CENTER FOR SPORTS MEDICINE & ORTHOPAEDICS

Achilles Repair Protocol

As with all protocols, these time frames are the ideal case and may not be appropriate for all patients based on BMI, comorbidities and age. This protocol represents the most aggressive approach to rehab and may need to be worked a week or two behind.

- Weeks 0-2: posterior splint, NWB.
- Patient attends first p/o appt at 2 weeks p/o, stitches (if present) are removed, pt placed in CAM walker with heel wedges. Per physician and pain level, may begin PWB at this time.
- PWB in boot w/ wedges to begin between 2 and 3 weeks p/o, per provider's orders, progressing to WBAT in CAM walker with heel lifts by 6 weeks p/o.
- Begin weaning out of boot at 8 weeks p/o unless otherwise stated in physician orders/ visit notes. Per physician, pt may need small wedge placed in athletic shoe at first.
- Early use of BFR is encouraged to reduce atrophy for whole LE.
- No passive stretching of the gastroc/soleus complex for 12 weeks past neutral.
- Typical return to sport/recreational activities 9-12 months p/o

Phase 1: 3-5 weeks p/o

- AROM all planes (DF w/ knee flexed, to neutral only)
- Seated towel scrunches
- Plantar fascia ball massage
- Seated HR (no resistance) - w/ BFR if available
- Submax isometric PF – w/ BFR is available
- Proximal strengthening (i.e. SLR all planes; LAQs; Bridges w/ ball under mid-calf); Core strengthening (i.e. TA sets; dead bugs; Russian twists)
- UBE: UE only for CV fitness
- May begin weight shifting in boot at 4 weeks p/o to prepare for WBAT gait. Phase

2: 6-11 weeks p/o

- WBAT in boot + heel lifts (reduce one lift per week on average- look for physician orders/ notes on this)
- Continue progressing above (adding weight to proximal strengthening and seated HR)
- Recumbent bike out of boot
- Begin ankle PF/inversion/eversion with TheraBand (6)
- Begin DL squats w/ heels elevated (6)

- Weight shifts (out of boot in athletic shoe, may need heels slightly elevated)
- Walking on gravity minimized TM at 60% (7)
- Side-stepping with resistance (8)
- Leg press DL progressing to SL limiting DF past neutral (8)
- Calf press with leg press machine (do not let ankle DF past neutral) (approx. 25-50% BW) (9 weeks)
- Hip hinging/ DL RDL (8)
- SLS (9)
- Step ups (9)
- Initiate DL HR (9-10)
- Stationary lunges (10)
- SLS with dynamic/secondary tasks (11)

Phase 3: 12-16 weeks (Consider transfer to C4 in this phase)

- Step downs- lateral ecc progressing to fwd (12+)
- Progress to eccentric HR as appropriate (DL up, SL down) (12+)
- ½ kneeling DF mobility (12+)
- Weighted squats and/or SL squats (12)
- Farmers carry/ resisted walking/marching (13)
- Progress loading with lunging, step ups and RDLs (13+)
- Formal strength testing (isometric 14+ weeks). Criteria for progressing to plyometrics or running include ability to perform 10 SL HR and 70% strength compared to contralateral with isometric testing.
- Toe walking (15+)

Phase 4: 16-20 weeks

- SL HR (16+)
- Alter G interval jogging at 50-60% BW (16+)
- Ladder drills (gentle/ slow) (16+)
- Snap downs (DL progressing to split stance) (16+)
- Triple extension drill (16+)

(20+ weeks)

- Skipping, shuffling, carioca
- Line hops/ wall taps
- Small box jumps progressing to larger
- Reactive drills/ change of direction

6+ months: Sport-specific work; no sprinting until approx 7 months p/o Expected

return to sport: 9-12 months

Return to sport criteria:

- Force output of 1.5-2x BW with isokinetic testing or 90% LSI
- If isokinetic testing is unavailable, can perform standing HR test:
    - # reps heel raise x heigh of heel raise compared to contralateral (involved/uninvolved x100)