



Name:		Patient Flow Sheet
Date of Surgery:		

Arthroscopic MPFL Reconstruction Rehab Protocol Benedict Figuerres, MD

- **Phase I—Immediate Postoperative Phase (Weeks 0-2)**

Date: _____

- Goals:

- Protect fixation and surrounding soft tissue
- Control pain and inflammation
- Regain active quadriceps contraction
- Minimize adverse effects of immobilization
- Regain full knee extension

- Bracing and Weight Bearing Status:

- Weeks 0-2:
 - Brace locked in extension
 - WBAT with crutches

- ROM and CPM (if available) Goals:

- Weeks 0-2:
 - Progressing to 0-90 degrees

- Days 1-14:

- Quad sets, hamstring sets, glut sets
- Active-assistive heel slides with towel, within ROM guidelines
- Gastroc/soleus, hamstring stretches
- 4-way SLR (hip abduction, adduction, extension, flexion) with brace locked in extension
- Cryotherapy and E-stim PRN for pain and inflammation

- **Phase II—Maximum Protection Phase (Weeks 2-6)**

Date: _____

- Goals:

- Manage pain and swelling
- Range of motion: progressing to full ROM
- Good quadriceps contraction with ability to perform SLR with no extensor lag
- Improve soft tissue and scar mobility
- Improve patellar mobility

- Bracing and Weight Bearing Status:

- Weeks 2-6
 - Brace can be unlocked when patient can perform SLR x 20 with no extensor lag
 - WBAT with crutches
 - Criteria to D/C crutches:
 - Non-antalgic gait pattern
 - Full knee extension ROM

- ROM and CPM (if available) Goals:

- Week 3: at least 120 degrees knee flexion
- Weeks 4-6: full ROM equal to contralateral

- Weeks 2-4:

- Continue above listed exercises
- Isotonic hamstring curls within ROM guidelines
- Instruct patient in self-scar tissue mobilizations when incisions are healed
- PFJ mobilizations (no lateral glides)

- Weeks 4-6:

- **MD recheck at 6 weeks**
- Continue above listed exercises

- Bike within ROM guidelines, starting with ½ revolutions
- Quad sets with NMES as need for improved quad activation
- Total gym or partial wall squats (0-45 degrees)
- Initiate proprioceptive/balance training: DLSL once patient has sufficient quad control
- Initiate core strengthening exercises
- Continue cryotherapy and E-stim PRN for pain and inflammation

- **Phase III—Intermediate Phase (Weeks 6-12)**

Date: _____

- Goals:

- Progress to full ROM equal to contralateral
- Demonstrate normalized gait with no assistive device or brace
- Avoid overstressing fixation site (excessive dynamic valgus, lateral patellar gliding, etc.)
- Improve quadriceps control and lower extremity strength

- Bracing and Weight Bearing Status:

- Weeks 6-8:
 - Progress to FWB
 - MD D/C's brace and patient transitions to lateral patella stabilizing brace

- ROM Guidelines

- Progress to full ROM

- Week 6-12:
 - **MD recheck at 12 weeks**
 - Continue and progress above listed exercises
 - Emphasize full ROM equal to contralateral
 - Progress hip strengthening—clam shells, standing hip extension and abduction, lateral band walks, monster walks, etc.
 - Progress core strengthening—planks, Swiss ball exercises, etc.
 - Step ups, starting at 2-inch step progressing to 8 inches +
 - Partial lunges (0-45 degrees), starting with involved leg in the front monitoring PFJ tracking
 - Partial lunges (0-45 degrees)
 - Increase resistance on stationary bike
 - Step downs, starting at 2-inch step progressing to 6-8-inch step
 - Continue proprioceptive/balance activities: DLSL, solidunstable, eyes openeyes closed, predictableunpredictable. ****Caution with single leg balance on unstable surfaces prior to 3 months unless patient demonstrates good postural control**
 - Continue flexibility exercises; initiate quad stretch
 - Continue cryotherapy and E-stim PRN for pain and inflammation

- **Phase IV—Dynamic Strengthening Phase (Weeks 12-16)**

Date: _____

- Goals:
 - Demonstrate full knee ROM equal to contralateral
 - Improve strength, balance, and proprioception
 - Minimal to no pain
 - Completion of isokinetic testing (if available) at approximately week 12 for progression to running
 - Initiate running program

- Weeks 12-16:

- Continue and progress above listed exercises
- Testing (if available)
 - Isokinetic testing (90/180/300 degrees/sec, full ROM, 10/15/15

	<p>reps)</p> <ul style="list-style-type: none"> • Maintain/beginning running (if patient fulfills criteria and with physician clearance) <ul style="list-style-type: none"> • If testing not available, assess for good lumbo/pelvic/hip control, good eccentric quad control with single leg squat and step downs • Running progression: <ul style="list-style-type: none"> • Treadmill walking • Treadmill walk/run interval • Treadmill run • Track: run straights, walk turns • Track: run straight and turns • Run on road • Introduce low impact agility and plyometric exercises <p>• Phase V—Return to Sport/Activity Phase (Weeks 16-24) Date: _____</p> <ul style="list-style-type: none"> • <u>Goals:</u> <ul style="list-style-type: none"> • Development of strength, power, endurance • Gradual return to higher level work activities • Gradual return to recreational sport activities • <u>Weeks 16-24:</u> <ul style="list-style-type: none"> • Exercises: <ul style="list-style-type: none"> • Continue all above exercises • Continue and progress running progression • Emphasize eccentric quad work • Progress plyometric program—DLSL, stable/unstable, single planar/multi-planar, controlled/uncontrolled situations • Progress agility activities • Sports specific training and drills • Testing (if available) <ul style="list-style-type: none"> • Isokinetic testing (90/180/300 degrees/sec, full ROM, 10/15 reps) <ul style="list-style-type: none"> • Compare scores to 3-month testing • Quadriceps bilateral comparison (80% or greater) • Hamstring bilateral comparison (110% or greater) • Quadriceps torque/body weight ratio (55% or greater) • Hamstrings/quadriceps ratio (70% or greater) • Complete return to sport evaluation at 90% or greater of contralateral lower extremity