ACHILLES TENDON REPAIR POSTOPERATIVE REHABILITATION PROGRAM

Background

Achilles tendon repair is performed after injury occurs to the Achilles tendon. The injury is often accompanied by an audible and palpable pop, with limited ability to push off of the injured limb. Recovery is expected to take between 6 to 9 months, and return to athletics may take 9-12 months depending on the severity of injury and nature of sport.

Summary of Recommendations

Risk Factors	• Exceeding ROM goals • Age (30-50 years) • Male • Fluoroquinolone use
Precautions	• Weight bearing in protective boot after initial postoperative followup • Neutral ankle weight bearing by week 6
Criteria for Discharge	• Discontinue boot: may transition to shoe after patient progresses to neutral weight bearing without limp • Return to Running: 95% symmetry with Range of motion, calf circumference • Return to Sports: 90% symmetry single leg hop testing

Rehab Protocol

Phase I–protection

Weeks 0-2	• Maintain splint • Non-weightbearing • Goal: reduce edema, protect incision, prevent DVT

Phase II–return to walking

Weeks 2-6	• Begin walking
	  ○ Walking boot, heel lifts (wean 1 left every 2 weeks as tolerated)
	• Mobility
	  ○ Active ROM up to 15° plantar flexion without boot
	• Initiate ankle strengthening in protected position
	• After 2 weeks
	  ○ Isometrics in all planes
	  ○ Active plantar flexion up to 15°
	  ○ Sitting heel raises–no weightbearing
	  ○ 4 way straight leg raise
	  ○ Bicycle in boot
	  ○ BAPS as tolerated, beginning in seated position

	● After 4 weeks ○ Active ROM up to 10° PF without boot ○ 4 way t-band, PF up to 10° ○ Seated heel raise with light weight ○ Initiate balance/proprioception training on stable surface once patient can bear weight in neutral ○ Leg press ● May initiate soft tissue mobilization after wound is healed ● Pool therapy may begin at week 4 if wound healed

Phase III–strength progression

Weeks 6-12	● Wean off boot, initiate walking in shoe/neutral heel position ○ Use of heel wedges (<2) in shoe as needed ● Initiate weight bearing strengthening exercises ● Exercise progression ○ Calf raise progression: 2 leg in neutral, single leg in neutral, 2 leg in dorsiflexion, single leg in dorsiflexion ○ Continue BAPS for ankle ROM ○ Closed chain hip/knee strengthening as tolerated ○ Initiate balance training on unstable surfaces

Phase IV–return to sport

Week 12 and beyond	● Criteria for initiating return to running ○ 5 x 25 single calf raises ○ Normal landing mechanics ○ 20 single leg squats ○ 95% symmetry ROM, calf circumference ● Return to sport ○ 90% symmetry in single leg hop testing ● Continued progressing of strength and stability exercise on stable and unstable surfaces ● Sports specific exercise/agility progression

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