

Physical Therapy Prescription – Cartilage Restoration of Patellofemoral Joint with Tibial Tubercle Osteotomy

Procedure: Cartilage Restoration of PF Joint and TTO

Frequency: 2-3 times per week for 6 weeks

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

- **Weightbearing:** Toe Touch/Heel touch WB in brace locked in extension with crutches
- **Hinged Knee Brace:** Locked in full extension at all times. Remove for CPM and PT
- **Range of Motion:** Continuous Passive Motion (CPM) machine for 4-6 hours/day
 - **CPM Protocol:** Start 0-30° (weeks 0-2), Progress 15° each week till 6 weeks post op
- **Therapeutic Exercises:**
 - **Weeks 0-2:** quad sets, calf pumps, passive leg hangs to 40°
 - **Weeks 2- 6:** PROM/AAROM correlated CPM ROM, gentle patellar mobs, quad set without SLR, HS/glute sets, side-lying hip and core exercises
- **Modalities:** Per therapist, including electrical stimulation, ultrasound, heat (before), ice (after)
- **PRECAUTION:** Refrain from straight leg raise until after 6 weeks.

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, terminal knee extension with theraband 0-45°
 - Begin gentle stationary bicycle and partial wall-sits at 8 weeks
 - 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 months postop

Signature: _____

Date: _____