

INFORMATION FOR YOU

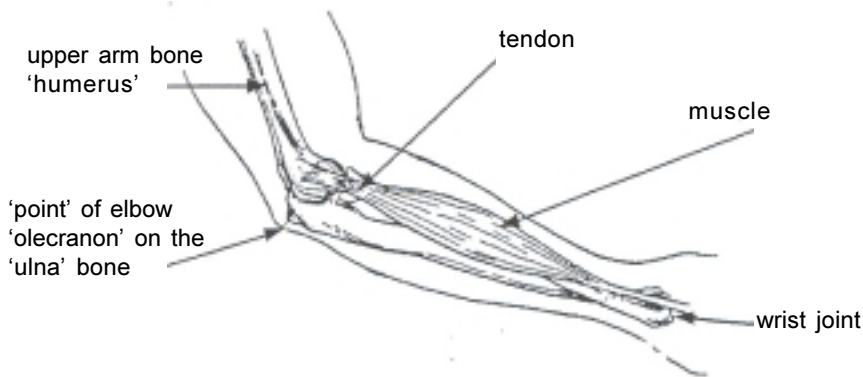
**‘TENNIS ELBOW’ or
LATERAL EPICONDYLITIS**

The aim of this information sheet is to give you some understanding of the problem you may have with your elbow. It has been divided into sections, describing your elbow, what we know about tennis elbow and your treatment options.

ABOUT YOUR ELBOW

The elbow consists of the upper arm bone and two bones in the forearm. It works in two parts. One part acts as a hinge enabling you to bend and straighten the elbow. The second part provides rotation of your forearm, for example to put your palm up towards the ceiling to receive change in a shop.

The joint is surrounded by muscles which move the elbow. Muscles which move your wrist and fingers also attach around the elbow. In addition, there are nerves which pass close by the joint (eg hitting your elbow can produce pain and pins and needles in the forearm and/or fingers).



WHAT IS 'TENNIS ELBOW'?

It is characterised by **pain** on the outside of the elbow and is a problem with **tendons** around the elbow. Tendons attach muscles to bone so using and stretching the muscles will have an effect on the tendon.

One or more tendons which attach around the elbow and move the wrist and forearm become inflamed. If the inflammation process continues the tendons can then show changes of 'wear and tear', with the tendon tissue becoming thickened or swollen.

This leaflet has been written to help you understand more about the problem with your elbow. The leaflet is not a substitute for professional medical advice and should be used in conjunction with verbal information and treatment given at the Orthopaedic Clinic.

For general enquiries about appointments, please phone:

Mr Smibert's secretary on: 01935 384597

Mr Chambler's secretary on: 01935 384779

For enquiries regarding admission dates, please phone the admissions office on: 01935 384619

We would like to thank the Nuffield Orthopaedic Centre (Upper Limb Clinic) for allowing us to re-produce the information in this leaflet.

2) How to influence/'break' the pain cycle

All the ideas mentioned above will, hopefully, influence the pain. Specific treatments may also help.

- a) Try using a **wet ice cube** and massage it over the tender area for up to 10 minutes.
- b) Try using **anti-inflammatory cream** on the area (from chemist without a prescription, but check you have no allergies or conditions that are influenced by these drugs).
- c) Pain medication (ie, **tablets**).
- d) **Physiotherapy** – this may include treatments to relieve pain such as transcutaneous nerve stimulation, ultrasound and laser. The effects are not proven, but rarely cause worsening symptoms. Thorough assessment of your arm, advice and exercises are probably more important aspects of treatment.
- e) **Injection** – this is given around the area (rather than into the tendon). It is usually local anaesthetic and steroid. Although it can be a painful procedure, injection can have a good effect. Doctors will generally not want to give more than 3-5 injections in a year, and if your symptoms keep returning, other treatment methods would be suggested. There is a risk of skin blanching if the injection is placed close to the surface of the skin or given repeatedly.

SURGICAL TREATMENT

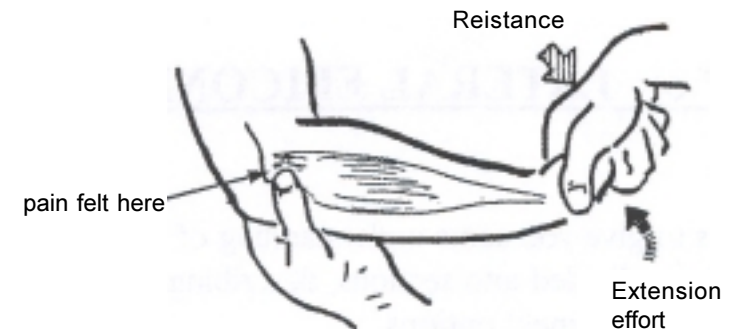
This is **rarely done**, but as you are attending the hospital for help, you may have a resistant or 'stubborn' tennis elbow. You may be offered surgery if you have had the problem for over a year, have pain when your arm is resting, and your everyday life is influenced in a significant way by your problem (ie, unable to work, etc).

