

High Tibial Osteotomy Opening Wedge

PHASE I – (week 0-6)

- **Weightbearing and Range of Motion:**
 - Non-weightbearing with crutches
 - ROM: As tolerated – CPM for 2 hours, twice daily, from 0-90° of flexion out of brace
- **Brace Use:**
 - Locked in full extension at all times other than PT
- **Weight Bearing:**
 - As tolerated with two crutches (approx. 50% WB)
- **Therapeutic Elements:** (No closed chain exercises until 6 weeks post-op)
 - Heel slides 0-90°
 - Quad sets
 - Ankle pumps
 - Calf/hamstring stretches (non-weightbearing position)
 - Seated leg raise with brace locked in full extension
 - Resisted plantar flexion

PHASE II – (Week 6-8)

- **Weightbearing and Range of Motion:**
 - As tolerated with crutches – begin to advance to a normalized gait pattern with crutches
- **Brace Use:**
 - Unlocked for ambulation
 - Remove for sleeping
 - Discontinue CPM in knee extension is at least 90°
- **Therapeutic Elements:**
 - Continue above
 - SLR without brace if able to maintain full extension
 - Initiate stationary bike with low resistance

Phase III – (Week 8 – 3 Months)

- **Weightbearing and Range of Motion:**
 - Full weightbearing
 - Discontinue crutches when normal gait
- **Brace Use:**
 - Discontinue use – per physician
- **Therapeutic Elements:**
 - Continue above
 - Mini-squats 0-45° progressing to step-ups and leg press 0-60°
 - Closed chain terminal knee extensions
 - Toe raises
 - Balance activities
 - Hamstring curls
 - Increase to moderate resistance on bike

Phase IV – (3-9 Months)

- **Weightbearing and Range of Motion:**
 - Full
 - Pain free
- **Brace Use:**
 - None
- **Therapeutic Elements:**
 - Continue with increased resistance
 - Progress closed chain activities
 - Begin treadmill walking, swimming, and sport-specific activities