

Sports & Orthopaedic Specialists Lateral Epicondyle Release Protocol

This protocol provides appropriate guidelines for the rehabilitation of patients with lateral epicondyle release. The protocol draws evidence from the current literature and accounts for preferences of the providers at Sports & Orthopaedic Specialists. The program may be modified by the referring provider for an individual patient. If questions arise regarding the utilization of the protocol or the progress of the patient, contact Sports & Orthopaedic Specialists:

Main line: (952) 946-9777 Physical therapy: (952) 914-8631

PRECAUTIONS

-No resisted wrist extension or co-contraction for 6 weeks

PT FREQUENCY & DURATION

- -Eight to ten physical therapy visits over 4-5 months
- -Begin physical therapy 4+ weeks after surgery or as instructed by surgeon

REHAB PRINCIPLES

- -Focus on <u>active engagement of the patient</u> through patient education and therapeutic exercise. Establish a home exercise program that can be progressed throughout the postoperative period.
- -Respect tissue healing. The surgeons at Sports & Orthopaedic Specialists uniformly prefer a slow progression of postop patients with minimal postoperative pain.
- -Postoperative pain may be experienced however physical therapy, including the home exercise program, should result in <u>minimal to no symptom exacerbation</u>. The patient should call the PT for recommendations if pain increases during or after exercise.
- -The therapeutic exercises listed in this protocol convey the appropriate load for the elbow given the time elapsed since surgery in regards to tissue healing. It is acceptable for a patient to <u>progress more slowly</u>. However, it is not acceptable for a patient to progress more quickly unless directly indicated by the physician.
- -Recommend max of 6 exercises for home exercise program. Select a <u>well-rounded program</u> that targets each area of insufficiency identified during physical exam.

MODALITIES

<u>Cold Therapy / Ice</u>: Instruct patient to use ice daily until pain free or 8 weeks after surgery.

Other Modalities: **DO NOT USE**

-Ultrasound -Infrared laser -Phonophoresis -NMES/TENS -Iontophoresis -Hot packs

LATERAL EPICONDYLE RELEASE

MANUAL THERAPY

- -Transverse friction at common extensor tendon at 6 weeks.
- -Joint mobilization of elbow after 8 weeks ONLY if prescribed by surgeon
- -Joint mobilization to address shoulder hypomobility ONLY if prescribed by surgeon
- -Soft tissue techniques to upper trapezius/levator scapula/pect minor are permitted

THERAPEUTIC ACTIVITY AND PATIENT EDUCATION

Patient education is very important in getting the patient to take an active role in therapy and recovery. Educate the patient at the appropriate level regarding:

- -Anatomy of the elbow
- -Influence of shoulder on elbow mechanics
- -Basics of surgical procedure in layman's terms
- -Surgical precautions
- -Avoidance of pain provoking activities

THERAPEUTIC EXERCISE

-<u>Free Weights</u>: Use the following age guidelines to establish a maximum weight for rotator cuff strength/conditioning ONLY when the protocol calls for the use of free weights.

For patients over 60 years old:

No external weights for rotator cuff strength/conditioning (Ex: Side lying external rotation, full can)

For patients aged 40-60:

Progress from two ounces to four, then a max of eight ounces for rotator cuff strength/conditioning.

For patients under 40 years old:

Progress from two ounces to four, then eight ounces. A <u>max of 16 ounces</u> can be used for rotator cuff strength/conditioning.

-Exercise Band: DO NOT USE

The use of Yellow Theraband®, the least resistive color in the Theraband series, results in 2.9 pounds of resistance when elongated by 100%. In addition, length-tension principles of muscle function do not align with exercise band properties; the muscle is asked to provide maximum force at a shortened and inefficient length. Therefore, exercise band use is not permitted for use during rotator cuff conditioning.

-Pulleys: **DO NOT USE**

LATERAL EPICONDYLE RELEASE

WEEK 0-1

- -Patient receives postop instructions after surgery that include:
- -Wear sling and splint for comfort.
- -Gentle AROM of the wrist and hand with gravity-reduced
- -Application of ice daily.

WEEK 2-4:

- -Remove sling
- -Begin physical therapy:
 - -Gentle wrist extensor stretch
 - -AROM of the wrist and hand against gravity
 - -Scapular stability
 - -Shoulder strengthening program
- -Application of ice daily.

WEEK 5-7:

- -Wrist extensor stretch
- -Advance wrist strengthening as tolerated (eccentric with free weights or manual resistance)
- -Continue shoulder strengthening and scapular stabilization programs
- -Week 6: Begin transverse friction over common extensor tendon.
- -Brace: Epitrain brace measured to fit
- -Application of ice daily.

WEEK 8-12:

- -Begin task-specific functional training
- -Return to sport or activities when cleared by surgeon
- -Continue counterforce bracing if needed

