

#### Achilles Tendon Rupture / Repair Protocol

# PATIENT INFORMATION

### **BEFORE YOUR SURGERY:**

You will meet with an orthopedic assistant before your scheduled surgery to go over the fundamentals of the rehabilitation program, preoperative and postoperative instructions, limitations after surgery, as well as to answer any questions regarding the upcoming surgical procedure. It is imperative that you understand and follow the rehabilitation exercises in order to assure a safe and effective recovery from your surgery.

### **AFTER YOUR SURGERY:**

Most patients will be discharged home the day of surgery. A posterior splint was placed on your leg in the operating room. You will be non-weight bearing with crutches for the first 2 weeks after your surgery in this splint. Please keep the splint clean and dry. You will be provided with crutches prior to being discharged home from the hospital. You will have a longitudinal incision on the back of your ankle/leg. This incision is closed with black nylon suture. You will follow-up in clinic approximately 2 weeks following your procedure for splint removal, removal of you sutures, and instructions on beginning physical therapy.

A prescription for pain medication has been provided and should be filled. You may use ibuprofen, or Tylenol in place of this but most patients require a stronger medication during the first 24 to 48 hours. Apply an ice bag to the ankle to relieve the pain and minimize the swelling. You should also keep your ankle elevated to reduce swelling.

# **REHABILITATION GUIDELINES**

# PHASE I

#### **0-2 WEEKS:**

- 0-2 weeks: NWB with assistive device x 2 weeks
- Immobilization in posterior splint placed in OR x 2 weeks
- First post-operative appointment 2 weeks

### PHASE II

### **2-6 WEEKS:**

- CAM boot
  - 1. 25 % weight bearing with crutches x 2 weeks (weeks 2-4)
  - 2. 50% weight bearing with crutches x 2 weeks (weeks 4-6)
- Begin gentle <u>active</u> dorsiflexion, <u>passive</u> plantarflexion, ankle ROM
  - 1. Goal: 0 degrees dorsiflexion at 6 weeks
  - 2. <u>Precaution</u>: Excessive passive dorsiflexion, active/resistive plantarflexion
- Manual Therapy: Soft tissue mobilization, joint mobilization (TCJ, STJ, MTJs) as needed

# PHASE III

# 6-12 WEEKS:

- CAM boot
  - 1. 75% weight bearing with crutches x 2 weeks (weeks 6-8)
  - 2. 100% weight bearing with crutches x 2 weeks (weeks 8-12)
  - 3. 100 % weight bearing without crutches x 2 weeks (weeks 12-14)
- Cont progressive ROM
- Begin PT at 6 weeks for strengthening-<u>start slow</u>
- Ankle theraband exercises
- Gait re-education
- Single leg balance
- BAPS board (seated)
- Hip and knee PRE's
- Modalities as needed

# PHASE IV: POW 12-16

- ROM/stretching Achilles as needed, other LE muscles
- Gait: Ensure good gait pattern: heel-toe gait, good heel strike and push-off, stance time equal left to right

- SLB activities (eyes open/closed, head nods, arm movement)
  - Progress to multiple planes
- Begin functional strengthening exercises
- Leg press bilateral
- Leg press toes raises (bilateral, progress to unilateral)
- Progress to WB bilateral toe raises
- Continue proprioception activities i.e. BAPS, balance board
- Continue soft tissue and joint mobes as needed
- Stairmaster, bike for cardio
- Modalities as needed

Criteria to progress: 1. Good gait mechanics

- 2. ROM equal to opposite side
- 3. Controlled inflammation
- 4. No pain
- 5. Plantarflexor strength 4/5 (perform 10 partial to full toes raises)

# **PHASE V: POW 16-20**

- Progress previous exercises: hip and knee PRE's
- Progress to WB unilateral heel raises
- Stairmaster
- Isokinetics for ankle (inv/ev, dors/pltf) optional
- Begin jumping progression: leg press, min-tramp, ground)
- Functional rehab
  - Forward dips multiple plane for balance
  - Begin light plyos

<u>Criteria to progress:</u> 1. ROM equal to opposite side

- 2. Perform 20 unilateral toes raises (full range, pain-free)
- 3. Perform bilateral jumping in place 30 seconds each F/B, L/R with good technique

#### PHASE VI: 5-6 months post-op

- Progress previous exercises
- Progress jumping to hopping
- Begin jogging/running when 85-90% SL hop achieved compared to contralateral side
- Sport specific drills for appropriate patients

Criteria to discharge non-athletes:

- Good gait pattern
- ADL's without difficulty
- Gastroc/soleus 4+ 5/5 strength

Criteria to discharge athletes:

- Good gait pattern
- Patient performs the following tests within 85% of the uninvolved leg:

- Hop for distance
  Single leg balance reach
  Isokinetic strength test

Maintenance program should stress continued strength and endurance work at least 2-3 times per week.

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