

University Orthopedics, Inc.
Sports Medicine Division

MPFL RECONSTRUCTION REHABILITATION**

The following is a protocol for postoperative patients following Medial Patellofemoral Ligament Reconstruction. The primary goal of this protocol is to protect the repair while steadily progressing towards and ultimately achieving pre-injury level of activity. Please note this protocol is a guideline. This protocol is aggressive with ROM and activation of the quadriceps muscle due to the likelihood of stiffness and quadricep weakness with this procedure.

PHASE I: ~0-2 WEEKS POSTOPERATIVE

GOALS:

- Pain / effusion control
- No extensor lag

AMBULATION AND BRACE USE:

Dressing – POD 1: Debulk dressing, TED Hose in place
– POD 2: Change dressing, keep wound covered, continue TED Hose
– POD 7-10: Sutures out, D/C TED Hose when effusion resolved
Brace – Days 1-7: Locked in extension
– Weeks 1-2: Locked at 0-20 degrees
Crutches – Weight bearing as tolerated (WBAT) (D/C when gait is normal)

EXERCISES:

AROM, AAROM 0-20 degrees
Patellar mobilization (teach patient)
Calf pumping
Passive extension with heel on bolster or prone hangs
Electrical stimulation in full extension with quad sets and SLR
Quad sets, Co-contractions quads / HS
Straight leg raise (SLR) x 4 on mat, in brace (parallel bars if poor quad control)
Double leg heel raises
Gentle Hamstring stretching
Ice pack with knee in full extension after exercise

PHASE II: ~2-4 WEEKS POSTOPERATIVE

GOALS:

- Normal gait
- AROM 0-60 degrees

AMBULATION AND BRACE USE:

Brace – Weeks 2-3: 0-45 degrees
– Weeks 3-4: 0-60 degrees

EXERCISES:

Continue appropriate previous exercises
Scar massage when incision healed
AAROM, AROM 0-60 degrees
SLR x 4 on mat, without brace – no resistance
Single leg heel raises
Stretches – Hamstring, hip flexors, ITB

PHASE III: ~4-6 WEEKS POSTOPERATIVE

GOALS:

- ROM 0-90 degrees
- No effusion

AMBULATION AND BRACE USE:

Brace – Weeks 4-5: 0-75 degrees
– Weeks 5-6: 0-90 degrees

EXERCISES:

Continue appropriate previous exercises
AROM, AAROM 0-90 degrees
Standing SLR x 4 with light weight at ankle
Weight shifts, Mini squats
Short arc quads with light weight as tolerated
Total Gym – Mini squats (level 3-5) – No flexion > 45 degrees
– Passive flexion to 90 degrees (push up with opposite leg)
Leg press 0-45 degrees with light resistance
Hamstring curls 0-45 degrees – Carpet drags or rolling stool (closed chain)
Proprioception ex – Double leg BAPS
Stationary bike for ROM
Pool therapy

PHASE IV: ~6-9 WEEKS POSTOPERATIVE

GOALS: Full AROM

AMBULATION AND BRACE USE:

Brace – Weeks 6-7: 0-105 degrees

– Weeks 7-9: 0-120 degrees

EXERCISES:

Continue appropriate previous exercises

PROM, AAROM, AROM through full range

Wall squats – No knee flexion past 45 degrees

Standing SLR x 4 with Theraband bilaterally

Forward, lateral and retro step downs

– No knee flexion past 45 degrees (small step)

Proprioceptive ex – Single leg BAPS, ball toss, and
body blade

Hamstring curls through full range – Carpet drag or
rolling stool (closed chain)

Stationary bike – Progressive resistance and time

Elliptical trainer

Treadmill – Forwards and backwards walking

PHASE V: ~9-12 WEEKS POSTOPERATIVE

GOALS:

Walk 2 miles at 15 min/mile pace

AMBULATION AND BRACE USE: D/C brace

EXERCISES:

Continue appropriate previous exercises with
progressive resistance

PROM, AAROM, AROM to regain full motion

Hamstring curl weight machine

Knee extension weight machine

Hip weight machine x 4 bilaterally

Forward, lateral and retro step downs – Medium to
large step

Treadmill – Walking progression program

PHASE VI: 12+ WEEKS

May begin treadmill jogging intervals

Progress to light agility and functional
training exercises as tolerated

Return to Sport Criteria:

1. Full knee ROM
2. No pain
3. Good Quad contraction
4. Strength at 90% of the opposite side
5. Hop test 90% of opposite side

**This protocol is designed to be administered by a licensed physical therapist and/or certified athletic trainer.
Please do not hesitate to contact our office should you have any questions concerning the rehabilitation process.