

## High Tibial Osteotomy Rehab Protocol

(\*For genu varum deformity)

Patient Name: \_\_\_\_\_

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

Diagnosis: \_\_\_\_\_

DOS: \_\_\_\_\_

Frequency: 1 2 3 4 times/week

Duration: 1 2 3 4 5 6 weeks

### Phase 1 (0-6 weeks)

- Goals: Control swelling, restore neuromuscular communication loops, prevent kinesiphobia; gait training
- Modalities: Compressive cyrotherapy, e-stimulation
- Weightbearing: Non-weightbearing
- Brace:
  - Locked in full extension at all times initial 48 hours (2 days).
  - ROM opened 0-90° from day-2 through 4 weeks
  - ROM opened to full, 0-120° weeks 4-6.
- ROM:
  - First priority is to focus on regaining terminal extension.
  - Advance knee flexion ROM 5-10° daily as tolerated with goal of 90° within 2-3 weeks.
- Exercises:
  - 0-2wks: Quad sets, SLR, calf pumps, passive leg hangs to 90° at home
  - 2-6wks: PROM/AAROM to tolerance, patella and tibiofibular joint mobs, quad, hamstring, and glute sets, SLR, side-lying hip and core

### Phase 2 (6-8 weeks)

- Weightbearing: *\*Guided by 6-week in-office radiographs. Call for clarity if not designated by physician.*
  - Advance 25% weekly until full weightbearing. Instruct patient to recognize maladaptive gait.
- Brace: Begin to wean from brace after 6 weeks. Advocate to continue in uncontrolled settings or adverse weather.
- ROM: Full
- Exercises: Advance phase 1 exercises. Progress weightbearing flexibility, begin toe raises and closed chain quad work. Begin floor-based core and gluteal work, balance exercises, hamstring curls and stationary bike.

### Phase 3 (6-8 weeks)

- Weightbearing: Advance 25% weekly and progress to full with normalized gait pattern
- Brace: None
- ROM: Full
- Exercises: Advance closed chain quads, progress balance, core/pelvic and stability work. Begin stationary bike at 6 weeks. Advance SLR, floor based exercise; hip/core

### Phase 4 (8-16 wks)

- Weightbearing: Full
- Brace: None
- ROM: Full
- Exercises: Progress flexibility/strengthening, progression of functional balance, core, glutes program. Advance bike, add elliptical at 12 weeks as tolerated. Swimming ok at 12 weeks.

Phase 5 (16-24wks)

- Weightbearing: Full
- Brace: None
- ROM: Full
- Exercises: Advance Phase IV activity. Progress to functional training, including impact activity after 20 weeks when cleared by MD.