

ACHILLES TENDON REPAIR

Rehabilitation Protocol

Timeframes mentioned in this protocol should be considered approximate with actual progression based on clinical presentation and physician direction.

General Considerations:

- Patient is non-weightbearing for 3-4 weeks post op
- Physical therapy usually begins 4 weeks post op.
- Monitor the incision scar and tendon scar for mobility; implement regular soft tissue mobilization to avoid fibrosis.
- No active or passive dorsiflexion past neutral until 8 weeks post op.
- May start to remove heel wedges at 6 weeks post op.
- Discontinue boot between 6-8 weeks post op.
- Discontinue night splint at 6 weeks.
- Discontinue heel wedge in shoe between 12 to 16 weeks post op.
- May start single leg heel raise between 12 to 16 weeks post op if patient is able to do equal double leg heel raises.
- No open chain or closed chain gastrocnemius or solues stretching till 12 weeks post op.

Phase I (4-6 weeks):

- Gait training with patient in bivalve cast or walking boot progress from non-weightbearing to partial weightbearing, and finally to full weightbearing with the goal of full weightbearing in the boot by 6 weeks.
- Soft tissue mobilization for scar tissue and modalities as indicated.

Exercises:

AROM (avoid dorsiflexion past neutral)
Thera-Band exercises
Seated calf raises
Straight leg raises
Seated BAPS
Well-leg stationary bike
Aquatic exercise including deep-well exercises

Progress to Phase II when:

Physician indicates
Ambulating full weightbearing in boot without assistive device
Plantarflexion, inversion, and eversion ROM equal bilaterally
Dorsiflexion ROM is neutral

Phase II (6-12) weeks:

- Gait training with patient progressing slowly from walking boot to shoe with heel lift over the 6 to 8 weeks mark post op in home.
- Continue to wear the boot with wedge outside of house until 8 weeks post op then progress to shoe with wedge for community ambulation.
- Soft tissue mobilization for scar tissue.

Exercises:

Active dorsiflexion
Stationary bike (heel push with pedal at mid foot until 8 weeks)
Standing calf raises (approximately 8 weeks)
Mini-squats (bilateral progress to unilateral)
Closed chain step exercises (step-ups progress to step-downs)
Proprioceptive training (single-leg balance challenged as able)
Leg press (bilateral to unilateral)

Progress to Phase III when:

Physician indicates
Dorsiflexion ROM equal bilaterally
Single leg stance equal bilaterally
Gait normalized

Phase III (12 weeks – discharge):

- Gait training with patient discontinuing heel wedge in shoe between 12 to 16 week post op.
- Assess running mechanics when appropriate to start jogging.

Exercises

Initiate gentle gastrocnemius and soleus stretching
Lunges (multidirectional and walking).
Unilateral calf raises (initiate between 12 to 16 weeks when double leg heel raise is equal).
Outdoor biking.
Double leg heel raise off an edge (approximately 16 to 20 weeks post op when dorsiflexion AROM is within normal limits)
Eccentric heel raises
Jogging (approximately 16 to 20 weeks, once patient can perform a single leg heel raise with good mechanics).
Agility drills (approximately 16-20 weeks, cleared by MD).

Discharge criteria:

Physician indicates
Long-term goals achieved
Patient personal goals achieved