

Achilles Tendon Repair

Dr Barton Branam

Pre-operative Rehabilitation

GOAL: Optimize medical and physical conditions to maximize likelihood of achieving operative goals. Review post-operative protocol/restrictions and address any concerns about living environment/ADL's. The patient and surgeon should have similar goals and expectations relative to the surgery and the expected outcomes.

Postoperative rehabilitation

GOAL: Restore range of motion and strength, such that function is optimized to achieve surgeon and patient goals. Range of motion and strength often dictate functional outcome. Eliminate (or minimize) pain depending on clinical situation. The ranges below are indicative of differences in recovery times as determined by factors such as age, activity level, medical conditions, conditioning, and tissue quality. The intent is to rehab as aggressively as possible while allowing for proper healing of the surgically treated tissue. The patient will follow up post-operatively with Dr Branam's office at 10-14 days, 6 weeks, 3 months and 4-5 months. Return to sport or work will be discussed at the last visit. Outside of the regularly scheduled follow up appointments with Dr. Branam, he needs to know about outlier patients i.e. those that are well ahead or behind schedule.

****If the patient is rehabbing out of town, the Athletic Trainer and/or Physical Therapist need to touch base with someone from Dr Branam's team at regular intervals. Communication is key to a successful outcome**

PHASE I: Weeks 1-2

- 1) Restrictions: NWB'ing with crutches in a splint
 - a. Patient will be in a splint 10-14days, this will be removed by Dr Branam's office and the patient will be given a walking boot with wedges and instructions to begin physical therapy

PHASE I: Weeks 2-8

- 1) GOALS: wound closure, manage pain, edema control, slow/progressive ROM
- 2) ROM: No active (or resisted) plantarflexion
 - a. Gentle passive/active Dorsiflexion
- 3) Gait training: WBAT in walking boot with wedges
 - a. Can wean from crutches as tolerated
 - b. Wedges may be removed as patient's PROM progresses, not to tension the repair
 - i. For example: if pt ROM is off 10deg, keep wedges at 20deg → stay 1 wedge behind
 - ii. This should be slow and progressive, taking up to 8wks
 - iii. Once patient can get to neutral, may discharge all wedges but continue with walking boot
- 4) Exercises/therapy activities: hip/knee that does not involve the ankle

- 5) Pain, swelling and limping are guidelines to indicate the patient is doing too much and needs to back off. Teach the patient to adhere to these symptoms when progressing activities and
- 6) GOALS: wound healed, minimal pain/swelling, FWB'ing without crutches and weaning from wedges in walking boot

PHASE II: Weeks 8-12

- 1) Continue weaning from wedges in walking boot
- 2) Pending follow up visit with Dr Branam, pt can begin weaning from walking boot into ankle brace/shoe at wk 10-12
- 3) Continue ROM/flexibility exercise to progress gentle ROM
- 4) Continue exercises with progressive strength and endurance training
 - a. Cardio: bike, elliptical
 - b. CKC: heel raises, squats, leg press progress to in ankle brace/shoe
 - c. Balance/proprioception training – progress to unstable surface
- 5) Establish HEP/gym program
 - a. Importance of doing the exercises 5-6 days/wk and not just in PT. Assist in setting up a gym or home program so the patient can be consistent and be successful in returning to their activities prior to injury
- 6) GOALS: full ROM, normal gait, no effusion

PHASE III: Weeks 12 to 4+ months

- 1) Continue progressive strengthening
 - a. Cardio: Elliptical, Stairmaster, bike
 - b. CKC: progress to unilateral
 - i. Lunges, step ups forward and lateral
 - ii. Unilateral eccentric leg press and heel raises
 - c. Balance/proprioception
 - d. Endurance
- 1) Progress to jogging at 4 mos
 - a. Walk: jog interval – length and number of intervals depends on overall conditioning
 - b. Gentle jumping/hopping drills to prepare for jogging
 - i. 2 feet to 1 foot: work on landing
 - ii. 1 foot to 2 feet: work on push off
- 2) Continue to progress to more sport specific drills at 6 months
- 3) At this point, patient may do check in's with physical therapy as they should be doing most of the work independently

Return to functional goals: i.e. sport/work: Upon completion of proper rehab you'll be cleared to return to sport. This may require a functional evaluation by the therapist which will aid the surgeon in determining the appropriate timing. This should be consistent with the preoperative discussions, but are often variable. Please make sure you understand the process for return to sport which will almost always involves a gradual progression.