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Lateral Epicondylitis
(Tennis Elbow)

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What is it? Lateral epicondylitis occurs with pain and inflammation on the outer side of the elbow where the muscles that extend the wrist attach to the bone. This can occur not only in tennis players but in anyone who performs repeated motions of the wrist. See Figure 1.

What are the symptoms? Commonly this occurs with pain and tenderness on the outside or lateral side of the elbow, pain or weakness with gripping or twisting of the wrist, and pain with lifting objects.

What causes this? Epicondylitis is caused by repetitive stress and strain to the muscles and tendons that attach the forearm muscles to the elbow. This can include any sudden change in activity level or intensity, or any incorrect grip or grip size in racquet sports.

What is the treatment?
Step 1: Initially treatment consists of anti-inflammatory medication and a stretching and strengthening program. **Stretching is a key component in treating epicondylitis. Each stretch should be held for at least 10 seconds, then relax the arm and repeat up to several times a day and in between activities.** See Figure 2.

Strengthening exercises may also help but are not as useful as stretching. **While doing any strengthening, exercises should always be pain free and done with a light weight and at least 3 sets of 15-20 repetitions.** See Figure 3- 4.

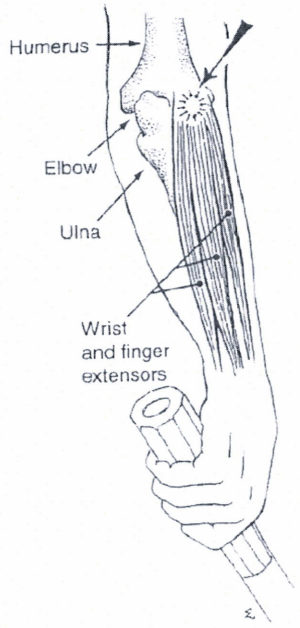

Figure 1: *From Economou SG, Economou TS: Instructions for Surgery Patients. Philadelphia, WB Saunders, 1998, p.589.*

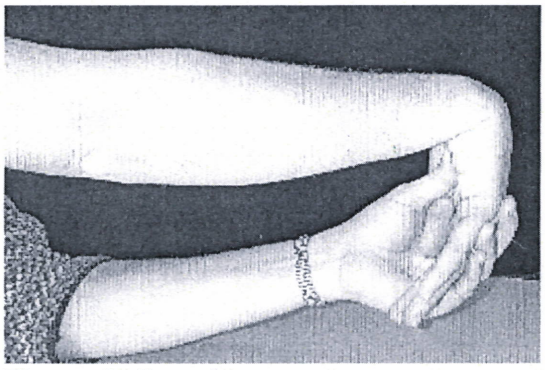

Figure 2: *Stretching*

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Step 2: If symptoms continue after a trial of stretching and strengthening, patients may benefit from a cortisone injection. Cortisone acts by decreasing swelling and inflammation, and increasing blood flow to the area which aids in healing. Most patients feel relief after one injection, but up to three cortisone injections over a period of time may be given.

Step 3: If stretching and strengthening, anti- inflammatory medication, and cortisone injections do not relieve symptoms then surgery is beneficial. Through a small incision over the bony prominence on the outside of the elbow the base of the diseased tendon is removed and then normal tendon tissue is repaired back to the bone.

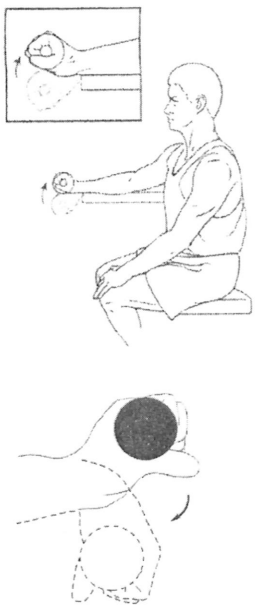

Figure 3: *Wrist Extensors. 3 sets of 20 repetitions 3-4 days a week, pain free.*

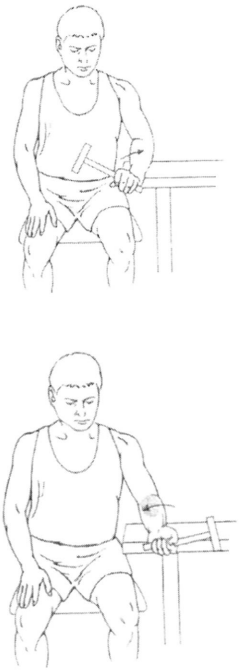

Figure 4: *Supination and Pronation. 3 sets of 20 repetitions 3-4 days a week, pain free.*