

**Ronak M. Patel, MD**  
**Meniscal Transplant**  
**Rehabilitation Guidelines**

**Acute/Immediate Post-Operative Phase 0-4 weeks:**

**GOALS:**

- Decrease swelling
- Re-establish quadriceps control
- Begin ROM
- Improve gait pattern

**Guidelines:**

- Bracing: Extension Lock Splint (ELS) locked at zero; can be removed for exercises. Ice-Man or ice application
- WB status with brace locked at 0 degrees with assistive device
- **MAY BE RESTRICTED TO NON-WEIGHT BEARING PER DR. PATEL FOR 4-6 WEEKS. PLEASE FOLLOW POST OP INSTRUCTIONS PER PATIENT**
- Weeks 0-2: 0-50% WB
- Weeks 3-4: 50-75% WB
- AROM to extension:
  - Weeks 0-4: 0-90 degrees
- Exercises: Quadriceps setting with e-stim as needed, SLRs – flexion, abduction, and adduction (in brace locked in extension), patellar mobilization, calf, quad and hamstring stretching-seated only, ankle pumps without→with band, seated or supine knee flexion 0-90 degrees

**Moderate Protection Phase 5-6 weeks**

**GOALS:**

- Full knee flexion and extension ROM
- Muscle Control
- Normalize gait

**Guidelines**

- Bracing: Discontinue crutches and brace when patient has adequate quad control
- WB status: WBAT (continue brace - unlocked or issue unloader brace to unload involved compartment)
- AROM: As tolerated
- Exercises: Weight shifting, supine wall walks for knee flexion, Heel/toe raises, quarter→half squats, Multi-Hip Machine with proximal resistance, seated knee ext (no weight) 90-30 degrees, proprioception/balance activities (in brace), bike once has 110 degrees knee flexion, quad stretching

## **Minimal Protection Phase (Progressive ROM/Strengthening) 7-12 weeks**

### **GOALS:**

- Full knee flexion and extension ROM
- Normal gait without brace or assistive device
- Good quadriceps control
- Good proprioceptive control

### **Guidelines:**

- WB status: WBAT without brace/crutches (all)
- ROM: as tolerated
- May include aquatics at week 9
- Exercises: Continue quad strengthening (leg press, squats (no deep squats) -> lunges), stretching all directions, lateral step-ups -> step-downs, stationary bike, proprioception activities bilateral -> unilateral, hamstring curls

### **Return to Activity Phase**

- Exercises: Slowly progress to treadmill walking -> running in straight line as permitted by physician (~5-6 months) sport specific activities, progress proprioception activities as tolerated.
- Swimming at ~4 months. Continue no deep squats precaution until released by Dr. Patel

\*\*Modalities as needed for pain control and quadriceps strengthening are permitted.