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### **LEFT or RIGHT ARTHROSCOPIC MICROFRACTURE PROCEDURE** *(With or Without Meniscus Surgery)*

### **PHYSICAL THERAPY PROTOCOL**

**Patient Name:**

**Date:**

**Date of Surgery:**

### **Post Operative - Weeks 1-6**

- ☐ TTWB with Brace Locked in Extension when ambulating with crutches at all times for the first 2 weeks post-surgery
- ☐ Please open Knee Brace to ROM as tolerated at week 2 to 6 with transition to PWB with crutches.
- ☐ ROM as tolerated when out of brace for CPM machine.
- ☐ CPM starting Post Operative Day #3 from 0-90 and advance as tolerated. 2-3X / Day for 2-3 hours per session. (6 weeks)

**\*\* Please take your brace off for CPM sessions \*\***

- When ambulating, it is very important that you wear your brace at all times, locked in extension, and TTWB for the first 2 weeks.
- Please do ankle pumps daily for the first 2 weeks after surgery to prevent DVT (deep vein thrombosis)
- Please follow the general postoperative instruction for arthroscopic knee surgery.

## **Weeks 6-14**

Supervised PT – 2 to 3 times a week

### **GOALS**

- ☐ Restore full ROM
- ☐ Restore normal gait
- ☐ Demonstrate ability to ascend and descend 8-inch stairs with good leg control without pain
- ☐ Improve ADL endurance
- ☐ Independence in HEP

### **PRECAUTIONS**

- Avoid descending stairs reciprocally until adequate quad control and lower extremity alignment
- Avoid pain with therapeutic exercise and functional activities
- Avoid running and sport activity

### **TREATMENT STRATEGIES**

1. 50% WB to start at week 6. Progressive WBAT at week 7 or 8 as quad control allows (good quad set/ability to SLR without pain or lag).
2. Aquatic therapy if available – pool ambulation or underwater treadmill
3. D/C crutches or cane when gait is non-antalgic after week 7 or 8
4. AAROM exercises
5. Patellar mobilization
6. SLR's in all planes with weights
7. Proximal PREs
8. Neuromuscular training (bilateral to unilateral support)
9. Balance apparatus, foam surface, perturbations
10. Short crank stationary bike
11. Standard stationary bike (when knee ROM >115)
12. Leg press – bilateral/eccentric/unilateral progression
13. Squat program (PRE) 0-60deg
14. Open chain quad isotonics (pain free arc of motion)
15. Initiate step-up and step-down programs
16. StairMaster
17. Retrograde treadmill ambulation
18. Quad stretching
19. Elliptical machine
20. Forward Step-Down Test
21. Upper extremity cardiovascular exercises as tolerated
22. Cryotherapy
23. Emphasize patient compliance to HEP

### **CRITERIA FOR ADVANCEMENT**

- ☐ ROM to WNL
- ☐ Ability to descend 8-inch stairs with good leg control w/o pain
- ☐ Add water exercises if desired (and all incisions are closed and sutures out)

## **Weeks 14-22**

### **GOALS**

- ☐ Demonstrate ability to run pain-free
- ☐ Maximize strength and flexibility as to meet demands of ADL
- ☐ Hop test  $\geq 85\%$  limb symmetry
- ☐ Isokinetic test  $> 85\%$  limb symmetry
- ☐ Lack of apprehension with sport-specific movements
- ☐ Flexibility to accepted levels of sport performance
- ☐ Independence with gym program for maintenance and progression of therapeutic exercise program at discharge

### **PRECAUTIONS**

- Avoid pain with therapeutic exercise and functional activities
- Avoid sport activity until adequate strength development

### **TREATMENT STRATEGIES**

1. Progress squat program  $< 90$ -degree flexion
2. Lunges
3. Start forward running (treadmill) program at 4 months postop if 8-inch step down satisfactory
4. Cont LE strengthening and flexibility programs
5. Agility program/sport specific ( sports cord)
6. Start plyometric program when strength base is sufficient
7. Isotonic knee flexion/extension (pain and crepitus-free arc)
8. Isokinetic training (fast to moderate to slow velocities)
9. Functional testing (hop test)
10. Isokinetic testing
11. HEP

### **CRITERIA FOR DISCHARGE**

- ☐ Symptom-free running and sport-specific agility
- ☐ Hop test  $> 85\%$  limb symmetry
- ☐ Isokinetic test  $> 85\%$  limb symmetry
- ☐ Lack of apprehension with sport specific movements
- ☐ Flexibility to acceptable levels of sport performance
- ☐ Independence with gym program for maintenance and progression of therapeutic exercise program at discharge

This is strictly an outline of most of the major exercises that we would like to be incorporated in your post operative rehab protocol. 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.

\* Please send progress notes \*

Physician's Signature: \_\_\_\_\_

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