The **operation is done as a day case**. You may have a general anaesthetic or regional anaesthetic where just your arm is 'put to sleep', you are still awake. The surgeon cuts the skin to find the damaged tendon tissue which is taken out. The healthy tendon tissue left should heal during the next 6-12 weeks. During this time activities to reduce the stress on the tendon, (as explained earlier) can be followed. Gradually re-start your activities. You may be sent for physiotherapy following surgery.

The results of this operation can be quite mixed, with approximately 30% still having problems on aggressive activities.

One muscle (called extensor carpi radialis brevis) is commonly involved, although it works in conjunction with several others so can be difficult to isolate and test specifically. Gripping, writing and/or twisting movements requiring muscular effort often make the pain worse. The discomfort can be felt into the forearm (ie, along the length of the muscles).

This test, shown for the right elbow is often painful, and can be worse when the elbow is straight. Resistance to middle finger extension is another commonly 'positive' test.



A similar pain can be felt on the inside of the elbow, this is sometimes called medial tennis elbow or 'golfers elbow' where it affects different tendons.

HOW COMMON IS IT?

It can occur at any age, but you do not have to play tennis to get it. It may happen as a result of a sporting injury, but most commonly occurs for no apparent reason. It is most frequently found in middle age (between the ages of 40-50). Repetitive wrist and hand movements in work or sports is often a feature. It is found in equal numbers of men and women.

WHAT ARE THE SYMPTOMS?

Varying degrees of pain on the outside of the elbow, from a mild discomfort when the elbow and wrist are used, to severe pain interfering with sleep and when the arm is still. Gripping and twisting movements are often painful and may be worse still against resistance or weight. Repeated movements such as doing DIY or computer 'mouse' work often aggravate the symptoms.

The outside of your elbow may be very tender to touch and you may notice some pain travelling down the forearm.

Symptoms of neck, shoulder or upper arm or hand pain should be reported to the doctor. In addition, tell them if you feel any pins and needles or tingling in the arm or hand as these may indicate that the pain is coming from your neck or wrist, via the nerves of your arm.

WHY DOES IT OCCUR?

The exact cause of lateral epicondylitis is not known. However, it is thought to be an 'overuse' problem. This relates both to **how long** and **how hard** the muscles are worked.

WHAT TESTS MAY BE DONE?

The main way we diagnose tennis elbow is through what you tell us and by examining your elbow. Sometimes an x-ray will be taken, although this only shows bones and does not show muscle inflammation or wear and tear.

WHAT ARE YOUR TREATMENT OPTIONS?

We appreciate that as you are attending the Orthopaedic Clinic you have probably had the problem for a long time, or that it is particularly severe. However, treatment is usually non-operative, with only a very small proportion requiring surgery. For most people the pain will go, although it may take up to a year.

NON-OPERATIVE TREATMENT

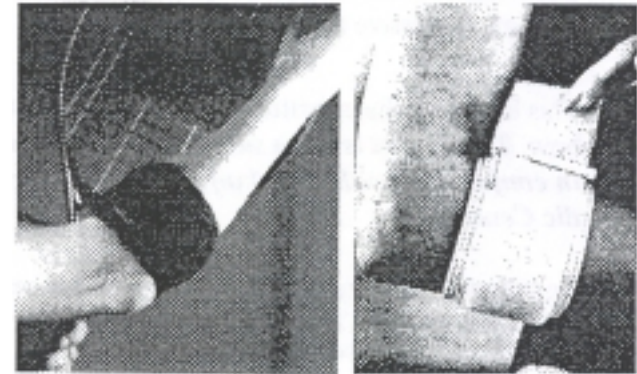
There are various things you can do that may change your pain. If you have not already tried these measures it is worth doing so now!

The aims of treatment are:

- 1) to reduce the stress on the tendon(s) so that your body can try and heal the area
- 2) to break the pain cycle

1) How to reduce the stress on the tendon

- a) If possible, **stop** the particular activity that causes pain or **find a different way** of doing it. For example, you may find that you tend to use your wrist and hand rather than your elbow and shoulder. Try to avoid this and **use the larger joints in the arm to 'spread the load'**.
- b) If you are involved in a sport/profession using repetitive movements, seek expert advice on your **technique**. A chartered physiotherapist may be able to give you advice on your movement patterns as well as **appropriate stretching** and **progressive strengthening exercises**.
- c) Be aware of the amount of force that you use to grip things, look at your knuckles, are they white showing that you are gripping hard? Try and use the **minimum amount of force** to maintain contact.
- d) **Altering the grip size** on objects you use may also have some beneficial effect. Often enlarging the grip is helpful, possibly **reducing the weight** of rackets/tools, etc, is useful.
- e) Using a **spint or brace** may be helpful. There are many on the market. It is better to try the counter-force braces for the elbow (see examples) rather than splints that stop the wrist moving. The wrist splints are best used only if the pain is very severe.



The counter-force splints aim to decrease the tension on the tendon, by using pressure from the brace on a different part of the muscle. Place the brace just below (ie towards the wrist) the painful area. **Wear it when you are using your arm** and take it off at night/resting. Experiment with the brace in different places – if it is going to work it normally makes an immediate difference.