

Post-op PATIENT Instructions: ACHILLES REPAIR

Dressing: A dressing has been applied to your ankle to absorb any fluid/blood. A small amount of blood on the dressing is expected. Leaving the steri-strips on the skin, replace the covering gauze dressing daily with new dry, sterile gauze (obtained from your pharmacy). Unless directed by your surgeon, **no salves, balms, or ointments (even antibiotic ointments) to the incisions.** Soreness and bruising is expected for several days afterward.

Showering (No bathtub): is permitted 72 hours after surgery with the incisions covered. After showering, gently dry the incision and apply a new dry dressing. **Do NOT soak/submerge the incisions. No swimming/hot-tubs/lake or beachwater until cleared by your surgeon.**

Ice: Ice is a powerful anti-inflammatory. Icepacks/wraps will help to reduce swelling and pain. Use liberally (20-30 min./session), but remember to protect the skin from direct contact (and frostbite).

Activity: Crutches will be needed after surgery. Unless specified otherwise you should be **NON weight-bearing** on your leg immediately. Tightening the thigh muscle and straight leg raises will assist your thigh muscle in returning its function faster. Bending the knee as soon as you are comfortable (unless otherwise restricted) is also encouraged. However, **no driving until permission is given by your surgeon.**

Pain: A local nerve block has been performed for immediate post-op pain control. It typically “wears off” at about 4-8 hrs. following surgery. A narcotic (taken every 3-4hrs as needed for breakthrough pain) is given for your pain control. **Begin taking these pain medications when you BEGIN experiencing pain!** These meds can take 30-45 minutes to start “working”. You do not want to play “catch-up” by letting your pain get out of control. Nausea, drowsiness, and constipation are common side effects of narcotics. Adequate fluid intake and a stool softener obtained over the counter from your local pharmacy is recommended to minimize constipation. Call the office if you are unable to tolerate your medication.

Precautions: Call the office (813) 684-2663 if you develop: temperatures >101°F, shortness of breath, chest pain, uncontrolled pain, marked redness/hives, persistent drainage, new onset numbness, significant incisional/calf swelling, or any other concerns. **Post-operative Appt: Call (813) 684-2663 today to make a post-operative appointment to see your surgeon 10-14 days following your surgery.**

Additional Instructions:

For **MILD** pain; Take OVER THE COUNTER medications:

- Tylenol (acetaminophen; 650mg tabs): Take 1 tab by mouth every 6hrs. as needed for pain
 - Aleve (naproxen; 220mg tabs): Take 2 tabs by mouth every 12hrs WITH FOOD as needed for pain
- *Stop if stomach upset/abnormal bleeding occurs; DO NOT TAKE with ANY blood thinners (or aspirin)**

For **MODERATE to SEVERE PAIN**; Take the PRESCRIPTION medication:

- Oxycodone (5mg tablets): Take 1-2 tabs by mouth every 4-6hours as needed for pain

Special Instructions: _____ (Additionally, follow any indicated instructions below.)

Physical therapy: per attached prescription; to be scheduled as soon as able

Weightbearing (operative leg): **NON weight-bearing** **Brace:** with elevated heel wedge

PT/OT PRESCRIPTION:

(PATIENT NAME)

Diagnosis: s/p LEFT / RIGHT Achilles Tendon Repair

Graft: _____

MD Orders for the Therapist:

- Physical Therapy Prescription: 2-3 times per week x 6 weeks
- Follow this protocol without substitution. Contact my office with any questions.

Christopher T. Donaldson, MD

PHASE I: WEEK 0-2

1. Placed in Post-operative brace/splint
2. Wound care
3. Edema reduction – ice, elevation and compression
 - a. Out of splint 3x/day for icing
4. Crutches, non-weight bearing (NWB)
5. Recommended Exercises (Pain-free range)
 - a. Toe wiggles

Goals: Wound healing, edema reduction, ensure neurovascular integrity

WEEK: 2-3

1. Placed in post-operative boot to 30° plantar flexion (with folded towel or heel wedge)
2. Continue ice (3x/day), rest and elevation
3. Range of motion (ROM)-begin active ROM
 - a. Alphabet
 - b. NWB gastroc stretch/ankle pumps to 0° Dorsiflexion (DF), Pain-free range
 - c. Eversion, Dorsiflexion, and Inversion isometrics

Goals: Continued wound healing, Improve mobility to 0° DF (Pain-free range)

PHASE II: WEEK 3-4:

1. NWB in boot at 15° with ambulation.
2. Weight-bearing as tolerated (WBAT) in boot with physical therapy in clinic.
3. Vasopneumatic/cryocuff cooling boot, if applicable
4. ROM
 - a. Bike with boot (half to full revolutions per tolerance, no resistance)
 - b. Continue NWB gastroc stretching to 0° DF
5. Recommended Exercises
 - a. Ant/Post and Med/Lat weight shifts with upper extremity (UE) support in boot
 - b. Multi-directional Straight leg raises (SLR)
 - c. Terminal knee extensions
 - d. Sub maximal Eversion, DF, and Inversion T-band strengthening
 - e. Plantar flexion isometrics
 - f. Shuttle
 - i. Mini-squats - double leg: 25%-50% Body Weight (to 0° Dorsiflexion)

- g. Leg extensions with light resistance

Goals: Improve Ankle strength without exacerbation of symptoms, Complete PWB ex without increase in pain

