

## MEDIAL PATELLOFEMORAL LIGAMENT (MPFL) RECONSTRUCTION REHAB PROTOCOL

- Limited activity with ice and elevation for five days to prevent hemarthrosis and minimize swelling. Out of bed to eat, use bathroom, therapy, and shower.
- WBAT using crutches for five days for balance ONLY. Encourage Full WB ASAP.
- Knee Brace locked in full extension of 2 weeks, then open ROM and transition out of the brace during week 3 and 4. DC the brace by week 4.
- Bandage for 3 days post op.
- May shower, rolling saran wrap or press and seal over the bandage, keeping dressing dry
- ROM gentle, but not forced
- Extension stretches four times daily for fifteen minutes per session (minimum)
- Straight Leg raises, fifty twice daily as tolerated
- Start PT between week 1 and 2.
- Ankle pumps every hour
- Ted hose twenty hours per day
- Aspirin or Advil (unless contraindicated) one pill twice daily; continue for a full two weeks

### WEEK 2 - 6

EDEMA CONTROL: Ice full time for one week. Expect effusion to be resolved by week two or three with minimal knee swelling thereafter.

### RANGE OF MOTION:

- PASSIVE: As tolerated with emphasis on extension. Extension stretches four times daily (add prone hangs as needed).
- ACTIVE: as tolerated.
- GOALS: Full extension cold by postop day #7. - 0 - 130 by four weeks postop.

**FOUR QUADRANT LEG LIFTS:** Straight leg raises beginning postop day #1. Progress to four quadrant exercises as tolerated. Advance to progressive closed chain exercises when no limp noted and good quad control achieved.

**CLOSED KINETIC CHAIN EXERCISES:** 1/3 knee bends and unilateral involved leg squats started when tolerated. Bicycle with involved leg against resistance allowed when no limp noted, good quad control achieved, and 110 degrees of flexion obtained; increase resistance as tolerated. Leg presses, rowing machine, Stairmaster, Nordic Track etc. started with involved leg when bicycle tolerated well for fifteen minutes. Avoid all open chain exercises for twelve weeks.

**WELL LEG EXERCISES / AEROBIC CONDITIONING:** Well leg exercises including bicycle, squats, leg presses etc. to start as tolerated. Upper body ergometer, weights, etc. as tolerated to maintain strength and conditioning.

#### WEEK 7 – 8

AGGRESSIVE ROM stretches, aerobic conditioning on stationary bicycle or elliptical trainer.

#### WEEK 9 – 12

ADVANCED EXERCISES: Jogging or free wheel biking on level surface, controlled environment, golf, and swimming beginning at week eight with surgeon's ok.

- Jogging forward and backward against sport cord, treadmill forward and backward, plyometrics, lateral sport cord, ski fitter, mini tramp and jump roping to begin thereafter as tolerated.

#### WEEK 13 – 16

OPEN CHAIN EXERCISES: If patient has full painless ROM and is progressing on schedule, begin with five pounds max. HEP of 10 sets of 10 twice daily. When patient can perform ten sets of ten without quad fatigue, then advance 5 lbs. Continue to advance up to 25 lbs. DO NOT exceed 25 lbs open chain. If patient develops patellofemoral pain or crepitus, D/C open chain immediately. Retro walking and retro biking with resistance for quad specific strengthening

#### WEEK 17 – 24

RETURN TO SPORTS CRITERIA:

- Painless ROM equal to non-operated knee
- No effusion
- Excellent quad contour and control.
- Quad girth progressing toward normal.
- Agility training and proprioceptive feedback termed excellent.