

**Achilles Tendon Repair – Rehab Guidelines**

Protocol: Brian Grawe, MD

Progression is based on healing constraints and functional progression specific to the patient. Phases and time frames are designed to give a general sense of progression. Acute versus chronic, as well as, concomitant procedures, and physiologic age of the patient

PHASE I:      Generally 0 - 6 weeks post-op	
<b>PHASE I GOALS:</b>	Protect surgical repair Avoid a “stiff” ankle – would like ankle dorsiflexion to neutral @ 6 weeks post-op
<b>PRECAUTIONS:</b>	Wear ankle boot always for ambulation
<b>BRACE/CRUTCHES:</b>	Per ortho: Typically patient wears an ankle boot as follows: <ul style="list-style-type: none"> <li>○ Weeks 1-2: -30 to -15° (dorsiflexion) in boot - NWB</li> <li>○ Weeks 3-4: -15 to -0° (dorsiflexion) in boot - NWB (adjust motion tolerances)</li> <li>○ Weeks 5-6: -15 to -0° (dorsiflexion) in boot - progress to FWB in boot (adjust motion tolerances)</li> </ul>
<b>WOUND:</b>	Post-op dressing remains intact until post-op day #2 (~48 hours after surgery) May begin showering after post-op day #2 (no need to cover incision site; however, if casted the cast would need to be covered) <b>*Do NOT</b> submerge ankle in tub or pool for 4 weeks* Begin scar massage after incision site sloughs/scar is formed Suture/staple removal @ 7-10 days per Ortho/PT
<b>REHABILITATION:</b>	Keep lower extremity elevated as much as possible, may ice ankle when applicable
~weeks 1-2	NO PASSIV HEEL CORD STRETCHING (only active motion) Quad sets & glut sets (bilateral) Gentle hamstring stretching Toe wiggles / Toe curls on towel Knee and hip AROM exercises
~weeks 3-4	NO PASSIV HEEL CORD STRETCHING (only active motion) Sagittal plane ankle exercises only: gentle calf pumps (50-100 repetitions, 5-6 x per day) SLRs and SAQs: may add weight gradually Lower extremity stretching: (HS, Glutes, IT band, piriformis, quads)
~weeks 5-6	UBE and light intensity upper extremity weight lifting (No pushups) Gentle seated achilles towel stretch (pain free) Ankle ROM exercises (alphabet, circles, etc.) Ankle strengthening with light tubing (eversion & inversion only) Low intensity stationary biking against light resistance (5-10 minutes) Pain free ankle isometrics Beginning level pool exercises: (chest deep water walking & deep water jogging only)
<b>FOLLOW-UP:</b>	Physical Therapy: Weekly; Ortho: ~4-6 weeks post-op; Supervised rehabilitation: 1-2 x per week as needed
<b>DOCUMENTATION:</b>	Precautions, pain level - medications and modalities Observation: (incision sites) - Signs/symptoms of infection? Site healing well? Ankle ROM & gait

will alter the guidelines. Importantly, the reconstruction must be protected for the first 4 weeks non-weight bearing, then full weight bearing in a boot for the next 4 weeks. Please do not hesitate to contact me with any questions or concerns.

<b>PHASE II: Generally 7-12 weeks post-op</b>	
<b>PHASE II GOALS:</b>	Full ankle range of motion Normal gait and stair ambulation
<b>PRECAUTIONS:</b>	No running until 4 months post-op
<b>BRACE/CRUTCHES:</b>	Transition out of boot at 8 week mark to FWB in shoe. D/C crutches when gait is WNL.
<b>REHABILITATION:</b>	*Continue phase I exercises as needed* Progress to the following exercises and increase intensity gradually when patient is ready (i.e., no increase in ankle pain or edema since the previous exercise session) *Note: all strengthening should be done starting with low weights, high repetitions, and in a painless ROM*
<b>~8 weeks</b>	Stationary bike for conditioning Ankle ROM exercises – add mobilizations/manual stretching as needed Seated wobble board Gait training (cone walking, marching, retrowalking, cariocas, shuffles, etc.) Ankle strengthening with tubing (strengthen eversion in the plantar-flexed position) Seated heel raises Beginning level pool exercises
<b>~9-12 weeks</b>	Elliptical – add gradually with stationary bike for conditioning Forward, lateral, and retro step-ups (start with 4", progress as tolerated) Heel raise progression Standing gastroc and soleus stretch Bilateral minisquats – add resistance gradually Progressive strengthening (knee extensions, leg press, HS curls, hip abd/add) (first set: 20 repetitions, then 1 additional sets at the same weight to muscle failure) Progressive standing balance exercises (body blade, plyoball, platform training, etc.) (progress in duration, intensity, double leg to single leg, etc.) Intermediate level pool exercises
<b>FOLLOW-UP:</b>	PT: Bimonthly; Ortho: ~12 weeks post-op; Supervised rehabilitation: 2-3 x per week as needed
<b>DOCUMENTATION:</b>	Precautions, pain level, medications, modalities Observation: (incision sites) - Signs/symptoms of infection? Site healing well? Ankle ROM, strength, & gait

**PHASE III: Generally 4-6 months post-op**

- PHASE III GOALS:** Full ankle ROM and strength  
Jog at own pace and distance without pain  
Hop for distance > 90% of uninjured side
- PRECAUTIONS:** \***NO** running until 4 months post-op\*  
\***NO** participation in contact/collision sports or military schools until 9-12 months post-op\*
- BRACE:** Ankle lace-up brace as needed
- REHABILITATION:** Continue other phase II exercises as needed  
Progress in duration and intensity of exercise only if there is no increase in ankle pain or edema since the previous exercise session.
- ~13-16 weeks** Stairmaster - add gradually with elliptical/bike for conditioning  
General LE stretching: 5-10 minutes (calf, HS, quads, HF, hip adductors)  
Progressive strengthening (calf press, leg press, squats (0-45°), HS curls, hip abd/add)  
(first set: 8-10 repetitions, then 2 additional sets at the same weight to muscle failure)  
Progressive balance training as needed  
Progressive pool program as tolerated
- ~17-26 weeks** Progressive jogging program (begin with jogging on treadmill 5-10 minutes per session  
Increase time and/or distance no more than 10-20% per wk)  
Progressive functional training: Begin at 25-50% intensity and progress gradually  
(jumping, hopping, directional jogging, cariocas, shuffles, etc.)
- FOLLOW-UP:** PT: monthly; Ortho: ~6 months post-op;  
Supervised rehab: 1-2 x per week as needed
- DOCUMENTATION:** Pain level & medications  
Ankle ROM & strength  
Hop for distance
- MISCELLANEOUS:** After 6 months post-op: Exercises in phase III are continued, gradually increasing intensity & duration as tolerated.  
The recommendation is to wait until 8-10 months post-op to return to contact/collision Sports. This time period may be adjusted slightly by the surgeon and therapist according to patient progress.