

Lateral or Medial Epicondylectomy Rehabilitation Protocol

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Lateral Epicondylectomy

A lateral incision is made approximately 3-4 cm beginning just proximal to the lateral epicondyle and extending distally at the interval between the extensor carpi radialis longus, and brevis tendons. The fascia is incised, and the extensor longus muscle is retracted anteriorly exposing the brevis tendon. Abnormal tendon tissue, which appears grayish and gelatinous, is excised by sharp dissection. The lateral epicondyle is debrided down to subchondral bone. Multiple holes are made in the bone to promote a fibroproliferative healing response, and the fascia is repaired. Subcutaneous sutures are closed with a 2-0 Prolene or Monocryl, and the skin is closed with a subcuticular 3-0 Prolene, Mathysol and Steri-Strips.

Medial Epicondylectomy

A longitudinal incision is made beginning just proximal to the medial epicondyle and extending distally at the interval between the pronator teres and flexor carpi radialis tendon. Dissection is carried down through the subcutaneous tissues exposing the flexor pronator mass. Abnormal tissue, which is usually present between the pronator teres and flexor carpi radialis tendon, is excised. The medial epicondyle is debrided down to subchondral bone. Multiple holes are made in the bone to promote a fibroproliferative healing response, and the fascia is repaired. Subcutaneous sutures are closed with a 3-0 Monocryl or Vicryl, and the skin is closed with a subcuticular 3-0 Prolene, Mathysol and Steri-Strips.

A long arm splint is fitted, and the patient is to return in 1 week.

Phase I: 1- 3 weeks

Post-Op Treatment Following Lateral Epicondyle Release

Clinical Goals

- ◆ Maintain minimal swelling using tubigrip and icing after exercise

Testing

- ◆ ROM for elbow, wrist, forearm

Exercises

- ◆ Long arm splint worn between exercises and at night.
 - If pain is minimal, short arm splint may be approved by physician.

- ◆ AROM exercises for the elbow, wrist, and forearm, 6 times per day.
- ◆ PROM exercises may be initiated at two weeks.
- ◆ Ice 3-5 times per day after exercise.

Post -Op Treatment Following Medial Epicondyle Release

Clinical Goals

- ◆ Maintain minimal swelling using tubigrip and icing after exercise

Testing

- ◆ ROM for elbow, wrist, forearm

Exercises

- ◆ Long arm splint worn between exercises and at night.
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Phase II: 3-6 Weeks

Lateral Epicondyle Release

Clinical Goals

- ◆ Increase strength while not increasing pain level. If pain persists, increase splint wear and rest.
- ◆ Achieve full ROM of UE

Exercises

- ◆ Increase passive stretching of elbow if needed.
- ◆ Patient may remove splint for part of the day at 4-5 weeks when discomfort allows, but continue splint at night for 6 weeks
- ◆ Scar massage 3-4 times per day when the wound is healed.
- ◆ If pain is minimal, light strengthening program is initiated at 5-6 weeks:
 - Putty 3 times per day
 - Wrist and elbow curls with 1-2 lbs once or twice a day
 - Forearm rotations with red tubing, 10 repetitions 2 times per day

Testing

- ◆ Elbow, wrist, forearm ROM

Medial Epicondyle Release

Clinical Goals:

- ◆ Follow treatment plan for Lateral Release from 3 weeks post-op
 - Ice after strengthening

Phase III: 6 Weeks to 6 Months

Clinical Goals

- ◆ Full use of extremity by 3-5 months depending on work or sports.
 - Patient may not be able to return to heavy work for 6 months.
- ◆ Increase strength while not increasing pain level. If pain persists, increase splint wear and rest.

Testing

- ◆ Elbow, wrist, forearm ROM
- ◆ Grip strength

Exercises

- ◆ Strengthening exercises with putty 3 times per day for 5 minutes and progress to 10 minutes at 7-8 weeks.
- ◆ Continue to increase intensity of strengthening program for hand, wrist, forearm and elbow.
- ◆ Rotator cuff strengthening exercises.

Clinical Follow-up

- ◆ Patient is seen approximately once a month at this time until 3 months and then only as needed.

Conservative Treatment

Lateral Epicondylitis

Medication and Bracing

- ◆ Anti-inflammatory medication may be prescribed by the physician.
- ◆ A wrist immobilization splint with the wrist in 40° to 45° of extension is fitted and should be worn at night and part of the day as needed.
 - A counterforce brace with the pad over the extensor muscle mass is worn during the day

Exercises

- ◆ Perform HEP three times per day:
 - With the involved elbow extended, the opposite hand is used to passively stretch the wrist into flexion and increased pronation. The stretch is held for 15 seconds and repeated 5 times.
 - Ice is applied with an ice cup massage for 5-8 minutes or an ice pack is applied for 20 minutes.
 - Cross friction massage is performed over the lateral epicondyle area for 4-5 minutes
- ◆ Once the initial pain has improved, usually within 1-2 weeks, the patient should begin eccentric strengthening exercises for the wrist extensors. These are performed 1 or 2 times per day after the stretching exercises and before icing.
- ◆ As pain continues to improve, the strengthening program is increased and the splint is worn only at night.
- ◆ If the pain does increase, the strengthening should be significantly reduced and the patient should rest the arm as much as possible.
 - If the patient is experiencing significant acute pain during the first visit, it may be recommended to rest in the splint for 1-2 weeks, icing 2-3 times per day, before beginning the HEP.

Medial Epicondylitis

Medication and Bracing

- ◆ Anti-inflammatory medication may be prescribed by the physician.
- ◆ A Meunster splint, with the wrist in 0°-5° of flexion and the forearm in neutral or slight pronation, is fitted to be worn at night and for part of the day as needed.
- ◆ A counterforce brace, with the pad over the flexor/pronator mass, is worn during the day when the Meunster splint is not being worn.

Exercises

- ◆ Perform HEP three times per day:
 - With the involved elbow extended and the forearm supinated, the opposite hand is used to passively stretch the wrist into extension. The stretch is held for 15 seconds and repeated 5 times.
 - Ice is applied with an ice cup massage for 5-8 minutes or an ice pack is applied for 20 minutes.
- ◆ Cross friction massage is performed over the lateral epicondyle area for 4-5 minutes.
- ◆ Once the initial pain has begun to improve, usually within 1-2 weeks, eccentric strengthening exercises for the wrist flexors are initiated 1-2 times per day before icing.
 - The stretches, icing, and massage are continued 3 times per day
 - If the patient is experiencing significant acute pain during the first visit, it may be recommended to rest in the splint for 1-2 weeks, icing 2-3 times per day, before beginning the HEP.

DISCLAIMER

These general rehabilitation guidelines are created by physical and occupational therapist for the rehabilitation of various shoulder and elbow pathologies. These are to simply be used as guidelines. This information is provided for informational and educational purposes, only. Specific treatment of a patient should be based on individual needs and the medical care deemed necessary by the treating physician and therapists. The University of Kentucky and The American Society of Shoulder and Elbow Therapists take no responsibility or assume no liability for improper use of these protocols. We recommend that you consult your treating physician or therapist for specific courses of treatment.