



Indiana University Health

IU Health Physicians Orthopedics & Sports Medicine

CARTILAGE RESTORATION – PATELLAR OR TROCHLEAR CARTILAGE

PHYSICAL THERAPY PROTOCOL

Bryan M. Saltzman, M.D.

Chief, Division of Sports Medicine & Shoulder/Elbow Surgery

Indiana University Health Physicians

Assistant Professor of Orthopaedic Surgery, Indiana University

Sports Medicine, Cartilage Restoration, Shoulder/Elbow Surgery

IU Health Methodist Medical Plaza North (MSK) – 201 Pennsylvania Pkwy #100,
Carmel, IN 46280

IU Health Methodist Hospital – 1801 N Senate Ave, Indianapolis, IN 46202
317-944-9400

www.bryansaltzmanmd.com

Patient Name: _____ **Date of Surgery:** _____

____ **Evaluate and Treat** ____ **Provide patient with home program**

Frequency: _____ x/week x _____ weeks

PHASE I (Weeks 0 – 6):

Period of protection, decrease edema, activate quadriceps



- **Weightbearing:** Full with brace
- **Hinged Knee Brace:**
 - **Week 0-1:** Locked in full extension for ambulation and sleeping (remove for CPM and PT)
 - **Weeks 2-6:** Unlock brace as quad control improved; discontinue when able to perform SLR without extension lag
- **Range of Motion:** Continuous Passive Motion (CPM) machine for 6-8 hours/day
 - **CPM Protocol:** 1 cycle per minute starting 0-30° (weeks 0-2), 0-60° (weeks 2-4), 0-90° (weeks 4-6)
- **Therapeutic Exercises:**
 - **Weeks 0-2:** quad sets, calf pumps, passive leg hangs to 45°
 - **Weeks 2-6:** PROM/AAROM to tolerance, gentle patellar mobs, quad/HS/glute sets, SLR, side-lying hip and core exercises
- **Modalities:** Per therapist, including electrical stimulation, ultrasound, heat (before), ice (after)

Phase II (Weeks 6 – 8)

- **Weightbearing:** Full
- **Hinged Knee Brace:** None
- **Range of Motion:** Progress to full, painless AROM
- **Therapeutic Exercises:** Advance Phase I
- **Modalities:** Per therapist, including electrical stimulation, ultrasound, heat (before), ice (after)

Phase III (Weeks 8 – 12)

- **Weightbearing:** Full
- **Range of Motion:** Full, painless
- **Therapeutic Exercises:** Advance Phase II, begin closed chain exercises (wall sits, shuttle, mini-squats, toe-raises), begin stationary bike, begin unilateral stance activities and balance training
- **Modalities:** Per therapist, including electrical stimulation, ultrasound, heat (before), ice (after)

Phase IV (Weeks 12 – 24)

- Advance Phase III exercises; focus on core/glutes; advance to elliptical, bike, and pool as tolerated

Phase V (>6 months):



Gradual return to athletic activity

- Encourage maintenance program
- Return to sport-specific activity and impact when cleared by MD at 8-9 months postop

By signing this referral, I certify that I have examined this patient and physical therapy is medically necessary. This patient ___ would ___ would not benefit from social services.

Date: _____

Bryan M. Saltzman, MD