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**Post-Op Rehabilitation Guidelines for Multiligament Knee Reconstruction  
(Posterolateral Corner Reconstruction +/- PCL)**

**Phase 1: 0-6 weeks: Protection**

- NWB 6 weeks
- Avoid tibial rotation, hyperextension and varus force to the knee.
- Hinged knee brace locked in extension for ambulation and sleeping x 6 weeks.
  - \*\*If PCL reconstruction dynamic knee brace used for 6 months
- ROM 0-90 for weeks 0-2, then progress as tolerated. Emphasize maintenance of full extension. \*\*If PCL reconstruction, perform ROM in prone position to avoid tension on PCL graft via posterior tibial glide from gravity.
  - \*\*If PCL reconstruction, NO active knee flexion and open chain hamstring isometrics x 8 weeks

**Exercises:**

- ROM
- Wall slides/supine heel slide with strap
- Seated knee flexion with contralateral LE assist
  - \*\*If PCL reconstruction perform prone knee flexion PROM with strap.

**Neuromuscular Control:**

- Quad Set, Prone TKE, SLR in brace
- Use of NMES if insufficient volitional quad activation.
- Quad isometrics at 90, 60, 30 and 0 deg knee flexion
- S/L hip ABD in brace
- Prone hip extension in brace
- Ankle mobility and resisted motions in all planes in supine, long sit or seated position.
- Supine and seated core stabilization.
- Seated/supine anti rotation/palof
- Supine core isometrics with UE and LE dissociative movements.

**\*\*Criterion to progress:**

- Pain free ROM 0-90
- Pain/swelling controlled
- SLR without extensor lag

**Phase 2: 6-12 weeks: Restore ROM and strength**

- No kneeling for 12 weeks post op.
- Progress to PWB and then FWB/wean off assistive device
- Discharge crutches then brace when adequate quad activation/strength
  - **\*\*If PCL reconstruction keep dynamic brace for 6 months Ie. No extension lag with SLR, no knee buckling with weight shifting**

**ROM:**

- Stationary bike

**Proprioception and balance:**

- Initiate balance training

**Strengthening:**

- Closed chain functional exercise
- Mini squat, Step up, lunging in sagittal plane (no flexion >70 deg)
- Bridge
- Side steps
- Keep band proximal to minimize varus force on knee
- Core strength and endurance

**\*\*Criterion to progress:**

- Pain free, non-antalgic gait without AD for limited distances
- PROM normalized to contralateral side 100%
- Dynamometry 80% compared contralaterally with muscle testing

**Phase 3: 12-20 weeks: Restore dynamic strength and begin plyometrics**

- Initiate transverse plane and multiplanar motions
- Initiate plyometrics
- Restore power

**\*\*Criterion to progress:**

- Y balance test >90%
- 60 sec continuous SL squat to 60 deg without femoral and lumbo-pelvic compensations
- Plank and side plank 60 sec without compensations
- Dynamometry 90% compared contralaterally with muscle testing
- Return to PLOF with minimal symptoms

**Phase 4 : Return to sport**

- AlterG initiated at 20 weeks for running
- Full body running at 24 weeks
- Sport specific dynamic exercises
  - **\*\*If PCL reconstruction, discharge dynamic brace if kneeling stress X-rays demonstrate less than 2mm of difference**