



Non-Operative Treatment of Achilles Rupture

Patients with Achilles rupture may opt to be treated non-surgically. This is a decision made between the patient and the physician. Research suggests that there is a slightly higher re-rupture rate and less power production once healed in those treated non-operatively. It should be noted that those choosing to undergo non-operative treatment will likely not have goals to return to any organized sport or high-level activity. Also note that the beginning stages of rehab are slower for non-operative treatment vs. Operative. Depending on the patient's healing, it may never be appropriate to "stretch" the Achilles/ calf with these patients. Ankle mobility into dorsiflexion, if needed for return of proper gait mechanics, can be completed with knee flexed after 12 weeks. If soft tissue needs to be stretched to achieve functional DF ROM, may begin this after 16 weeks post-injury.

As with all protocols, these time frames may need to be adjusted based on age, weight and other comorbidities, and appropriate clinical reasoning/ judgement must be exercised. All weeks are counted by "rupture date"

Weight bearing/ cast and boot progressions outlined below, followed by rehab protocol unless otherwise noted in physician notes:

- NWB in plantarflexed cast x4-6 weeks pending healing/tension
- At 4-6 weeks post injury: CAM walker with heel wedges, Begin physical therapy per physician orders, PWB transitioning to WBAT over 1-2 weeks.
- Around 6-7 weeks, WBAT w/ CAM walker +wedges, reducing one wedge per week, until in boot flat. Remain in boot 1-2 weeks without wedges before weaning out.
- Transition out of CAM walker between weeks 10 and 12. Physician may want one wedge in shoe.
- 4 weeks-6 weeks: Ankle AROM all planes; sub-max PF isometric; Inv/ Ev w/ resistance; toe scrunches; plantar fascia massage ball; proximal strengthening (SLR/ bridge on ball/ LAQ/HS curls/clamshells)
- 6-8 weeks: bike in boot or UE bike for cardio; seated heel raises; standing hip 3-way; resisted banded PF
- 8-10 weeks: Bike out of boot; DL squat w/ heels elevated; seated HR gradually adding weight; weight shifting (in shoe w/ lift); DL RDL; alter G walking 60-70% in shoe w/ lift
- 10-12 weeks: gait training with hurdle: SLS/balance work; step ups; leg press; side stepping
- 12-16 weeks: DL HR standing; progress strengthening w/ squats (shallow);split stance/lunges; farmers carry
- 16-20: DL-> SL heel raise; heel and toe walking; sled pushing; progress resistance on the above.
- 20-24: Eccentric heel raise progress to SL HR; begin DL plyometrics; jogging on alter G 24+: jogging; gradually return to prior activity level with sport specific activities.