

## PHYSICAL THERAPY PRESCRIPTION

### FRANK A. PETRIGLIANO, MD

CHIEF – DIVISION OF SPORTS MEDICINE  
HEAD TEAM PHYSICIAN – LA KINGS  
ORTHOPAEDIC SURGERY AND SPORTS MEDICINE  
USC DEPARTMENT OF ORTHOPAEDIC SURGERY  
323.442.5822 OFFICE  
323.865.5480 FAX



Keck Medicine  
of USC

PATIENT STICKER

DATE OF SURGERY: \_\_\_\_\_

DIAGNOSIS: (LEFT/RIGHT) **CARTILAGE REPAIR** (MICROFRACTURE/OATS/ALLOGRAFT OATS)  
(MEDIAL FEMORAL CONDYLE/LATERAL FEMORAL CONDYLE/TROCHLEA /PATELLA)

### PHYSICAL THERAPY PRESCRIPTION

#### PHASE 1: EARLY 0-6 WEEKS

- ★ **Knee brace** thru 6 weeks
- ★ **Non-weightbearing** with crutches x6 weeks (TTWB ok for patella/trochlea)
- ★ **CPM** ~ 3-4 hours daily x6 weeks, start 0-60 degrees post-op, progress to 110 degrees by 6 weeks, and full ROM by 12 weeks post-op.

#### ROM Exercises:

- Week 0 - 6: 0-110 degrees
- Goal: 90 degrees flexion by week 3; 110 degrees by week 6

#### Isometric quad sets and SLR:

- Start immediately post-op
- Wear knee brace during SLR
- May apply e-stim for poor quad function

#### Pre-Progression: Emphasize VMO Strengthening

- Multiple angle isometrics
- Eccentric closed chain isotonic
- Concentric closed chain isotonic
- Eccentric open chain isokinetics (performed in 90-30 deg arc)
- Concentric open chain isokinetics, submaximal
- Eccentric open chain isotonic
- Concentric open chain isotonic, submaximal
- Concentric open chain isotonic, maximal

- Gentle multi-directional patella mobilization immediately after surgery
- Massage/deep friction to hamstring insertions, suprapatellar quadriceps, medial/lateral gutters, and infrapatellar regions 2-3 weeks post-op

#### Pre-Progressive (continued):

# PHYSICAL THERAPY PRESCRIPTION

- Hamstring/adductor/abductor/quadriceps/Achilles stretching
- Whirlpool therapy if available at 2-3 weeks post-op to enhance motion
- Stationary bicycle with no resistance once 90 degrees knee flexion obtained (~4 weeks)
- Anti-inflammatory modalities as needed (US/massage/e-stim)
- Cryotherapy and compression stockings/TEDS for swelling and pain control

## **PHASE 2: TRANSITIONAL PHASE**

**\*\*Weight-bearing status:** use bathroom scale to progress as follows:

- ★ week 7: PWB 1/3 body weight
- ★ week 8: PWB 2/3 body weight
- ★ week 9: FWB with crutches
- ★ week 10+: crutch, cane, or no device as tolerated

**ROM Exercises:** Continue full AROM and gentle PROM exercises  
CPM may be discontinued

- Low weight (max 10-20lbs.) open-chain leg extension and curl
- Stationary bicycle with gradual increased tension per level of comfort
- Continue quad sets, SLR in brace, leg curl and heel slides
- Strengthen quads, hamstrings, and hip abductors/extensors using ankle weights and/or elastic band resistance through full ROM as tolerated
- Gentle closed-chain terminal knee extension 0-40 degrees (TKE) permitted starting at 9-10 weeks as tolerated per weight bearing restriction
- Continue multi-directional patella mobilization
- Hamstring/adductor/abductor/quadriceps/Achilles stretching
- Whirlpool therapy if available to enhance motion and quadriceps/hamstring muscle control
- E-stim for VMO/quadricep muscle re-education/biofeedback as needed
- Gentle massage/deep friction to hamstring insertions, suprapatellar quadriceps, medial/lateral gutters, and infrapatellar regions
- Activity level should be modified if increased pain, catching, or swelling occurs

## **PHASE 3: REMODELING PHASE 13 WEEKS+**

**\*\*Weight-bearing status:** full weight-bearing as tolerated with crutch or cane as needed/pain allows

**ROM Exercises:** Continue full AROM and gentle PROM exercises  
CPM may be discontinued

### **Therex**

- Resisted open-chain exercise with  $\leq$  20lbs to be progressed as tolerated after 6 months
- Closed-chain exercise to promote knee stability and proprioception through full ROM as tolerated
- Cycling on level surfaces permitted with gradual increase in tension per level of comfort
- Treadmill walking encouraged
- Rollerblading permitted at 6-7 months

## **PHASE 3: REMODELING (CONTINUED)**

## PHYSICAL THERAPY PRESCRIPTION

- Continue multi-directional patella mobilization
- Hamstring/adductor/abductor/quadriceps/Achilles stretching
- Whirlpool therapy if available to enhance motion and quadriceps/hamstring muscle control
- E-stim for VMO/quadricep muscle re-education/biofeedback as needed
- Gentle massage/deep friction to hamstring insertions, suprapatellar quadriceps, medial/lateral gutters, and infrapatellar regions
- Activity level should be modified if increased pain, catching, or swelling occurs

\*\*no pivoting sports should be started without MD clearance

\*\*no squats, no leg presses allowed

Treatment: \_\_\_\_\_ times per week    Duration: \_\_\_\_\_ weeks

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

Frank A. Petrigliano, MD, Attending Orthopaedic Surgeon, USC