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MCL Reconstruction Rehab Protocol

POST OPERATIVE MANAGEMENT

- Pain control with ice, elevation, compression, and anti-inflammatories

Week 0-2:

- Initiation of quadriceps muscle training
- Weight Bearing: Touch-down with crutches and brace locked
- Swelling/ Inflammation Control: Cryotherapy, NSAIDS, Elevation
- Range of Motion: 0 to 30 degrees of flexion in brace
- Muscle Retraining: Quadriceps isometrics, straight leg raises, flexibility, hamstring stretches, calf stretches

Week 2-6:

- ROM: Increase as tolerated working toward full flexion (week 6-8)
- Weight Bearing: Can fully weight bear only when brace is locked at 0 degrees extension.
- Swelling/Inflammation: Cryotherapy, NSAIDS, Elevation
- **Exercises:**
 - Quadriceps Strengthening (Especially VMO)
 - Muscle Retraining: Electrical muscle stimulation to quads
 - Quad Setting Isometrics
 - Initiate quadriceps muscle stretching
 - Straight Leg Raises (flexion)
 - Hip Adduction
 - Bicycle (Stationary, in brace) if ROM/Swelling permits
 - Proprioception Training
 - Flexibility: Continue Hamstring, Calf Stretches

Criteria to Progress:

- Minimal inflammation/pain
- ROM (0-near full flexion)
- Strong quadriceps contraction

Week 6-12:

- Discontinue brace at 6 weeks
- Swelling/Inflammation: continue use of ice, compression, and elevation, as needed.
- Improve muscular strength and control without exacerbation of symptoms.
- Functional exercise movements
- Flexibility: continue all stretching exercises for LE
- **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)
 - Squats against wall (0-60 degrees)*
 - Knee Extension (90-0 degrees), pain free arc
 - Bicycle
 - Pool Program (walking, strengthening, running)*
 - Proprioceptive training

Criteria To Progress:

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

Week 12-16:

- Goals: Achieve maximal strength and endurance.
- Functional activities/drills
- **Exercises:**
 - Wall Squats (0-70 degrees) pain free arc
 - Vertical Squats (0-60 degrees)*
 - Leg 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)
 - Jogging Program
 - Continue all stretching
 - Continue use of ice as needed

Criteria to Progress:

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

Week 16-24:

- Goal: Functional return to work/sport pain free
- Introduce sport specific training and functional drills

Criteria for discharge:

1. Full, pain free range of motion
2. Strength is equal bilaterally
3. Has met specific functional/activity goals
4. Has been cleared by physician