

MPFL Reconstruction



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GENERAL GOALS

1. Restore normal joint function
 - a. Control pain and inflammation
 - b. Restore range of motion
 - c. Restore muscle strength
 - d. Improve proprioception and agility
 - e. Restore endurance
2. Return to pre-injury unrestricted and sporting activity
 - a. 90% muscle strength and endurance as determined by isokinetic testing or functional hop test
 - b. Functional hop test
 - i. 3 consecutive SLH for distance (90% of contralateral normal)

POST-OP PHASES

Phase I: 0-4 weeks

BRACE

- Protected weight bearing. NWB in brace
- SLR with no extension lag
- Good quad control

EXERCISES

- Quad sets (SLR's) hourly +/- e-stim (4 directions)
- Ankle pumps, HS and gluteal sets
- Active extension from 90-50 degrees out of brace
- * Patella Mobs – superior/inferior and med/lat
- AROM/PROM exercises – (0-90 degrees)
- Hip flexor exercises, hip abductor exercises

Phase II: 5-8 weeks

CRITERIA TO PROGRESS TO PHASE II

- Minimal swelling
- Gait with full extension
- Ability to lock knee while weight bearing
- Can discontinue brace beginning week 6
- Advance to FWB/no crutches over this phase

EXERCISES

- Increase AROM/ PROM beyond 90 degrees: no limits
- Stationary bike: no resistance
 - Advance duration as tolerated
- Resisted gastroc/soleus exercises with TheraBand only
- Progress to bilateral toe raises and then to unilateral toe raises
- Resisted hamstring curls with TheraBands
- Step-ups (lateral and forward) on 2-4 inch steps
 - Increase at own individual pace
- Forward and backward walking with TheraBand around thighs
- Ankle weights to SLR if no extension lag

Phase III: 9-12 weeks

CRITERIA TO PROGRESS TO PHASE III

- Full active extension and 110 degrees of flexion
- No extension lag
- Good quad control on single leg stance
- Stairs foot over foot
- WBAT

PROGRAM

- Stationary cycle with light resistance
 - RPM>80
 - Progress to 15-20 minutes per day
- Leg Press or Total Gym 40-45 degrees knee flexion toward full extension
- Calf raises using leg machine to add resistance
- Proprioception exercises
 - Balance Board/BABS
 - TheraBand “kicks” (wt bear on operative leg)
 - Pool program if available
 - Resistance Walking (forward/backward)
 - Hip exercises (all muscle groups)
- Stair stepper or seated Kinitron if no anterior knee pain
 - Begin for 1-5 minutes
 - Short steps (4-6”) Can gradually increase time to 15 minutes

*If you have any problems or questions,
please call your doctor's office (8am-5pm).
Answering service for after hours.*

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Phase IV: 12 weeks +

CRITERIA TO PROGRESS TO PHASE IV

- Full AROM
- Normal gait
- No swelling or pain

PROGRAM

- Increase intensity and resistance for exercises above
- Heel taps
- Start light agility drills
 - Carioca
 - Single-leg hopping on total gym
- Slow lunges with tubing

EXERCISES AT 16 WEEKS

- Perform isokinetic testing (180deg/sec) or single leg hop 3 consecutive for distance
- Begin light jogging on treadmill
- Lunges and side-to-side and front-back agility work
 - Side-to-side jumps and hops
 - Side-to-side steps
- Single leg hopping off total gym
- Braiding
- Jumping rope
- Weight machines
 - Increase weight and intensity for all lower extremity muscle groups
 - 10% increases weekly
 - Open and closed chain exercises
 - Plyometrics
- HEP