Assistant Professor, Department of Orthopedic Surgery University of South Dakota School of Medicine www.MatthewBlakeMD.com



## Physical Therapy Prescription – Tibial Tubercle Osteotomy With Cartilage Restoration

Name:	Date:
Procedure: R / L	Date of Surgery:

Frequency: 2-3 times per week for \_\_\_\_\_ weeks

**PHASE I (Weeks 0 – 2):** Period of protection, decrease edema, activate quadriceps

- Weightbearing: Heel-touch WB in brace locked in extension with crutches
- Hinged Knee Brace:
  - Weeks 0-2: Locked in full extension at all times (remove for PT)
- Range of Motion: AROM/AAROM/PROM 0-45°. CPM 0-30°
- Therapeutic Exercises: Quad sets, patellar mobs, SLR, calf pumps at home. CPM at home.
- Modalities: Per therapist, including electrical stimulation, ultrasound, heat (before), ice (after)

Phase II (Weeks 2 – 8)

- Weightbearing:
  - Weeks 2-6: Heel touch only
  - Weeks 6-8: Advance 25% weekly until full WB with normalized gait pattern
- Hinged Knee Brace:
  - Weeks 2-4: Unlocked 0-45°
  - 4-6 Weeks: Unlocked 0-90°. Discontinue at 6 weeks. Wean between 6-8 weeks; discontinue completely once good quad control
- Range of Motion:
  - Weeks 2-4: CPM 0-60°
  - Weeks 4-6: CPM 0-90° then advance ROM as tolerated when non-WB
  - Progress to full, painless ROM by 6 weeks
- Therapeutic Exercises:
  - Weeks 2-6: Add side lying hip and core, advance quad set and stretching
  - Weeks 6-8: Addition of heel raises, total gym (closed chain), gait normalization, eccentric quads, eccentric hamstring. Advance core, glutes and pelvic stability.
- Modalities: Per therapist, including electrical stimulation, ultrasound, heat (before), ice (after)

## Phase III (Weeks 8 – 12)

- Weightbearing: Full
- Hinged Knee Brace: None
- Range of Motion: Full, painless
- **Therapeutic Exercises**: Progress closed chain activities. Advance hamstring work, proprioception/ balance exercises; hip/core/glutes.
  - Begin stationary bike at 10 weeks.
  - Add elliptical at 12 weeks
  - Swimming allowed at 12 weeks
- Modalities: Per therapist, including electrical stimulation, ultrasound, heat (before), ice (after)

## Phase IV (Weeks 12 – 24)

• Advance Phase III exercises and functional activities: walking lunges, planks, bridges, swiss ball, half-bosu exercises. Advance core/glutes and balance.

Phase V (>6 months): Advance to all activity. No impact such as running, jumping, pivoting, sports until cleared by MD.

Signature:

Date: \_\_\_\_\_