

Altru Advanced Orthopedics Achilles Tendon Repair Rehabilitation Protocol

The intent of this protocol is to provide the therapist with a guideline for the post-op rehab of a patient who has had an Achilles tendon repair. It is not intended to be a substitute for appropriate clinical decision making regarding the progression of a patient's rehab. The actual therapy plan of care must be based on the surgical approach, physical exam and findings, individual progress, any post-op complications, and/or co-morbidities. If a therapist needs assistance or has questions regarding the progression of a patient post-surgically they should consult the referring surgeon.

Precautions	Treatment	Goals
<p>Phase I: post-op day 1 to 2 weeks</p> <ul style="list-style-type: none"> • Splint in place • NWB with use of appropriate AD • Keep incision dry, watch for signs of infection • Sutures removed 10-14 days post-op 	<ul style="list-style-type: none"> • Hip AROM: lying and standing • Knee AROM: lying and standing • Rest and elevation 	<ul style="list-style-type: none"> • Protect repaired tendon • Decrease pain and swelling
<p>Phase II: Weeks 2-4</p> <ul style="list-style-type: none"> • Begin TTWB progress to WBAT with boot in PF position • Monitor wound healing for signs of infection • Specific surgeon precautions: • Dr. Marquart: NWB 4-5 weeks, then WBAT in boot with wedges, remove wedge every 2 weeks until none. • Dr. Gardner: TTWB 2-3 weeks in walker boot in PF position- remove one wedge every 2 weeks, WBAT at 4 weeks in boot 	<ul style="list-style-type: none"> • Gait: begin TTWB progressing to heel strike WBAT with boot and AD • Ankle PROM-AROM within precautions/as tolerated • Ankle isometrics all directions as tolerated • Toe AROM • Open chain hip and core strengthening • UE strengthening and cardio progress as tolerated • Cryotherapy to control swelling 	<ul style="list-style-type: none"> • Protect repaired tendon • Decrease pain and swelling • WBAT in boot with AD with normalized gait pattern • Pain-free active dorsiflexion to neutral (0°)
<p>Phase III: Weeks 4-8</p>	<ul style="list-style-type: none"> • AROM ankle: PF, IN/EV, DF 	<ul style="list-style-type: none"> • Protect repaired tendon

<ul style="list-style-type: none"> • WBAT in walker boot, wean from boot between weeks 6-8 as tolerated • Monitor wound healing and scar mobility • Avoid overstressing repair site • No forceful PF, aggressive PROM, or impact activities 	<ul style="list-style-type: none"> • Ankle strengthening with theraband or tubing gently, gradually • Gentle gastroc/soelus stretching (no forceful stretching) • Static balance exercises- DL then progressing to split-stance to SL stance • Continue core, hip, and knee strengthening (exercises with boot on) • Add resistance to hamstring strengthening • Cryotherapy as needed • Manual therapy: scar tissue mobilization as needed 	<ul style="list-style-type: none"> • AROM 5° DF to 40° PF • Normalized gait on level surfaces without boot or heel lift (avoid knee hyperextension) • SLS with control for 10 seconds on affected side
<p>Phase IV: Weeks 8-12</p> <ul style="list-style-type: none"> • Avoid forceful impact activities • No exercises with compensations 	<ul style="list-style-type: none"> • Continue to progress and perform above exercises as needed • Stationary bike, can start to add resistance • Progress ankle strengthening as tolerated • Progress balance/proprioception exercises as tolerated <ul style="list-style-type: none"> ○ Tilt board, BAPs, foam, BOSU 	<ul style="list-style-type: none"> • Normalize gait on all surfaces without boot or heel lift • SLS with control for 20 seconds on affected side • AROM 10° DF to 50° PF • No pain and good control/alignment with functional movements- step up/down, squat, lunges • Able to squat to 30° knee flex without compensation
<p>Phase V: Weeks 12+</p> <ul style="list-style-type: none"> • Avoid high forces on calf and Achilles 	<ul style="list-style-type: none"> • Continue to progress and perform above exercises as needed • Running progression 12-14 weeks post-op (see chart below) 	<ul style="list-style-type: none"> • Normal gait mechanics without boot on all surfaces • Able to squat and lunge to 70° without compensation

<ul style="list-style-type: none"> • Risk of re-rupture if jumping down from a height • Return to competitive sport at 26 weeks post-op unless otherwise specified by surgeon 	<ul style="list-style-type: none"> • Swimming/Stair stepper • Gradually progress Plyos: <ul style="list-style-type: none"> ○ hopping, skipping, DL then SL • Gradual return to sport/work specific balance and proprioception drills at 14+ weeks 	<ul style="list-style-type: none"> • SLS with control for 30 seconds on affected side • AROM 10° DF to 50° PF
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<p>Running Progression:</p> <p>Trace or less effusion, 80% or > strength involved/uninvolved</p>	<ol style="list-style-type: none"> 1. Treadmill/track walking 2. Treadmill walk/run intervals 3. Treadmill running/track: run straights walk turns 4. Track: run straights and turns 5. Run outside on path/road 	<ul style="list-style-type: none"> • Progress until 2 miles tolerated without increased pain and swelling. • No more than 4 times/week and only every other day. • Do not progress more than 2 levels in 7 days.
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