

Tennis Elbow information for GPs

What is Tennis Elbow?

Tennis Elbow (Lateral Epicondylitis) is a condition causing pain and tenderness around the outer aspect of the elbow joint. It commonly affects people who play racquet sports (hence the name) or manual workers though can occur in any individual.

Pathophysiology

- True patho-physiology is not fully understood
- Likely an overuse condition affecting the common extensor tendon at insertion onto lateral epicondyle
- Not actually an inflammatory condition
- Likely, degeneration within the tendon due to overuse resulting in microscopic tears. In chronic tennis elbow calcification can occur around the insertion of the tendon and in a small number of cases larger tears can occur.

Presenting Symptoms:

- The usual symptoms are pain located around the outer aspect of the elbow over the lateral epicondyle.
- The pain is triggered by actions that extend the wrist eg lifting with the palm down, wringing out a dishcloth or pouring from a heavy jug/pan.
- A tender spot can usually be felt over the bone and just in front of it in the tendon itself.

Simple clinical tests

1. Whilst patient extends wrist against resistance pressing over the lateral epicondyle and common extensor tendon will illicit tenderness and cause discomfort.
2. With the patients forearm and hand laid flat on a table, palm facing down ask them to raise their middle finger off the table. This movement in itself may illicit pain over the lateral epicondyle.

If not ask them to do it again but this time against resistance. Pain over epicondyle/common extensor tendon confirm lateral epicondylitis.

Advice about prevention

- If new to a sport or activity get expert advice-poor technique or incorrect equipment will increase the risk of injury.
- Build up slowly if not accustomed to an activity.

- DIY is another common cause of tennis elbow especially in those unaccustomed to physical activity. Try to break large jobs up into manageable amounts and spread them over a number of weeks. Avoid lots of repetitive actions or excessive lifting all in one go.
- Warm up slowly before participating in strenuous activity.
- After activity massage and stretching may help.
- Good general posture and correct set up of work stations is important

Management of Tennis Elbow

Most cases of tennis elbow can be self-managed with simple things such as modification of activities, simple exercises and if necessary painkillers. In a small number of cases injections may be done around the tendon insertion and occasionally in recalcitrant cases surgery may be an option.

1. Simple advice:

- After physical activity if the elbow feels sore try applying an ice pack for 15mins every few hours.
- Massaging across the tendon and around the insertion may help and using a topical non-steroidal anti-inflammatory gel such as ibuprofen gel may reduce the discomfort.
- Stretching after activity.
- Modification of activity eg.reduced frequency or intensity of the causative activity or a complete rest from it.
- In racquet sports increasing the size of the grip by winding more tape on it may be beneficial
- Brace's specific for tennis elbow are available from sports shops or online which put pressure over the extensor tendon and muscle may help ease symptoms when active.

2. Eccentric Physiotherapy Exercises

- There is good evidence for the use of specific exercises called eccentric exercise for the rehabilitation of various forms of tendonopathy from tennis and golfers elbow to Achilles and patella tendonopathy.

Isometric muscle contraction is one where the muscle contracts and shortens whilst under load, for example doing a biceps curl with a weight. An isometric contraction is where the muscle neither shortens nor lengthens (eg holding a weight in one position).

An eccentric exercise is one that loads the muscle and tendon whilst the muscle lengthens - for example, slowly lowering the weight back down after the biceps curl. The muscle is still working otherwise the weight would drop quickly, but the fibres are lengthening.

It is this lengthening of the muscle under load, "an eccentric exercise", which appears to rehabilitate tendons. It is important to understand this when explaining the exercises to patients.

A patient leaflet re the exercises can be found at the www.sheffieldhandandelbowpain.com website

3. Corticosteroid Injections

Historically corticosteroid injections have been done for tennis elbow, the steroid being injected around the tendon and its insertion onto the bone.

There are studies however, which suggest patients who have injections have a poorer outcome long term, with ongoing or recurrent symptoms being more likely. Steroid injections also have potential complications of tendon rupture and atrophy of the tissue resulting in permanent dimpling of the skin around the injection site.

Injections are therefore not recommended other than in specific cases.

4. Surgery

In a small number of severe, chronic cases surgery may be necessary. The surgery is aimed at releasing strain on the tendon, removing degenerative tissue and promoting healing.

There have been numerous other proposed treatments all with limited evidence at the present time from application of heat, pulsed ultrasound treatment, botulinum toxin A injections, and electrotherapy amongst others.