

## **Achilles Tendon Repair Post Op Rehab Protocol**

Achilles tendon ruptures are disabling events. Both surgical and non-surgical treatment has been described. In general, non-surgical treatment is reserved for older, more sedentary individuals with comorbidities (diabetes, smokers, lymph edema, etc.) while operative repair is used for younger, active, and healthy individuals. Non-operative care treatment has a higher rate of re-rupture than operative treatment (10-20%, compared to 1-5%) in most studies. However, operative treatment has a higher rate of other complications including skin breakdown, wound infections and anesthetic complications. Treatment is tailored for each individual after a thorough discussion of the risks and benefits involved.

Post-operative rehab and non-operative rehab are fairly similar, though the progression is slower for non-operative rehab. Also, these are general guidelines. Some patients may move slightly faster or slower on this protocol depending on the nature of the tear, the quality of the tissue and strength of the repair, and the overall health of the individual.

### **PHASE ONE: Immediate Post-Op Weeks 1-2**

Patient is in well padded splint in 20-30 degrees of equinus position (plantar flexion) of the ankle and is NON WEIGHT BEARING (NWB) during this time. Gait training for crutches or walker for NWB of the involved lower extremity is all that is required. Patient should be alert to signs of infection or blood clots (fevers, sweats, chills, increasing pain, shortness of breath, leg swelling, etc.).

### **PHASE TWO: Weeks 2-8**

Splint is removed and wound is inspected in clinic. Stitches are removed. The patient is then placed in a walking cast with the ankle in 20 degrees of equinus, or in an AFO with dorsiflexion locked to not exceed 20 degrees. If patient is in an AFO, they are instructed to remove the AFO while sitting twice daily and to work on active dorsiflexion and ankle ROM exercises. These are all without resistance and NON WEIGHT BEARING.

The dorsiflexion block is decreased from 20 to 10° at Week 4, from 10 to 0° at Week 5, and from 0 to +10° at Week 6. At weeks 6-8, patients are instructed to wean from the AFO as tolerated.

If an AFO is not available, then patients are casted in 20° of equinus for weeks 2-4, at 10° of equinus at weeks 4-6, and at 0° of equinus at weeks 6-8. At Week 8, they are to begin WEIGHT BEARING AS TOLERATED (WBAT) without a cast or brace.

### **PHASE THREE: Weeks 8-12**

Dorsiflexion, plantar flexion, and range-of-motion exercises with resistance tubing is begun, a progressive heel-raise routine, and stationary cycling are added.

### **PHASE FOUR: Weeks 12-24**

Exercises are advanced again at the three month visit to include unilateral heel raises on the affected leg. At the six month post-operative visit, patients are allowed to resume their regular work and recreational activities.