



Rehabilitation Protocol: Multi Ligament Reconstruction, Anterior Cruciate Ligament (ACL), Posterior Cruciate Ligament (PCL), & Medial Collateral Ligament (MCL) Reconstructions

Immediate Postoperative Phase (Day 1 - 13)

Goals:

- Protect the post-surgical knee
- Restore normal knee extension and improve scar and patellar mobility
- Eliminate effusion (swelling)
- Restore leg control
- Initiate regaining knee flexion

Phase I (Weeks 0-4)

- **Weight bearing:** Non Weight Bearing (NWB) for 6 weeks (Toe Touch is ok)
- **Hinged Knee Brace:**
 - Locked in full extension for ambulation and sleeping – remove for hygiene and PT ONLY x 12 weeks
- **Range of Motion :**
 - No flexion week 0-4
 - Parameters allow for full extension (avoid hyperextension)
 - No open chain hamstring strengthening or isolated hamstring exercises
 - No hamstring stretching
 - No active hamstring exercises
 - No active knee flexion
 - No passive knee flexion
- **Therapeutic Exercises**
 - Soft tissue mobilization to anterior knee
 - Patellar mobilization
 - Electric stimulation as necessary to stimulate quad control
 - Quad sets
 - Leg lifts in standing with brace on for balance and hip strength – avoid hip extension secondary to hamstring restrictions
 - Straight leg raise (SLR) with brace locked
 - Ankle dorsiflexion (DF) and plantar flexion (PF) with manual resistance



Phase II (Weeks 4-6)

- **Weight bearing:** Toe Touch Weight bearing up to 6 weeks post-operative
- **Hinged Knee Brace:** Locked in full extension for ambulation and sleeping – remove for hygiene and PT ONLY x 12 weeks
- **Range of Motion:**
 - May start Passive knee flexion in Prone position at 4 weeks post-operative
 - Progress to full flexion as tolerated in prone position
 - May begin active extension
 - No open chain hamstring strengthening or isolated hamstring exercises
 - No hamstring stretching
 - No active hamstring exercises
 - No active knee flexion
- **Therapeutic Exercises**
 - Continue as above

Phase III (Weeks 6-12)

- **Weight bearing:**
 - 25-50% of body weight beginning at week 6 and increase over next week or so up to full weight bearing with brace in full extension
 - Must wear the brace locked for all weight bearing activities to allow ligaments to heal up to week 12
- **Range of Motion:**
 - Continue passive knee flexion in Prone position up to week 12
 - Should have full passive flexion by week 12
 - No open chain hamstring strengthening or isolated hamstring exercises
 - No active hamstring exercises
 - No active knee flexion
- **Therapeutic Exercises**
 - Continue as above

Phase IV (Weeks 12-24)

- **Weight bearing:**
 - Full weight bearing
- **Hinged Knee Brace:** Discontinue
- **Range of Motion:**
 - As tolerated
- **Therapeutic Exercises**
 - Quad strengthening closed chain (progressing to multi-plane) and open chain exercises
 - Non-impact balance and proprioceptive drills
 - Hip and core strengthening
 - Stretching for patient specific muscle imbalances