

LATERAL EPICONDYLITIS PROTOCOL

ACUTE PHASE

Symptoms with a duration of less than three months.

GOALS: Reduce pain and edema, facilitate tissue healing. Improve ergonomic knowledge/application and sports modification.

Modalities:

Choice of modality dependant on OT's discretion following evaluation, MD order, and patient's recent medical history (ie: recent steroid injection would contraindicate iontophoresis with dexamethasone).

Transdermal Drug Delivery: Iontophoresis with Dexamethasone to decrease inflammation. Iontophoresis with acetic acid if calcific deposits on x-ray.

Phonophoresis: Ultrasound with parameters set according to goals established for this phase.

Superficial cold and heat (ice, fluidotherapy, hot packs) for pain modulation before or after exercise.

Electrotherapy: High-volt pulsed current (HVPC) for pain modulation and tissue healing

Soft Tissue Techniques:

Transfriction massage after initial acute pain has subsided.

Myofascial release

Soft Tissue Massage

CHRONIC PHASE

Symptoms with a duration of greater than three months. Tendonosis should be suspected at this point.

GOALS: Restore flexibility, strength, endurance to the extensor muscle mass and common extensor tendon. Improve ergonomic knowledge/application and sports modification.

Modalities:

Choice of modality dependant on OT's discretion following evaluation, MD order, and patient's recent medical history.

Transdermal drug delivery (iontophoresis, phonophoresis, transdermal medication patches). If calcific tendonitis, then iontophoresis with acetic acid.

Ultrasound with parameters set according to goals established for this phase. Primarily to increase tissue extensibility of soft tissue of the forearm.

Superficial heat and cold (fluidotherapy, hot packs, ice) for pain modulation before or after exercise and to increase tissue extensibility of soft tissue of the forearm. May also be used to increase joint ROM.

Soft Tissue Techniques:

Massage to increase local blood flow and relax muscle tissue.

Splinting:

Counterforce brace to limit full expansion of wrist extensor muscle and/or increase area of applied tensile stress, dispersing forces, or as reminder for patient to not overexert the extensor muscles. Contraindicated if extensor mass or radial tunnel symptoms.

ACUTE PHASE

Splinting:

Wrist extension support to rest wrist extensors (cock-up splint)

Counterforce brace once acute tenderness has decreased but contraindicated if extensor mass or radial tunnel symptoms.

Therapeutic Exercise and Neuromuscular Conditioning:

Pain free elbow, forearm, wrist and hand range of motion (AROM).

Passive stretching dependant on patient's laxity.

Radial Nerve glides.

Strengthening as pain decreases for the elbow, forearm, and hand. Eccentric and concentric wrist strengthening...no pain.

Parascapular strengthening. Core strengthening.

ADL, Work and Sports Modifications:

Analyze tasks to avoid awkward postures, repetitive movement, static postures, or improper tool size handles.

Interval training program for sports/work if possible.

Modify work stations and provide ergonomic computer workstation information packet if appropriate.

CHRONIC PHASE

Therapeutic Exercise and Neuromuscular Conditioning:

Stretching warm up exercises.

Isometric strengthening more vigorous. Concentric isotonic contractions and eccentric strengthening.

Grip strengthening progressed in similar manner unless it appears to be cause of lateral epicondylitis.

Parascapular strengthening continued.

Repetitive oscillatory movement for co-contraction and stabilization exercises for the UE (BOING, Body Blade).

Work and Sports Modifications:

Analyze tasks to avoid awkward postures, repetitive movement, static postures, or improper tool size handles

Interval training program for sports/work if possible.

REFERENCE LIST FOR LATERAL EPICONDYLITIS PROTOCOL

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