

POST-OPERATIVE REHABILITATION PROTOCOL

Achilles Tendon Repair

William McLaughlin, MD | Sports Medicine Surgery | Advanced Bone & Joint

Phase 1 | 0-2 Weeks

GOALS FOR THIS PHASE

- Protect the tendon repair in relaxed equinus splinting.
- Control swelling with strict elevation.
- Maintain non-weight-bearing status with crutches.
- Achieve incision healing and suture removal at 2 weeks.

Immobilization & Weight Bearing

- Splinted in relaxed equinus.
- Non-weight bearing with crutches.
- Strict elevation above the level of the heart.

Wound Care

- Sutures out at 2 weeks.

Phase 2 | 2-6 Weeks

GOALS FOR THIS PHASE

- Transition to boot with heel lifts and begin partial weight bearing.
- Gradually remove heel lifts (one per week beginning at week 4).
- Initiate gentle ROM without dorsiflexing beyond neutral.
- Begin isometric and light resistance ankle/hindfoot strengthening.
- Initiate stationary bike conditioning with boot.

Immobilization & Weight Bearing

- Change to boot with heel lifts to maintain 20° plantar flexion at all times.
- Remove one heel lift every week beginning at week 4 until gone.
- Begin partial weight bearing with heel lifts as above.

Range of Motion

- Begin gentle ROM at week 3: plantar flexion/dorsiflexion 0° to 10°.

- Plantar flexion/circumduction (both directions).
- Do not dorsiflex ankle beyond neutral.

Therapeutic Exercises

- Isometric inversion/eversion.
- Toe curls with towel and weight.
- Hamstring curls in prone with boot on for resistance.
- Scar massage.
- Begin stationary bike with boot at low resistance.

Modalities

- Ice compresses (Ace).

Phase 3 | 6-10 Weeks

GOALS FOR THIS PHASE

- Progress to full weight bearing with heel lifts.
- Transition boot to 0° plantar flexion as tolerated.
- Achieve gentle passive dorsiflexion to 10° by end of phase.
- Advance ankle/hindfoot strengthening and balance training.

Immobilization & Weight Bearing

- Progress to full weight bearing (with heel lifts).
- Change boot to 0° plantar flexion as tolerated (at all times).

Range of Motion

- Gentle passive dorsiflexion to 10° by the end of this phase.

Therapeutic Exercises

- Isometric inversion/eversion, dorsiflexion/plantarflexion.
- Light band-resisted inversion, eversion, dorsiflexion, plantarflexion.
- Prone knee flexion.
- Continue stationary bike.
- Double-limb standing balance on uneven surface.
- Single-limb balance, progressing to uneven surface.

Modalities

- Compression and ice compresses.

Phase 4 | 10 Weeks - 4 Months

GOALS FOR THIS PHASE

- Wean out of the boot.
- Restore dorsiflexion past 10° to pain tolerance.
- Advance multi-plane ankle/hindfoot strengthening in open and closed chain.
- Progress low-impact cardiovascular conditioning.

Immobilization

- Wean out of boot.

Range of Motion

- Continue to work on dorsiflexion (may push past 10° to pain tolerance).

Therapeutic Exercises

- Advance plantar flexion/dorsiflexion/inversion/eversion strengthening (open and closed chain).
- Hamstring curls.
- Stationary biking / swimming / elliptical trainer.
- Cross-fiber massage to Achilles tendon.
- Continue strengthening and stretching modalities.

Phase 5 | 4-6 Months

GOALS FOR THIS PHASE

- Continue to advance multi-plane ankle strengthening.
- Restore proprioception.
- Gradual return to functional activities by end of phase.

Therapeutic Exercises

- Continue plantar flexion/dorsiflexion/inversion/eversion strengthening.
- Proprioception exercises.
- Gradual return to functional activities at the end of this phase.

CRITERIA FOR RETURN TO SPORT / FULL ACTIVITY

- Tip-toe walking.
- No pain or tenderness.
- Satisfactory clinical examination.

This protocol is a general guideline. Progression is patient-specific and at the discretion of William McLaughlin, MD.