

# RUSSELL M. LAFRANCE MD

Orthopedic Surgeon & Sports Medicine

## DR. LAFRANCE REHABILITATION FOLLOWING AN ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION UTILIZING A HAMSTRING GRAFT

### 1. IMMEDIATE POSTOPERATIVE PHASE (1-4 DAYS) : PRECAUTIONS

- Wait until your first physical therapy session for the therapist to change the surgical dressing for you.
- Perform sponge baths or shower only, with saran wrap covering surgical site.
- Avoid resisted knee extension to protect graft.
- Avoid active knee flexion and hip extension until 4 weeks post-op.
- Avoid resisted knee flexion and hip extension until 6 weeks post-op.
- If you experience malaise, fever, or chills- contact your physician immediately.
- Perform home exercise program issued at pre-op from Hamilton Orthopedics Physical Therapy Department.
- Control acute inflammation with the use of Cryocuff, 15-20 minutes hourly, rest, elevation, and prescribed medications.
- Ambulation: weight bearing as tolerated with the use of bilateral crutches or walker, a T-Scope post-operative brace on involved lower extremity locked in full extension for 1 day. Unlock brace the day after surgery.
- *If a meniscus repair was involved, restrict weight bearing to 25% for 2 weeks. At that time weight bearing may be progressed to 50%. At 4 weeks, full weight bearing as tolerated. Patient must use bilateral axillary crutches at all times unless while in physical therapy for 6 weeks post op in order to protect the repair.*
- Primary goal is to achieve terminal knee extension and good quad control.

### 2. ACUTE PHASE (5 days- 2 weeks):

- Begin Physical Therapy 5 days postoperatively for 3 sessions per week.
- Continue to ambulate with T-Scope brace, needs to be worn for all weight bearing activity for 6 weeks.
- Continue to avoid resisted knee extension.
- Continue to avoid active and resisted knee flexion and hip extension.
- Steri -strips should remain intact for approximately 2 weeks post -op.
- Ambulation/Gait training: begin with stance shifts to regain good quad control

and advance to single crutch, then no assistive device by 2 weeks.

- Patella mobilization
- Ankle pumps
- Isometric quad sets
- Active and passive terminal knee extension
- Straight leg raises, adding resistance as tolerated ( hip flexion, abduction.)
- Flexibility of hamstring (gentle), gastroc-soleus, quadriceps, hip adductors
- AAROM: wall-slides, heel-slides, and knee flexion in chair
- Standing calf lifts
- Partial wall squats(<45 degrees of flexion)
- Closed chain resisted terminal knee extension (i.e ball squeeze at wall)

### 3. ACUTE PHASE CONTINUED (14 days-4 weeks)

- Continue to progress above exercises
- Range of motion: 0-120 degrees
- Continue patella mobilization as needed
- Proprioceptive and single leg balance activities (if able to fully weight bear through involved lower extremity)
- Stationary lunge
- Partial wall squats (<60 degrees of flexion)
- Stationary bike (when able to achieve 110 degrees of flexion)
- Leg press (0-90 degrees)
- Sub maximal quad isometrics at 45 degrees of knee flexion
- Stairmaster, Nordic Track
- Forward/ lateral step-ups (4-8 inches)
- Continue to control edema and discomfort

### 4. SUBACUTE PHASE (4-11 WEEKS)

- Continue to progress above exercises
- Begin resisted knee extension from 90-40 degrees with care not to irritate the graft site.
- Begin active knee flexion and prone hip extension at 4 week post-op..
- Begin resisted knee flexion and hip extension at 6 weeks post-op.
- Begin squats (machine based only, NO free weight squats x 6 mos.)
- Begin eccentric quad strengthening.
- Range of motion: 0-135 degrees/full.
- Emphasize closed kinetic chain therapeutic exercise
- Walking lunges at 6 weeks post op
- Aerobic stepping ( Reebok step programming) forward and lateral at 6 weeks post op.
- **Fitting for sports specific functional ACL brace at Hamilton Orthopaedics at 6 weeks. Discontinue T-Scope post-operative brace at that time.**

**5. RETURN TO ACTIVITY PHASE (12-15 WEEKS)**

- Continue to progress above exercises with emphasis on single leg strengthening for all resistive strengthening
- **Perform 12 week functional test with forms provided by Hamilton Orthopaedics/ HSS Ancillary Services. Fax results to Surgeon, (315)824-8961.**
- If patient successfully completes the test, they may begin interval jogging, uniplanar double leg plyometrics, and dynamic flexibility programming.
- All plyometrics and jogging should be performed with the functional ACL brace on.

**6. ACTIVITIES PROGRESSION PHASE (16-19 Weeks):**

- Continue to progress above exercises
- **Perform 16 week functional test with forms provided forms provided by Hamilton Orthopaedics/HSS Ancillary Services. Fax results to Surgeon, (315)824-8961.**
- If patient successfully completes the test, they may begin single leg uniplanar and double leg multiplanar plyometrics, and agility work.
- Continue jogging program, progressing to tolerance.
- Begin sport specific training as indicated.
- All plyometrics, jogging, and sports specific training should be performed with the ACL brace on.

**7. PRE- RETURN TO PRIOR LEVEL OF RECREATIONAL ACTIVITIES (4-9 MONTHS):**

- Continue to progress resistive and endurance exercises
- **Perform 20 week functional test with forms provided by Hamilton Orthopaedics/ HSS Ancillary Services. Fax results to Surgeon, (315)824-8961**
- Prior to discharge, perform sports related drills implementing directional changes and sprinting.
- Discharge formal PT and continue gym program to progress strength, jogging, plyometrics, and sports related drills.
- Return to Hamilton Orthopaedics for final functional test 6 months post-op.
- Return to sports when released by physician at 9 months post-op.