

Therapist \_\_\_\_\_

## REHABILITATION FOLLOWING LATERAL RETINACULAR RELEASE

### I. IMMEDIATE POST-OPERATIVE PHASE

**Goals:** Diminish swelling/inflammation (control hemarthrosis)  
Initiation of quadriceps muscle training  
Medial mobilization of patella  
Independent Ambulation

**Weight Bearing:** As tolerated two crutches

**Swelling/  
Inflammation Control:** Cryotherapy  
Lateral "C" buttress pad  
Compression Bandage  
Elevation & Ankle Pumps

**Range of Motion:** ROM to tolerance  
At least 75 degrees flexion by day 2-3  
Patellar mobilization (especially medial)

**Muscle Retraining:** Quadriceps isometrics  
Straight Leg Raises (Flexion)  
Hip Adduction  
\* Knee Extension (painless arc)

**Flexibility:** Hamstring Stretches  
Calf Stretches  
AAROM Knee Flexion (to tolerance)

### II. ACUTE PHASE

**Goals:** Control swelling/inflammation  
Gradual Improvement in ROM  
Quadriceps Strengthening (Especially VMO)

**Note:** *Rate of progression based on swelling/inflammation.*

**Weight Bearing:** Progress WBAT (one crutch)  
<sup>b</sup> Progression based upon pain, swelling, and quad control.  
Discontinue crutch when appropriate.

Swelling/Inflammation: Continue use of lateral “C” pad  
Compression bandage  
Cryotherapy, elevation 5-6 times/day

Range of Motion: Rate of progression based upon swelling/inflammation.  
At least 90-100 degrees flexion (Week 1)  
<sup>b</sup> At least 105-115 degrees flexion (Week 2)  
<sup>b</sup> At least 115-125 degrees flexion (Week 3)

Muscle Retraining: Electrical muscle stimulation to quads  
Quad Setting Isometrics  
Straight Leg Raises (flexion)  
Hip Adduction  
Knee Extension 60-0 degrees, painfree arc  
<sup>a</sup> Mini-Squats with adduction (squeeze ball)  
<sup>a</sup> Leg Press  
\* Bicycle (Stationary) if ROM/Swelling permits  
Proprioception Training

Flexibility: Continue Hamstring, Calf Stretches  
Initiate quadriceps muscle stretching

### III. SUBACUTE PHASE - MODERATE PROTECTION

Goals: Eliminate any joint swelling  
Improve muscular strength and control without exacerbation of symptoms.  
Functional exercise movements

Criteria to Progress to Phase III:

1. Minimal inflammation/pain
2. ROM (0-125 degrees)
3. Voluntary quadriceps contraction

Exercises: Continue muscle stimulation to quadriceps (if needed)  
Quadriceps setting isometrics  
4 way Hip Machine (hip adduction, abduction, extension, and flexion)  
\* Lateral Step-Ups (if able)  
\* Front Step-Ups (if able)  
<sup>a</sup> □ squats against wall (0-60 degrees)  
<sup>a</sup> Leg Press  
Knee Extension (90-0 degrees), painfree arc  
Bicycle  
Pool Program (walking, strengthening, running)  
Proprioceptive Training.



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Flexibility: Continue all stretching exercises for LE

Swelling/Inflammation: Continue use of ice, compression, and elevation, as needed.

#### IV. ADVANCED PHASE - MINIMAL PROTECTION

Goals: Achieve maximal strength and endurance.  
Functional activities/drills

Criteria to Progress to Phase IV:

1. Full Non-Painful ROM
2. Absence of swelling/inflammation
3. Knee extension strength 70% of contralateral knee.

Exercises:

- <sup>a</sup> Wall Squats (0-70 degrees) painfree arc
- <sup>a</sup> Vertical Squats (0-60 degrees)
- <sup>a</sup> Leg Press
- Forward Lunges
- Lateral Lunges
- Lateral Step-ups
- Front Step-ups
- Knee Extension, painfree arc
- Hip Strengthening (4 way)
- Bicycle
- Stairmaster<sup>®</sup>
- Proprioception drills
- Sport Specific functional drills (competitive athletes)

Continue all stretching  
Continue use of ice as needed

**V. RETURN TO ACTIVITY PHASE**

Goal: Functional return to work/sport

Criteria to Progress to Phase V:

1. Full Non-Painful ROM
2. Appropriate Strength Level (80% of greater of contralateral leg)
3. Satisfactory clinical exam

Exercises:

Functional Drills  
Strengthening Exercises (selected)  
Flexibility Exercises

KEW: 11/96

\* If patient is able to perform painfree.

<sup>a</sup> Exercise can be augmented by hip adduction contraction (ball squeeze).

<sup>b</sup> Progression based upon assessment of pain, inflammation, and quadriceps control.