



ROCKFORD  
ORTHOPEDIC



CRYSTAL LAKE  
ORTHOPEDICS

A DIVISION OF ROCKFORD ORTHOPEDIC ASSOCIATES, LTD.

## Geoffrey S. Van Thiel, MD/MBA

[www.VanThielMD.com](http://www.VanThielMD.com)

[gvanthiel@rockfordortho.com](mailto:gvanthiel@rockfordortho.com)

---

### **Osteochondral Allograft Transplant with a High Tibial Osteotomy**

#### **Phase I (1 – 5 days post-op.)**

- Wound: Observe for signs of infection. OK to remove dressing on post-operative day 5 and begin showering. Keep covered until day 5. Cover incision with gauze and ace wrap.
- Gait: NWB
- Modalities: prn for pain and inflammation (ice, IFC)
- Brace: locked in full extension for ambulation, sleeping and activities for the first 4 weeks. Unlocked or removed for exercises and CPM.
- ROM: CPM use for 4 – 6 hours per day beginning 0 – 40 degrees, 1 cycle/minute. Increase 5 – 10 degrees daily per patient comfort up to 90 degrees for the first 4 weeks. Complete with brace removed.
- Exercises: Quad sets, ankle pumps, hamstring stretching

#### **Phase II (5 days – 4 weeks post op.)**

- Wound: Continue to monitor for signs of infection and begin scar management techniques when incision is closed. OK to remove dressing on post-operative day 5 and begin showering. Keep covered until day 5. Cover incision with gauze and ace wrap.
- Gait: NWB
- Modalities:
  - Ice on regular basis to control swelling
  - E-stim to increase quad contraction
  - sEMG for VMO activation
- Brace: Locked in full extension for ambulation, sleeping and activities for the first 4 weeks. Unlocked or removed for exercises and CPM.
- ROM: Continue Phase I. Goal 0 – 90 degrees at week 4
  - Bike for ROM and strengthening
- Strengthening
  - Isometric quad, SLR, hamstring, hip ab/adduction, and gluteal sets
- Mobilization/Stretching
  - PROM/AAROM to knee to meet goal
  - Patellar mobs

### **Phase III (4 – 12 weeks post-op)**

- Wound: Continue scar management techniques
- Gait: Increase WB 25% per week; FWB at 8 weeks
- Modalities: Continue e-stim or sEMG as needed; Ice for reduction of exercise induced swelling
- Brace: Wean from brace at 4 weeks with D/C at 6 weeks
- ROM: Goal full AROM at week 8 – 10
- Strengthening
  - Progress closed chain strengthening exercises within weight bearing restrictions
  - No restrictions on open chain strengthening exercises
  - Bilateral proprioceptive activities progressing to unilateral proprioceptive activities within weight bearing restrictions
- Mobilization/Stretching – no restrictions
  - PROM/AAROM to knee to meet goal
  - Patellar mobs

### **Phase IV (12 weeks – 6 months post-op)**

- Gait: Normalized gait pattern
- Strengthening: Advance all phase III activities
- Activities: Running allowed at 6 months post op. No other restrictions. Resume functional training.

Adopted from: Clinical Orthopaedic Rehabilitation, 3rd Edition

By S. Brent Brotzman, MD and Robert C. Manske, DPT, MEd, MPT, SCS, ATC, CSCS