



Physical Therapy Prescription – High Tibial Osteotomy



NOTE: If done concurrently with a cartilage restoration procedure (OCA, DeNovo, MACI), **please defer to that protocol for differences.**

PHASE 0: Pre- operative goals (i.e. Pre-hab)

- **Normal Gait**
- **AROM** 0-120 degrees
- **Strength:** 20 SLR with no lag.
- **Minimal Effusion**
- **Patient Education on Post op exercises with a stress on compliance and importance**
- **Education on ambulation with crutches and safe stair use**
- **Wound care instructions**
 - Keep tegederm clean and dry, no showering until 48hrs post-op then remove ACE, No submerging (bath, hot-tub, lake, river, ocean) for 6 weeks post op. Formal instructions will be listed in operative note and packet.

Educated in follow-up (also provided in packet) : 10-14 days post op, 6 weeks, 3 months, 6 months, 9 months, 1 year, 2 years, 5 years.

PHASE I (Weeks 0 – 2):

 Period of protection, decrease edema, activate quadriceps

- **Weightbearing:** Heel-touch in brace locked in extension
- **Hinged Knee Brace:** Locked in full extension for ambulation and sleeping (remove for PT)
- **Range of Motion:** AROM/AAROM/PROM with therapist; goal of 90°
- **Therapeutic Exercises:** calf pumps, quad sets, heel slides 0-90°, SLR in brace locked in full extension
- **Modalities:** Per therapist, including electrical stimulation, ultrasound, heat (before), ice (after)

Phase II (Weeks 2 – 6)

- **Weightbearing:** Heel-touch in brace
- **Hinged Knee Brace:** Unlocked 0-90°, off at night; discontinue completely at week 6 if good quad control
- **Range of Motion:** Progress to full, painless AROM
- **Therapeutic Exercises:** Advance Phase I, progress non-weight bearing flexibility, begin floor-based core/glute exercises; straight-leg raises with brace in full extension until quad strength prevents extension lag
- **Modalities:** Per therapist, including electrical stimulation, ultrasound, heat (before), ice (after)

Phase III (Weeks 6 – 8)

- **Weightbearing:** Advance 25% weekly until full WB with normalized gait pattern
 - **Range of Motion:** Full
- **Therapeutic Exercises:** Advance Phase II, begin closed chain exercises (wall sits, shuttle, mini-squats, toe-raises), begin stationary bike
- **Modalities:** Per therapist, including electrical stimulation, ultrasound, heat (before), ice (after)

Phase IV (Weeks 8 – 16)

- Advance Phase III exercises; focus on core/glutes; progress flexibility and strengthening
- Add elliptical at 12 weeks
- Swimming allowed at 12 weeks

Phase V (Weeks 16 – 24):

 Gradual return to athletic activity

- Advance Phase IV exercises
- Return to sport-specific activity and impact when cleared by MD at 5 months postop