Nonoperative Treatment for Lateral Epicondylitis (Tennis Elbow)— Dr. Trueblood

0-3 weeks (Pain management and soft-tissue healing response)

Cock-up wrist splint around the clock with counterforce bracing as needed for heavier demand activities. Patients may remove the wrist brace to bathe and for daily skin care but should wear it while sleeping.

Moist heat for 10 minutes before massage sessions to promote flexibility of the muscles and improve massage tolerance.

Modalities prn- especially ultrasound, iontophoresis, heat, and ice.

Manual massage for 5 minutes, bid. Massage should be performed clockwise, counterclockwise, along the long axis of the muscle, and perpendicular to the long axis of the muscle.

Encourage general conditioning, ex. a 20-30 minute walk either outside or on a treadmill, 2-3x/ week. Competitive athletes should be encouraged to “train around” their injury with high levels of intensity to prevent returning to sport in a deconditioned state. For all patients, this will serve as a positive reinforcement for good health and will help to maintain a positive attitude. Couple this with progressive strengthening exercises for the shoulder and trunk muscles. It is not uncommon for the wrist extensors to be over-taxed as compensation for limited shoulder girdle and static/dynamic core stabilization strength.

Patient education and reassurance are critical. It is important to review the list of activities and movements that aggravate lateral epicondylitis pain. Patients should be instructed in lifting objects with the palm up as opposed to grasping objects with the palm down.

3 weeks (Begin active flexibility—Phase II Exercises)

Begin active stretching for 4 sessions a day, 10 reps per session to follow abbreviated self-massage sessions.

Moist heat for 10 minutes before massage/active stretching.

Massage first, then hold each active stretching exercise for a 15 count (approximately 30 seconds).

Modalities prn- especially ultrasound, iontophoresis, heat, and ice.

4-6 weeks (Passive flexibility—Phase III Exercises)

Continue wrist splinting.

Moist heat and self-massage for 10 minutes before each stretching session.

Active stretching exercises follow heat and massage.

Passive stretching exercises in the same four positions follow the active sessions, 4 times/day for 10 minutes at a time. Each passive stretch should be held for a count of 15. These exercises must not be painful. If the patient is capable of performing the first and second
passive stretching exercises but not the third, the patient should be encouraged to repeat the
pain-free exercises instead of progressing into a painful range. With the next follow-up visit, you
can assess whether the patient is able to tolerate the next exercise.

When patients are not able to perform all of the stretching positions, it is very important to
reassure them that this is quite normal and not at all an indication that they will fail conservative
management.

If the patient is able to perform all of their active and passive stretches without pain, then
progressive strengthening may be initiated. **All strengthening exercises should be
performed with a counterforce brace.** These should begin in a mid range. A 1# weight used
for 25 repetitions, every other day, is generally a good place to start. Begin with the elbow
partially flexed and the forearm supinated and counsel against resistance for wrist extension in
forearm pronation. Reassure the patient that strength must be built gradually and that the goal
is progressive build over weeks, not days. Competitive and recreational athletes with a
background in weight training need more surveillance than non-athletes and will often “overdo” it
and will have recurrence of symptoms that had previously resolved.

**Modalities prn-** especially ultrasound, iontophoresis, heat, and ice.

### 6-9 weeks (Progressive Strengthening—Phase IV)
Progressively increase the strengthening range of motion to a full arc of motion, continuing the
use of a counterforce brace. Once the patient can tolerate gentle strengthening through the full
range of motion, they may begin to wean out the cock-up wrist splint. It is critical, however, that
strengthening should not elicit pain along the area of the lateral epicondyle.

Patients with sport-specific exacerbation of lateral epicondylitis may begin to return to skills
practice for no more than one hour per day. Movement patterns that elicit lateral epicondylar
pain should be identified and avoided. A counterforce brace should, again, be worn for all
sports activities. For tennis players and golfers, it is important to evaluate technique and
equipment as a part of their return to sport.

### 9-12 weeks (Normalization)
Many, though not all, patients will be out of their cock-up splints at this point. Counterforce
bracing is encouraged for resistance activities for at least 6 months, regardless of absence of
symptoms.

Patients with resolved elbow pain may return to sports without limitations at this point. The goal
at this point is to have equally strengthened extremities with normal range of motion in the
stressed positions. It is critical to remind athletes that they must warm up and perform their
active/ passive stretching prior to participation in sport.