical attention. It's likely an x-ray will be taken to look for broken bones. In a wrist sprain the x-ray will be normal and the doctor won't find any evidence of ligaments being completely torn. You may well be given a wrist splint to help rest and protect the wrist. As the pain subsides you should gradually wear the splint for shorter periods. You should take the wrist out of the splint several times a day and move it within the limits of pain. This is to prevent the wrist getting stiff and losing movement. Sometimes physiotherapy is required. If the wrist is very sore, temporary immobilization in a plaster cast may be recommended. Wrist sprains do not require surgery.

What is the outcome?

Wrist sprains gradually get better over days, weeks or rarely months. You should expect return of a completely normal range of motion that is pain-free. The wrist may have become weak because of disuse. Strength will gradually return with normal use but this can be accelerated with exercises. Occasionally an injury that initially appears to be a wrist sprain doesn't get better. This may indicate a more significant injury. In this case your doctor may want to undertake further x-rays or a scan.