Orthopaedic Surgery
Sports Medicine
Multiple Knee Ligament Reconstruction (ACL, PCL, LCL/MCL) Postoperative Rehabilitation Protocol

Preoperative

Brace: As needed  
Weight Bearing: Full, crutches as necessary

ROM Goals

Extension: Full  
Flexion: 135 degrees

Therapeutic Exercise: Learn exercises for postoperative regimen

Postoperative

Weeks 0 to 4: Advanced Protective Phase

Brace: Braced in full extension  
Weight Bearing: Touch down

ROM Goals

Extension: Full with posterior leg supported at all times to protect from tibial sag  
Flexion: No flexion permitted

Therapeutic Exercise

Strengthening:  
Quadriceps setting  
Three-way leg raises in brace (not flexion)  
Functional quadriceps electric stimulation

Manual Therapy:
Patellar mobilization  
Peri-patellar soft tissue mobilization

Cryotherapy: Six to eight times a day for 20 minutes

Weeks 5 to 8: Early Strengthening

Brace: Open to 30 degrees weeks 7 and 8
Weight Bearing: Progress 75% by week 8

ROM Goals

Extension: Full with posterior leg supported at all times to protect from tibial sag
Flexion: 60 degrees by end of week 6; progressing to 100 degrees by end of week 8

Therapeutic Exercise

Strengthening:
- Quadriceps setting
- Four-way straight leg raising in brace
- Open chain calf with theraband
- **No open chain hamstring strengthening

Manual Therapy:
- Patellar mobilization
- Passive knee flexion
- Peri-patellar soft tissue mobilization
- Prone quadriceps stretching to 60 to 90 degrees

Weeks 9 to 12: Advanced Strengthening

Brace: Open to 60

Weight Bearing: Full

ROM Goals

Extension: Full with posterior leg supported at all times to protect from tibial sag
Flexion: Progress to full

Therapeutic Exercise

Strengthening:
- Quadriceps setting
- Four-way straight leg raising in brace
- Half squats
- Step downs
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Slow progression of multi-plane closed chain exercises
**No open chain hamstring strengthening

Proprioception: Balance activities

Core strengthening:
Trunk activities
Conditioning stationary bike

Manual Therapy:
Patellar mobilization
Passive knee flexion to 125 degrees
Peri-patellar soft tissue mobilization
Prone quadriceps stretching to 125 degrees
Soft tissue flexibility maintenance

Weeks 12 Plus: Functional Training and Return to Sports

Therapeutic Exercise

Strengthening:
Progression of multi-plane closed chain activities
Proprioception
Advanced core strengthening

Conditioning:
Stationary bike
Running straight at 9 to 12 months

Note: Return to sport based on provider team input and appropriate testing.

All times and exercises are to serve as guidelines. Actual progress may be faster or slower, depending on each individual patient, as agreed upon by the patient and his/her team of providers.