



Dx: ☐ Right ☐ Left

Patient Name: _____

Date of Surgery: _____

PT/OT: Evaluate and treat. Follow the following protocol.

Signature/Date: _____

Multiligamentous Knee Reconstruction Rehab Program

General Information

The intent of this protocol is to provide the therapist and patient with guidelines for the post-operative rehabilitation course after multi-ligament knee reconstruction. This protocol is based on a review of the best available scientific studies regarding knee rehabilitation. It is by no means intended to serve as a substitute for one's clinical decision making regarding the progression of a patient's post-operative course. It should serve as a guideline based on the individual's physical exam/findings, progress to date, and the absence of post-operative complications. If the therapist requires assistance in the progression of a post-operative patient they should consult with your surgeon. **Progression to the next phase based on Clinical Criteria and/or Timeframes as appropriate.**

Pre-operative:

Brace: Usually required at all times

Weight Bearing: Full, crutches as necessary

ROM Goals:

Extension: Full

Flexion: 135 degrees

Therapeutic Exercise: Learn exercises for post-op regimen.

Weeks 0 to 4: Advanced Protective Phase:

Brace: Braced in full extension

Weight Bearing: Strict Non-Weight Bearing

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 week 7,8

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 thera-band

****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

Weeks 9 to 12: Advanced Strengthening Continued:

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 & 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.

NOTE: A loss of 10 to 15 degrees of terminal flexion can be expected in complex knee ligament reconstructions. This does not cause a functional problem for patients and is not a cause for alarm.