

Achilles Tendon Repair Rehabilitation

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PHASE 1: 0-2 Weeks – Maximum Protection Phase

PRECAUTIONS:	<ul style="list-style-type: none"> Safety with crutches, gait training, modify daily activities (ADLs)
BRACE/CRUTCHES:	<ul style="list-style-type: none"> Non-Weight Bearing (NWB) in splint at all times
REHABILITATION:	<ul style="list-style-type: none"> Will not begin PT until at least 5 weeks
GOALS:	<ul style="list-style-type: none"> Edema management Effectively use assistive devices NWB and with stairs Perform ADLs in a modified, independent manner or with minimal assistance

PHASE 2: 2-4 Weeks-- PROM

PRECAUTIONS:	<ul style="list-style-type: none"> NWB with assistive device in Achilles boot or controlled ankle motion (CAM) boot with Three (1 inch) heel wedges No active or passive dorsiflexion (DF) past 5 degrees below neutral
BRACE/CRUTCHES:	<ul style="list-style-type: none"> Assistive devices can include crutches, scooter, or wheelchair Achilles boot or CAM boot with wedges Non-weight Bearing at all times
REHABILITATION:	<ul style="list-style-type: none"> Modalities and patient education to control swelling Scar mobilization/massage Open chain strengthening for core, hips, knees in boot NWB fitness/cardiovascular exercises
GOALS:	<ul style="list-style-type: none"> Minimize loss of strength in core, hips, and knees Independence with home exercise program to perform daily

PHASE 3: 4-8 weeks

PRECAUTIONS:	<ul style="list-style-type: none"> No active or passive dorsiflexion (DF) past neutral until 6 weeks Partial progressive weight bearing with wedges in boot, progressing 25-50lbs each week until fully weight bearing on involved limb (beginning at week 5)
BRACE/CRUTCHES:	<ul style="list-style-type: none"> Partial progressive weight bearing with assistive device and Achilles boot with three (1 inch) heel wedges Slowly increase weight bearing 25-50lbs every week until full weight bearing through the involved limb

	<ul style="list-style-type: none"> Progress to only two (1 inch) heel wedges when able to get heel down in boot comfortably with partial weight bearing (Usually week 6) Utilize “even up” shoe leveler to be placed on shoe of uninvolved side to level shoe with boot height (unless pre-existing balance deficits)
REHABILITATION:	<ul style="list-style-type: none"> Ankle PROM exercises with hands-on techniques At 5 weeks progress DF to neutral. At 6 weeks DF can pass neutral NWB stretching of proximal lower extremity (thigh, not calf) Foot/ankle strengthening, maintain precautions Gait training to ensure safety and to normalize walking pattern Activity progression per PT guidance Fitness/cardiovascular: progress to stationary bike or Nu-step with both legs (involved leg in boot)
GOALS:	<ul style="list-style-type: none"> Full ROM foot and ankle in all plains (DF must remain below neutral until 6 weeks) Restore proximal strength/control of the core, hip, and knee Full weight bearing in Achilles boot with two (one inch) heel wedges without assistive device by week 8

PHASE 4: 8-12 Weeks	
PRECAUTIONS:	<ul style="list-style-type: none"> No weight bearing stretching of gastrocnemius or soleus to avoid overlengthening of the tendon
BRACE/CRUTCHES:	<ul style="list-style-type: none"> At 8-10 weeks remove one heel wedge from the boot. Should only have one (one inch) wedge remaining At 10-12 weeks remove final heel wedge from the boot Continue to wear the boot with wedge(s) until 12 weeks for community ambulation
REHABILITATION:	<ul style="list-style-type: none"> May begin stationary bike in sneaker with heel lift, no outdoor cycling Gait training to wean off assistive devices and normalize gait in the boot Functional activities, closed kinetic chain exercises in boot with heel lifts and “even up” once weight bearing as tolerated in boot without assistive device At 8-10 weeks begin weight shifting in sneaker with heel lift (1 cm) supervised in clinic and as part of home exercise program Progress to bilateral weight bearing and single leg exercises in sneaker with heel lift (1 cm) supervised in clinic and home exercise program
GOALS:	<ul style="list-style-type: none"> Full DF active ROM Full strength of lower extremity muscles (except calf)

	<ul style="list-style-type: none"> • Gradually return to regular functional activities (except sports and weight bearing fitness) if ROM, strength, and gait goals have been met • Improved gait pattern on all surfaces in boot without heel wedges without assistive devices by week 12
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PHASE 5: 12-14 Weeks	
PRECAUTIONS:	<ul style="list-style-type: none"> • Avoid high impact/pivoting, no running • No weight bearing stretching of gastrocnemius or soleus
BRACE/CRUTCHES:	<ul style="list-style-type: none"> • If not yet out of boot for community ambulation, wean out of the boot to a sneaker with heel lift (1 cm) • Once gait normalized, wean out of remaining heel lift from sneaker per patient tolerance
REHABILITATION:	<ul style="list-style-type: none"> • Once single leg closed chain activities are mastered in sneaker, progress to varying surfaces • Fitness/cardiovascular exercises to include the addition of the following as tolerated: elliptical, walking on treadmill, Stairmaster • Advance functional training to include sports specific movement patterns
GOALS:	<ul style="list-style-type: none"> • Normalize gait patterns with one heel lift (1 cm) • Full strength and motor control of bilateral lower extremities • Good balance and proprioception of bilateral lower extremities • Gradual return to minimal or low impact sports (cycling, rowing, swimming, Stairmaster, elliptical)

PHASE 6: 14-24 Weeks	
PRECAUTIONS:	<ul style="list-style-type: none"> • No running or pivoting until 6 months post injury
BRACE/CRUTCHES:	<ul style="list-style-type: none"> • No assistive devices should be necessary
REHABILITATION:	<ul style="list-style-type: none"> • Begin bilateral plyometric progression and progress to unilateral plyometrics • Sport specific training and conditioning (progress to high impact if applicable as tolerated once cleared by physician)
GOALS:	<ul style="list-style-type: none"> • Ambulating with normal gait pattern in sneakers without heel lift • Gradual return to activities with multi-planar movements on uneven outdoor surfaces (hiking) • At 6 months gradual return to high impact sports that include jogging, running, and jumping once cleared by physician/surgeon • Lower extremity functional testing for return to sports is at least 90% of the uninvolved limb