

Rehabilitation Following Lateral Retinacular Release

Phase I – Immediate Postoperative 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 and 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 (painfree arc)

Flexibility: Hamstring stretches
Calf stretches
AAROM Knee flexion (to tolerance)

Phase II – Acute Phase

Goals: Control swelling/inflammation
Gradual improvement of ROM
Quadriceps Strengthening (Especially VMO)

Note: Rate of progression based on swelling/inflammation

Weight Bearing: Progress WBAT (one crutch)
Progression based upon pain, swelling, and quad control
Discontinue one 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)
At least 105-115 degrees flexion (Week 2)
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

Mini-Squats with adduction (squeeze ball)
Leg press
Bicycle (Stationary) if ROM/Swelling permits
Proprioception Training

Flexibility: Continue hamstring, calf stretches
Initiate quadriceps muscle stretching

Phase III – 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: Control 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)
½ squats against wall (0-60 degrees)
Leg Press
Knee extension (90-0 degrees), painfree arc
Bicycle
Pool Program (walking, strengthening, running)
Proprioceptive training

Flexibility: Continue all stretching exercises for LE

Swelling/

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

Phase IV – 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: Wall squats (0-70 degrees) painfree arc
½ Vertical Squats (0-60 degrees)
Leg press
Forward Lunges
Lateral Lunges
Lateral Step-ups
Front Step-ups
Knee Extension, painfree arc
Hip strengthening (4 way)
Bicycle
Stairmaster

Proprioception drills
Sport specific functional drills (competitive athletes)

Flexibility: Continue all stretching

Swelling/

Inflammation: Continue use of ice as needed

Phase 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% or greater of contralateral leg)
3. Satisfactory clinical exam

Exercises: Functional drills
Strengthening exercises (selected)
Flexibility exercises