Xinning Li, M.D.

Associate Professor Sports Medicine and Shoulder Surgery Boston University School of Medicine – Boston Medical Center Boston University Athletics – Team Physician 725 Albany Street – 4th Floor Boston, MA 02118



(617) 638-5633 (Telephone – Shapiro Office) (617) 358-3400 (Telephone – Ryan Center) (617) 414-5226 (Fax) www.tigerortho.com



Date:

Patient Name:

Date of surgery:

Visit per week:

ARTHROSCOPIC MENISCAL REPAIR (ACL INTACT KNEE)

PHYSICAL THERAPY PRESCRIPTION

Patient Name:

WEEK 1-2 _____ Ambulate FWB in Bledsoe Brace locked @ 0° in Full Extension for first 4

weeks

- ____ Crutches 1-2 weeks
- ____ Limit Range of Motion in weeks 1-2 from 0° to 70°
- Range of Motion Active / Active-Assisted / Passive
- ____ Quadriceps and Hamstring stretching
- ____ Quadriceps Strengthening ____ V.M.O. Strengthening
 - _____ Full Arc _____ 0-30° Arc
- ____ Hamstring Strengthening
- _____Begin Straight Leg Raises (Knee at 0° in Full Extension)
- ____ Quad Isometrics
- ____ Achilles Tendon Stretching
- ____ Electrical Stimulation for Quadriceps

Date:

Start Formal PT between week 2 to 3.

WEEK 3-4 Range of Motion in weeks 3-4 increase 0° to 90°

____ Unlock Brace @ 4 weeks and return to normal gait

____ May Begin Exercise Bike, Closed Kinetic Chain Exercises

WEEK 5-6 Range of Motion in weeks 5-6 increase to Full ROM

____ Discard Brace @ 6 weeks

Weeks 6-14

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

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

- WBAT in full extension until week 8
- Progressive at week 8 to WBAT with brace unlocked at 45 deg as quad control allows (good quad set/ability to SLR without pain or lag). May use crutches/cane if needed
- Aquatic therapy if available pool ambulation or underwater treadmill
- D/C crutches or cane when gait is non-antalgic with along with brace
- AAROM exercises
- Patellar mobilization
- SLR's in all planes with weights
- Proximal PREs
- Neuromuscular training (bilateral to unilateral support)
- Balance apparatus, foam surface, perturbations
- Short crank stationary bike
- Standard stationary bike (when knee ROM >115)
- Leg press bilateral/eccentric/unilateral progression
- Squat program (PRE) 0-60deg

- Open chain quad isotonics (pain free arc of motion)
- Initiate step-up and step-down programs
- StairMaster
- Retrograde tredmill ambulation
- Quad stretching
- Elliptical machine
- Forward Step-Down Test
- Upper extremity cardiovascular exercises as tolerated
- Cryotherapy
- 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

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

Signature:_____

Xinning Li, M.D. Associate Professor Boston University School of Medicine <u>www.xinningli.com</u>

