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REHABILITATION PROTOCOL

Anterior Tibial Tendon Reconstruction

Postoperative Rehabilitation Protocol

Version: November 2026 · Online: nickstrassermd.com/anterior-tibial-tendon

> This protocol is a general guideline and does not replace individualized medical advice. Timelines vary with the procedure performed, healing, and individual factors. Always follow the specific instructions from your surgeon and physical therapist, which take precedence over this document.

Phase I: Protection and Healing

0–4 Weeks

WEEKS 0–2

- Immobilization in a posterior splint
- Strict non-weight-bearing (NWB) with crutches/knee scooter
- Elevation and icing to manage swelling
- Toe range of motion (ROM) exercises (avoiding tension on the reconstructed tendon)

WEEKS 2–4

- Transition to a cast
- Continue strict NWB
- Monitor for signs of healing and ensure proper alignment

Phase II: Transition to Controlled Mobility

4–8 Weeks

WEEKS 4–6

- Transition to a walking boot with NWB
- Begin gentle isometric exercises for surrounding muscles (e.g., quadriceps, glutes) to maintain strength
- Continue toe ROM exercises

WEEKS 6–8

- Progress to partial weight-bearing in the boot as tolerated (start at 25% body weight and advance weekly)
- Introduce active-assisted ankle dorsiflexion exercises (gravity or manual assistance) to engage the anterior tibialis without overloading
- Ankle passive ROM within a safe range (avoiding excessive dorsiflexion stress)

Phase III: Strengthening and Functional Recovery

8–16 Weeks

WEEKS 8–10

- Full weight-bearing in the boot
- Begin active ankle dorsiflexion strengthening with minimal resistance (e.g., light therabands)
- Progress ankle ROM exercises, including plantarflexion, inversion, and eversion
- Initiate light proprioceptive training (e.g., seated BAPS board)

WEEKS 10–12

- Transition from the boot to a shoe with a drop foot AFO
- Advance dorsiflexion strengthening with increasing resistance (moderate therabands)
- Introduce functional weight-bearing exercises, such as heel raises (starting with seated, then progressing to standing)

Phase IV: Advanced Strengthening and Return to Activity

4–6 Months

MONTHS 4–6

- Discontinue the AFO at 4 months if gait mechanics are normal and there is no evidence of foot drop
- Advance dorsiflexion strengthening to functional movements (e.g., toe taps, resisted dorsiflexion with weights)
- Focus on proprioceptive training (e.g., single-leg balance, wobble board)
- Gradual return to low-impact activities, such as cycling or swimming

Phase V: Return to Full Activity

6+ Months

- Progress to sport-specific activities as tolerated
- Continue strengthening dorsiflexion and other ankle movements
- Use AFO or supportive devices for high-demand activities during the transition if needed