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Rehabilitation Following Lateral Retinacular Release

I. Immediate Post -Operative

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

Flexibility:

- Hamstring stretches
- Calf Stretches
- AAROM Knee flexion (to tolerance)

II. Acute Phase (Weeks 0-3)

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)
- 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)
- ^bAt least 105-115 degrees flexion (Week 2)
- ^bAt 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, pain free arc
 - ^aMini Squats with adduction (Squeeze ball)
 - ^aLeg Press
 - Bicycle (Stationary) if ROM/Swelling permits
- Proprioception training

Flexibility:

- Continue hamstring, calf stretches
- Initiate quadriceps muscle stretching

III. Subacute Phase - Moderate Protection (Weeks 4-8)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)
 - ^a½ squats against wall (0-60 degrees)
 - ^aLeg press
- Knee extension (90-0 degrees), pain free 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

IV. Advanced Phase - Minimal Protection (Weeks 8-14)

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:

- ^aWall squats (0-70 degrees) pain free arc
- ^a½ Vertical squats (0-60 degrees)
- ^aLeg press
- Forward lunges
- Lateral lunges
- Lateral step-ups
- Front step-ups
- Knee extension, pain free arc
- Hip strengthening (4 way)
- Bicycle
- Stairmaster®
- Proprioception drills
- Sport specific functional drills (competitive athletes)
- Continue all stretching
- Continue use of ice as needed

V. Return to Activity Phase (Weeks 14-20)

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