



MPFL RECONSTRUCTION / PATELLAR REALIGNMENT **REHAB PROTOCOL**

WEEKS 1-6

- HEP including SLR with brace in full extension and passive ROM to a goal of 0 – 90 degrees by 6 weeks
- WBAT with brace locked in extension

WEEK 6

Supervised PT:

- 3 times a week (may need to adjust based on insurance)

Brace:

- Unlock brace (0 – 70) for ambulation when demonstrates good quad control

ROM:

- Emphasis full passive extension
- AAROM exercises (4 – 5 x / day) – no limits on ROM
- ROM goal: 0 – 115 degrees
- Flexion exercises PROM, AAROM, and AROM with brace off
- Stationary bike for range of motion (short crank or high seat, no resistance)

Exercises:

- Gentle patellar mobilization exercises
- Hamstring and calf stretching
- Mini-squats (0 – 45) and heel raises
- Hip strengthening – specifically external rotators
- Isotonic leg press (0 to 60 degrees)
- Progressive SLR program with weights for quad strength with brace off if no extensor lag (otherwise keep brace on and locked)



- Theraband standing terminal knee extension
- Proprioceptive training bilateral stance
- Hamstring PRE's
- Double leg balance on tilt boards
- 4 inch step ups
- Seated leg extension (0 – 90 degrees) against gravity with no weight
- Add water exercises if desired (and all incisions are closed and sutures out)

Treatment/Modalities:

- Perform scar massage aggressively

WEEK 7

Brace:

- D/C brace and advance to patellar stabilizing brace if quad control adequate

ROM:

- Continue ROM stretching and overpressure into extension

Exercises:

- Continue all exercises
- Initiate retro treadmill with 3% incline (for quad control)
- Regular stationary bike if flexion > 115
- Wall and/or ball squats
- 6 inch front step ups
- 4 inch step downs
- SLR's – in all planes with weight; Goal: 0 – 125 degrees

WEEK 8

- Continue above exercises
- Self ROM 4 – 5 x / day using other leg to provide ROM
- 8 inch step ups
- 4 inch step downs



- Single leg proprioceptive training
- Lateral step out with Therabands
- Retro treadmill progressive inclines
- SportCord (bungee) walking
- Increase resistance on stationary bike

WEEK 9

- Continue above exercises
- StairMaster machine
- Brisk walking
- Progress balance and board throws
- 6 inch step downs

WEEK 10

- Bike outdoors, level surfaces only
- Start slide board
- Plyometric leg press
- 8 inch step downs

WEEK 11

- Should have normal ROM (equal to opposite knee)
- Begin resistance for open chair knee extension
- Jump downs (double stance landing)
- Progress to running program and light sport specific drills if:
 - Quad strength > 75% contralateral side
 - Active ROM 0 to > 125 degrees
 - Functional hop test 70% contralateral side
 - Swelling < 1 cm at joint line
 - No pain
 - Demonstrates good control on jump down



WEEKS 12 - 22

- If full ROM, quad strength > 80% contralateral side, functional hop test > 85% contralateral side, satisfactory clinical exam:
 - Progress to home program for running. Start backward jogging, figure of 8, zigzags, and lateral shuffles.
 - Progress to hops, jumps, cuts, and sports specific drills. Begin to wean from supervised therapy.
- Criteria to return to sports and to D/C patellar stabilizing brace
 - Full active ROM
 - Quadriceps and hip external rotators strength > 90% contralateral side
 - Satisfactory clinical exam
 - Functional hop test > 90% contralateral side
 - Completion of running program

This is strictly an outline of most of the major exercises that we would like to incorporate into the patellofemoral rehabilitation. Not all exercises need to be done. Two main goals are that appropriate progress is made on a weekly basis and that communication exists between patient, therapist, and doctor.