

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 :

- o No flexion week 0-4
- o Parameters allow for full extension (avoid hyperextension)
- o 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

- o Soft tissue mobilization to anterior knee
- o 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
- o Straight leg raise (SLR) with brace locked
- o 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:

- o May start Passive knee flexion in Prone position at 4 weeks post-operative
- o Progress to full flexion as tolerated in prone position
- o May begin active extension
- o 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
- \circ Must wear the brace locked for all weight bearing activities to allow ligaments to heal up to week 12

• Range of Motion:

- o Continue passive knee flexion in Prone position up to week 12
- Should have full passive flexion by week 12
- o No open chain hamstring strengthening or isolated hamstring exercises
- No active hamstring exercises
- No active knee flexion

• Therapeutic Exercises

o Continue as above

Phase IV (Weeks 12-24)

• Weight bearing:

- Full weight bearing
- **Hinged Knee Brace:** Discontinue

• Range of Motion:

o As tolerated

• Therapeutic Exercises

- o 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