

## Elbow - common causes of pain

Overuse or repeated pressure on the tendons near the elbow joint can overload these tissues, particularly where the tendon anchors to the bone. If overload occurs, it can cause pain around the elbow, particularly when using the wrist and hand. Depending on the location and severity of the injury, full recovery can take months.

The most common type of elbow pain is known as 'tennis elbow'. 'Golfer's elbow' is a less common, but similar overuse injury. Despite their names, these injuries can occur as a result of a range of physical activities – racquet sports, rowing, canoeing, weightlifting, hockey, wrestling, swimming – as well as repetitive work tasks undertaken in a variety of occupations.

### The elbow joint

If you bend your arm, you can feel three bumps at your elbow joint. Injury to the tendons that anchor muscles to the two bumps on either side of the elbow are a common cause of elbow pain. These bumps are:

- lateral epicondyle ('tennis elbow') – the bump on the outer side of the elbow. The muscles on the back of your forearm, responsible for curling your wrist backwards, are anchored to this bony point. Pain in this bump is called lateral epicondylitis. This area is particularly susceptible to tennis elbow because it has a poor blood supply.
- medial epicondyle ('golfer's elbow') – the bump on the inner side of the elbow. The muscles on the front of your forearm, responsible for curling your wrist up, are anchored to this bony point. Pain in this bump is called medial epicondylitis.

### Symptoms of elbow pain

Some of the symptoms of elbow pain include:

- dull ache when at rest
- pain when making a fist (golfer's elbow)
- pain when opening the fingers (tennis elbow)
- soreness around the affected elbow bump
- weak grip
- difficulties and pain when trying to grasp objects, especially with the arm stretched out.

### Causes of elbow pain

Some of the many conditions and events that may contribute to elbow injuries include:

- lack of strength or flexibility in the forearm muscles
- lack of strength in the shoulder muscles
- instability of the elbow joint
- poor technique during sporting activities (especially tennis and golf) that puts too much strain on the elbow joint
- inappropriate sporting equipment, such as using a heavy tennis racquet or having the wrong sized grip on a tennis racquet or golf club
- repetitive movements of the hands and arms, such as working on an assembly line
- continuously making the muscles and joint take heavy loads
- other factors such as neck symptoms or nerve irritation.

### Treatment for elbow pain

If the symptoms don't improve, or if you are prone to recurring bouts of elbow pain, see your doctor or physiotherapist. Treatment options may include:

- exercises prescribed by your physiotherapist to gradually strengthen the tendons
- soft tissue massage
- ice massage
- acupuncture
- taping or bracing your elbow
- anti-inflammatory and pain-relieving medication can help you cope with the pain, but do not improve long-term outcomes
- surgery – in severe cases, and if pain has not resolved within 12 months.

There is now research evidence that corticosteroid injections can be harmful in the longer term, so these are no longer recommended in most cases.

Further research is needed to find out if new treatments such as injecting the person's own blood products back into the tendon, or using patches over the tendon that can help blood vessels to dilate can help.

## Prevention of elbow pain

Ways to reduce the risk of elbow injury include:

- Always warm up and cool down thoroughly when playing sport.
- Make sure you use good technique and proper equipment when playing your chosen sports.
- Do strengthening exercises with hand weights – your physiotherapist can prescribe the correct exercises for you.
- Avoid or modify work tasks that put excessive pressure on muscles of the forearm or that include the use of fingers, wrists and forearms in repetitive work involving forceful movement, awkward postures and lack of rest.

## Causes of elbow pain

While overuse injuries such as tennis and golfer's elbow are common causes of elbow pain, other conditions can include:

- Radiohumeral bursitis – bursitis is inflammation of a bursa. Bursae are small sacs that contain fluid to lubricate moving parts such as joints, muscles and tendons. Bursitis may be caused by repetitive use or frequent pressure or by injury to the elbow.
- Osteoarthritis – the joint cartilage becomes brittle and splits. Some pieces of cartilage may even break away and float around inside the synovial fluid (a liquid found in the joints). This can lead to inflammation.
- Referred pain – injuries to the bones of the spine (vertebrae) can irritate the nerves servicing the arm and cause referred pain around the elbow joint.
- Nerve entrapment – the radial nerve is the main nerve of the arm. If this nerve can't move freely, it can cause pain when the arm is stretched out. The radial nerve can be pinched by vertebrae or the elbow joint. There is evidence to suggest that nerve entrapment contributes to the pain of tennis elbow in some cases.
- Ligament sprain – joints are held together and supported by tough bands of connective tissue called ligaments. A sprain is a type of joint injury characterised by tearing of the ligaments.
- Bone fracture – a heavy fall or blow to the elbow may cause one of the bones to break or crack.
- Avulsion fracture – a powerful muscle contraction can wrench the tendon free and pull out pieces of bone.
- Osteochondritis dissecans – in younger people, a piece of cartilage and bone can become loose in the joint.

## Where to get help

- Your doctor
- Australian Physiotherapy Association Tel. (03) 9092 0888

## Things to remember

- The most common type of elbow pain is known as 'tennis elbow'. 'Golfer's elbow' is a similar overuse injury.
- First aid suggestions include rest and frequent applications of ice. In some cases, taping the elbow and forearm can help.
- If the symptoms don't improve, or if you are prone to recurring bouts of elbow pain, see your doctor or physiotherapist.
- Other causes of elbow pain include bone fractures, bursitis and nerve entrapment

**This page has been produced in consultation with, and approved by:**

La Trobe University - Health Science, School of Physiotherapy

Content on this website is provided for education and information purposes only. Information about a therapy, service, product or treatment does not imply endorsement and is not intended to replace advice from your doctor or other registered health professional. Content has been prepared for Victorian residents and wider Australian audiences, and was accurate at the time of publication. Readers should note that, over time, currency and completeness of the information may change. All users are urged to always seek advice from a registered health care professional for diagnosis and answers to their medical questions.

For the latest updates and more information, visit [www.betterhealth.vic.gov.au](http://www.betterhealth.vic.gov.au)

**Copyright** © 1999/2014 State of Victoria. Reproduced from the Better Health Channel ([www.betterhealth.vic.gov.au](http://www.betterhealth.vic.gov.au)) at no cost with permission of the Victorian Minister for Health. Unauthorised reproduction and other uses comprised in the copyright are prohibited without permission.