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TENNIS ELBOW – LATERAL EPICONDYLITIS

What is Tennis Elbow?

Tennis elbow is an injury to the muscles and tendons on the outside (lateral aspect) of the elbow that usually results from overuse or, less often, a single injury. The narrowing of the muscle bellies of the forearm as they merge into the tendons creates a highly focused area of stress where the tendons insert into the bone of the elbow.

Signs and Symptoms

General

- Difficulty holding onto, pinching, or gripping objects
- Pain, stiffness, or reduced movement of the elbow and hand
- Forearm muscle tightness
- Reduced forearm strength and function
- Point tenderness at or near the insertion sites of the muscles of the outside of the elbow.

If you have had an ultrasound or MRI which shows that there is a gap 5mm or more between the tendon and bone then surgery should be considered earlier.

Rehabilitation – What Should I Do, When Should I Do It, and How?

Epicondylitis, both medial (golfers elbow) and lateral (tennis elbow), is a common and often persistent condition.

As a general guideline, the longer you have experienced the condition, the longer the expected recovery time.

Epicondylitis often becomes a chronic problem if not cared for properly. For this reason, it must be stressed that the rehabilitation process should not be progressed until you experience little or no pain at the level you are performing. Regaining full strength and flexibility is critical before returning to your previous level of sports or other activity.

In general, the rehabilitation process can be divided into three phases:

PHASE 1

Goals: decrease pain; promote tissue healing, and decrease muscle wasting. During the acute stage of your injury the best thing to do is rest. This means avoiding further overuse, not absence of activity. You should maintain as high an activity level as possible while avoiding activities that aggravate the injury. Pain is the best guide to determine the appropriate type and level of activity.

PHASE 2

Goals: Improve flexibility, increase strength and endurance, gradual return to function.

Stretching

Gentle stretching exercises including wrist flexion, extension and rotation. The elbow should be extended (straight) to increase the amount of stretch as required. These stretches should be held for 20-30 seconds and repeated 5-10 times, at least twice a day. Vigorous stretching should be avoided - do not stretch to the point of pain that reproduces your symptoms.



Strengthening

With the elbow bent and the wrist supported perform the following exercises:

1. *Wrist Extension.* Place 500g weight in hand with palm facing downward (pronated); support forearm at the edge of a table or on your knee so that only your hand can move. Raise wrist/hand up slowly (concentric contraction), and lower slowly (eccentric contraction).

2.

Finger

Extension. Place a rubber band around all five finger tips. Spread fingers 25 times, repeat 3 times. If resistance is not enough, it can be increased by adding a second rubber band or using a rubber band of greater thickness.



3.

After exercising, massage across the area of tenderness and apply a cold pack for 5 minutes.

PHASE 3

Goals: Improve muscular strength and endurance, maintain and improve flexibility, and gradually return to prior level of sport or high level activity.

Continue the stretching and strengthening exercises, emphasizing the eccentric contractions of wrist flexion. In this regard, since the eccentric contractions are movements with gravity, do not let the weight drop too quickly; lower the weight in a controlled fashion. With the combined wrist flexion/extension exercise, work on increasing speed when rolling up the string with the attached weight as this will improve endurance.

Bracing and Aids

Lateral counter-force bracing is believed to distribute the stress on the tendon attachment over a broader area.



The counter-force brace can be worn beginning in Phase 2 of your rehabilitation program. However, adhere to the following caution: do not become dependent on the counter-force brace and gradually decrease its use during Phase 3. Counter-force bracing is a supplement to, not a replacement for your rehabilitation program.

If you are not making progress you may try the [Thera-bar](#). Progressing and using 'heavier' bars will help to prevent recurrence.

If after 6 weeks of *committed* exercises the pain is not improving then Radial Shock Wave Treatment, [growth factor injections](#) or [surgery](#) may be considered.