Banner. Sports Medicine

Banner New River Trails Sun City West Medical Center Thunderbird Medical Center

Physical Therapy Prescription – Cartilage Restoration of Patellofemoral Joint and Femoral Condyle

Procedure: Cartilage Restoration of PFJ and Femoral Condyle

Frequency: 2-3 times per week for 6 weeks

PHASE I (Weeks 0 – 6): Period of protection, decrease edema, activate quadriceps

- Weightbearing: Toe-touch WB in brace locked in extension with crutches
- Hinged Knee Brace: Locked in full extension for ambulation and sleeping (remove for CPM and PT)
- 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), Progress 15° each week till 6 weeks
- Therapeutic Exercises:
 - Weeks 0-2: quad sets, calf pumps, passive leg hangs to 40°
 - 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 - 12)

- Weightbearing: Advance 25% every 3-4 days until full WB at 8 weeks with normalized gait pattern
- Hinged Knee Brace: Wean between 6-8 weeks; discontinue completely once good quad control
- Range of Motion: Progress to full, painless ROM by 6 weeks
- Therapeutic Exercises: Advance Phase I exercises, advance floor-based core/glute exercises; SLR without brace if good quad control, partial wall-sits, terminal knee extension with theraband 0-45°
 - Begin gentle stationary bicycle at 6 weeks
 - o Begin unilateral stance activities and balance training
- Modalities: Per therapist, including electrical stimulation, ultrasound, heat (before), ice (after)

Phase III (Weeks 12 - 16)

- Therapeutic Exercises: Advance Phase II exercises, advance closed chain quad exercises, work on functional balance and core strengthening, progress with stationary bike; start slow treadmill walking
 Elliptical and Swimming at 12 weeks
- Modalities: Per therapist, including electrical stimulation, ultrasound, heat (before), ice (after)

Phase IV (Weeks 16 - 24)

• Advance Phase III exercises; focus on core/glutes; progress flexibility and strengthening; maximize single leg dynamic and static balance and strength; initiate light plyometrics; improve treadmill walking

Phase V (>6 months): Gradual return to athletic activity

- Advance Phase IV exercises; focus on single leg dynamic and static balance
- Return to sport-specific activity and impact when cleared by MD at 6-8 months postop