Department of Orthopaedic Surgery Sports Medicine and Shoulder Service

Knee Tibiofemoral Microfracture Rehab Protocol Prescription

Patient Name:		Date:	
Diagnosis: Articular cartilage lesion (Frequen am é:	MTP	LTP)	

Progressive WBAT 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/Ccrutches or cane when gait is non-antalgic

AAROM exercises

Patellar mobilization

SLRs 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) 0-60 deg

Open chain quad isotonics (pain free arc of motion)

Initiate step-up and step-down programs

Stairmaster

Retrograde treadmill ambulation

Quad stretching

Bliptical 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 >85% limb symmetry

Isokinetic test >85% limb symmetry

Lack of apprehension with sport-specific movements

Hexibility to accepted levels of sport performance

Independence with gym program for maintenance and progression of therapeutic exercise program at discharge

TREATMENT STRATEGIES

Progress squat program < 90 degree flexion

Lunges

Start forward running (treadmill) program at 4 months postop if 8-inch step down satisfactory

Continue LEstrengthening 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

Hexibility to acceptable levels of sport performance

Independence with gym program for maintenance and progression of therapeutic exercise program at discharge

Functional testing at 5 months, then monthly until passing