WEEK: 4-6

1. Progress to full-weight bearing (FWB) in boot at neutral DF with 1-2 heel lifts per tolerance
6. Gradual discontinuation of crutches per tolerance and gait analysis
7. Scar mobilization
8. Vasopneumatic/cryocuff cooling boot
9. ROM

- a. Biking without boot
- b. Seated towel stretches (to 0° DF)

10. Recommended Exercises

(Without Boot)

- a. Seated Multi-directional ankle T-band strengthening; initiate plantar flexion to 0° Dorsiflexion
- b. Progress SLRs
- c. Multi-directional Weight Shifts
- d. Seated heel raise
- e. Shuttle
 - i. Bilateral LE heel raises 25-50% Body Weight to 0° DF

(With boot)

- f. Shuttle
 - i. Mini-squats- single leg: 25%-50% Body Weight (to 0° DF)
- g. Leg extensions
- h. Bridges
- i. Mini-Lunges with UE support for balance

Goals: Increased strength with exercise without pain, improved scar mobility, no reactive effusion, normalization of gait in boot without use of crutches

WEEK: 6-8

1. WBAT in boot with no heel lift
2. Scar Mobilization
3. Vasopneumatic/cryocuff cooling boot
4. ROM

- a. Biking without boot
- b. Seated or standing gastroc stretch

5. Recommended Exercises

(Without boot)

- a. Biking with light resistance
- b. Seated heel raise with ankle weight on to of knee
- c. Eccentric heel raise (up with two, down with affected side, 25-50%) – limit to 0° Dorsiflexion

(With Boot)

- d. Shuttle
 - i. Single-leg mini-squats: 50-75% body weight
- e. Single-leg stance with upper-extremity support
- f. Progress all NWB strengthening exercise

g. Lunges in boot without UE support

Goals: Normalization of gait without use of crutches, improved scar mobility, active ROM from 0° DF to full plantar flexion, No exacerbation with gains in multi-directional strength

PHASE III: WEEK: 8-9

1. D/C use of boot
2. Initiate walking in shoe with one heel lift
3. Scar mobilization
4. ROM
 - a. Initiate standing gastroc and soleus stretches
 - b. Continue biking without shoe and progressive resistance
5. Recommended exercise
 - a. Shuttle/Leg press
 - i. PWB with both LE (75-100% BW)
 - ii. Bilateral eccentric heel raise (75-100% BW)
 - b. Lunges on stable surface
 - c. Treadmill walking
 - d. Leg extensions
 - e. Single-leg balance with perturbations (Steamboats)
 - f. Bilateral LE heel raise with UE support at home

Goals: Equal weight distribution with exercise, increased tolerance with community ambulation, progression with controlled strengthening and balance activities, No graft attenuation

WEEK: 9-10

1. Decrease use or height of heel lift per tolerance
2. Scar mobilization
3. ROM
 - a. Bike and Stretching
4. Recommended Exercises
 - a. B LE mini-squats on BOSU
 - b. B LE concentric shuttle heel raises (25-50% BW)
 - c. Standing Eccentric heel raises with UE support
 - d. Lunges on unstable surface
 - e. Balance exercise without vision
 - f. Resisted side-stepping
5. Conditioning
 - a. 10 min TM walking (no incline)

Goals: Decrease UE support with standing strengthening exercise

PHASE VI: WEEK: 10-12

1. Discontinue heel lift
2. Scar Mobilization
3. ROM
 - a. Bike and Stretching
 - b. Joint mobilizations if neutral DF is not achieved
4. Recommended exercises
 - a. Progress Strengthening on stable and unstable surfaces with emphasis on eccentric control of LE/Hip/Lumbosacral region
 - b. B LE Shuttle plyometrics (25-50% to 50-75% BW)

- c. Hop Downs at 10 weeks (ensure appropriate landing mechanics)
- d. Standing eccentric heel raises with only UE support for balance
- 5. Conditioning
 - a. Progression of TM walking
 - i. Increase incline per tolerance if no elongation of graft site
 - ii. Stepper exercise at 10 weeks

Goals: Normalization of active and passive ROM, progression of aerobic conditioning without lengthening of graft, DF strength 75% - 100% of uninvolved side, Prone resting PF = 15-20 degrees

PHASE V: MONTHS: 3-6

- 1. ROM
 - a. Continuation of self-stretching
 - b. Joint mobilizations as needed
- 2. Recommended Exercises
 - a. Continued progression of strength/stability/balance exercise on stable and unstable surfaces
 - b. Plyometrics
 - i. Single-leg shuttle plyometrics
 - ii. B LE straight-plane
 - iii. B LE diagonal-plane
 - iv. Rotational
 - v. Multi-directional
 - c. Resisted jogging in place with resistance in all planes
 - d. Sports specific exercise/agility progression, emphasis on proper mechanics
 - e. Walk to jog progression
 - i. Criteria to begin jogging
 - 1. Hop 10 times on involved leg with good mechanics
 - 2. Audible symmetry with foot strike
 - 3. Normalized functional ROM
- 3. Conditioning
 - a. Progress Stepper and walking progression
 - i. Increase incline as strength and endurance improves

Goals: 80-100% Plantar Flexion isokinetic strength, Normalization of movement without Achilles attenuation, completion of sports-specific exercise without exacerbation with or without functional bracing, no signs of excessive Achilles thickening.