



Well Beyond.

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Postoperative Therapy Protocol

Medial Patellofemoral Ligament (MPFL) Reconstruction with Tibial Tubercle Osteotomy

Functional Goals

Weeks 0-2: Control swelling and pain, regain full extension and flexion to 90 degrees, activate quadriceps.

Weeks 2-6: Continue improving active extension, restore full flexion, normalize gait.

Weeks 6-12: Discontinue brace, regain full motion, safely progress strengthening.

Weeks 12-16: Maintain full range of motion, safely progress strengthening.

Weeks 16-24: Sport specific training, return to pivoting sports (e.g. football, soccer, basketball) at 6 months.

Weeks 0-2

Toe touch weightbearing as tolerated with brace locked in extension for 2 weeks.

Ice 20 minutes per hour for the first 2-3 days, continue as needed afterwards.

Gentle early motion when seated, **do not flex greater than 90°**

- May remove brace during range of motion exercises.

Exercise	Reps/Sets	Days per Week	Goal
Seated Heel Slides	3 sets of 15 reps	6	Increase Flexion
Heel Prop	3 sets of 10 minutes	6	Increase Extension
Quadricep Sets	3 sets of 15 reps	6	Reactivate Quadriceps
Ankle Pumps	20 reps per hour	7	Maintain Circulation

Weeks 2-6

Continue toe touch weightbearing for weeks 2-4, 50% weightbearing for weeks 4-6

May unlock brace when able to perform straight leg raise without lag.

Discontinue crutches and brace after 6 weeks, focus on recruiting quadriceps muscle..

Continue gentle range of motion in seated position, >90 degrees to gradually regain full flexion.

- May remove brace during range of motion exercises.

Stationary bicycle.

Exercise	Reps/Sets	Goal	Additional Information
Seated Heel Slides	3 sets of 15 reps	Improve Flexion	Stop when flexion returns to baseline
Heel Prop	3 sets of 10 minutes	Improve Extension	Stop when extension returns to baseline
Quadricep Sets	3 sets of 15 reps	Reactivate Quadriceps	Stop when extension returns to baseline
Straight Leg Lift	3 sets of 15 reps	Strengthen Quadriceps	Start when full extension is reached
Short Arc Lift	3 sets of 15 reps	Strengthen Quadriceps	Stop at 6 weeks
Standing Toe Raise	3 sets of 15 reps	Balance	Stop at 6 weeks

Weeks 6-12

Discontinue brace.

Continue week 2-6 exercises

Cardiovascular exercise at week 8: elliptical, stair climber, flutter kick swimming, pool jogging.

Add the following exercises.

Exercise	Reps/Sets	Goal	Additional Information
Supine Heel Slides	3 sets of 15 reps	Increase Flexion	Hold 5 seconds at max flexion
Standing Hamstring Curls	3 sets of 15 reps	Increase flexion	Slowly increase flexion past 90°
Stationary Bicycle	20-30 minutes daily	Range of Motion	Low resistance, increase slowly over 6 weeks
Hip Abduction	1 set of 15 reps	Strengthen Abductors	Hold 1 second at 45°
Wall Slides	3 sets of 15 reps	Balance and Strengthen	Hold 5 seconds at 45°
Squat to Chair	3 sets of 15 reps	Strengthen Quadriceps	Add dumbbells as tolerated
Seated Leg Press	3 sets of 15 reps	Strengthen Quadriceps	Do not exceed body weight and no flexion past 90°
Step-up/Step-down	3 sets of 15 reps	Strength, Balance, Proprioception	Increase step height as patient progresses

Weeks 12-24

Continue all previous exercises but decrease to 2 sets of 15 reps.

Begin advanced muscular strengthening, cardiovascular conditioning, sport-specific training.

- Strength training: 3 days per week.
 - Continue exercises from weeks 6-12 adding light weight as strength improves.
 - Progress to single-leg wall slides and single-leg squat to chair as strength allows.
- Cardiovascular/sport-specific training: 3 days per week.
 - Stationary bicycle, elliptical, or arc trainer 30 minutes per day, increase resistance as tolerated.
 - Straight line running: start for 5 minutes and increase to 30 minutes over 4 week period.
 - Speed and agility training: begin only when straight line running for 30 minutes is well tolerated without pain or swelling. Work directly with trainers or rehab professional to personalize program for your sport or activity of interest.
 - Straight-line sprints: half speed ofr 100 yard for 10 reps
 - Advance to full speed for 100 yard for 10 reps
 - Advance to cones with light pivoting
 - Advance to forward and backward running
 - Advance to figure of eight running
 - Advance of carica running
 - Advance to shuttle run

Weeks 24 and Beyond

Full release for unrestricted pivoting sports when motion and strength have returned without swelling during sport-specific rehabilitation.

Watch carefully for redness, excessive swelling, excessive bleeding, discharge, fever or pain not relieved by medication. Call immediately (719) 632-7669 if any of these are noticed.