

Postoperative Rehabilitation for Achilles Tendon Repair after Acute Rupture
Dr. Aukerman 1/2018

DOS: _____

Week 1, Begin Date: _____

- Partial weight bearing
- ROM: out of splint active flexion/DF, 2 sets of 5 reps, 3 times a day
- No strength exercises

Week 2, Begin Date: _____

- Progressive, partial weight bearing
- ROM: PF/DF, 2 sets of 20 reps IV/EV 2 sets of 20 reps
Circumduction (both directions) 2 sets of 20 reps
- Strength exercise: isometric IV/EV, 2 sets of 20 reps (in neutral). Toe curls with towel and weight
- Gentle manual mobilization of scar tissue, cryotherapy with caution for any open areas of the wound

Week 3, Begin Date: _____

- Progressive partial weight bearing in walker splint to full weight bearing
- ROM: previous ankle ROM continued. Gentle passive stretching in DF with strap or towel begins
- Strength: Isometric IN/EV, 2 sets of 10 reps. Isometric PF, 2 sets of 10 reps, progression to 20 reps over the course of week 3. One rubber band IV/EV, 2 sets 10 reps. One rubber band PF/DF, 2 sets 10 reps
- Manual mobilization of scar and cryotherapy continues. Stationary cycling begins, 7-12 minutes, minimal resistance. Water exercise can begin under totally buoyant conditions with use of a flotation device. In water, ankle ROM and running or walking activities can be initiated to reserve fitness in lower body. No weight bearing activities can be done in the water.

Week 4-6, Begin Date: _____

- Full weight bearing status, as cleared by physician
- ROM: Previous exercises decreased to 1 set of 10 reps each direction. Passive stretch continues into DF with progressively greater efforts, knee at full extension and flexed to 35-40 degrees. Begin standing calf stretch knee fully extended and flexed at week 5
- Strength: Decrease isometrics to one set of 20 IV/EV and PF. Progress to three rubber bands. EV/IV/DF/PF, 3 sets 20 reps. Stationary cycling to 20 minutes with minimal resistance
- Gentle cross-fiber massage to Achilles tendon to release adhesions between tendon and paratendon; cryotherapy continues; US; phono; and electrical stimulation may be added for chronic swelling or excessive scar formation.
- Cycling as outline above; water exercise continues on totally buoyant state.

Weeks 6-12, Begin Date: _____

- Weight bearing status per physician
- ROM: Further progressed with standing calf stretch
- Strength: Omit isometrics. Continue three rubber band ankle strengthening in all directions. Begin double-legged toe raises with body weight as tolerated. Balance board exercises are begun for proprioceptive training.
- Therapy adjuncts as needed.
- Stationary cycling, treadmill walking, stair master, water exercises in chest deep water.

Weeks 8-10, Begin Date: _____

- Progress weight bearing out of cast boot and into hiking boots and to shoes as tolerated.
- Continue 6 week program

Weeks 12+, Begin Date: _____

- Full weight bearing in regular shoes
- Full ROM
- Strength: toe raises should progress to use of additional weight at least as great as body weight, and, in the case of athletes, up to 1.5 times body weight. Single-legged raises are begun as tolerated.
- Progress to jogging on trampoline and then to treadmill running via walk-to-run program. Eventually, perform steady-state outdoor running up to 20 minutes before adding figure 8 and cutting drills. Water exercises should be performed in shallow (waist-deep) water. In the water, begin to include hopping, bounding, and jumping drills.