

Preoperative

Brace: As needed

Weight Bearing: Full, crutches as necessary

ROM Goals:

Extension: Full

Flexion: 135 degrees

Therapeutic Exercise: Learn exercises for postoperative regimen

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: 0 degrees

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
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.