

## Lateral Epicondylitis Non-operative treatment

The pain you have on the outside of your elbow is due microtearing of the tendons coming off the epicondyle (bone). This results in the formation of scar tissue with resultant pain. Continued stress can lead to a vicious cycle of pain and weakness. This is not a serious injury, but the pain can greatly affect your capability to perform sports activities. We can keep you in training if you follow this treatment regimen: Acute (1-3 weeks from onset of symptoms)

- Modalities to relieve pain
  - Ice, NSAID'S, corticosteroid injection, cock-up wrist splint, cast
- Rehabilitation
  - Rest until asymptomatic, then gradual resumption of normal activities; alter provocative activities if possible

Subacute and Chronic (>3 weeks from onset of symptoms)

- Modalities for relief of pain
  - Heat, NSAID'S, massage, ultrasonography, electrical stimulation, elbow sleeve or counterforce forearm brace

Rehabilitation

- Exercise: flexibility (alphabet tracing), strength (isometric) program for wrist extensors, endurance (when pain-free, begin isokinetic program).
- Return to full activities when grip strength is normal and pain is absent

An isometric strengthening program for forearm extensors can begin with the use of lightly resistive therapeutic putty. As the patient grips the putty, the wrist extensors isometrically contract to stabilize the wrist. Isometric exercises allow strengthening of the muscle with less stress than occurs with isotonic and isokinetic exercises.

As the patient's level of pain decreases, generally within 3-6 weeks of initiation of treatment, a progressive resistive exercise program is started, with the goal of strengthening the wrist extensors, forearm flexors, supinators, and pronators. Isotonic and isokinetic exercises can also be used.

Isotonic exercise occurs when the muscle works against resistance through available range-of-motion. Free weights or exercise rubber bands can be used. With isokinetic exercises, the speed of muscle lengthening and contraction is controlled and resistance is varied.