

## **Post-Op Total Knee/Uni Knee PT Protocol**

**Diagnosis: Primary Osteoarthritis of the knee – M17.11**

**Duration: 2 times per week for 6 weeks**

**Physical Therapy: Starts 3-5 days post op**

### **Goals:**

- Allow soft tissue healing.
- Reduce pain, inflammation, and swelling.
- Increase motor control and strength.
- Educate patient regarding weight bearing.
- Maintain the 0-120 degrees obtained in the OR.

### **Phase 1: 0-5 days after surgery**

- Patient evaluation and initiation of ROM.
- Cold pack or ice to manage pain, inflammation, and swelling. (*4 times per day*)
- Patient education for positioning and joint protection strategies.
- Ambulate with an assistive device for 25-100 feet and ascend/descend stairs.
- Therapeutic exercises in supine: passive and active assist heel slides, ankle pumps, quadriceps and gluteal sets.
- Independently perform Straight Leg Raise (SLR)
- Therapeutic exercises in sitting: Passive/Active Assist/Active knee extension/flexion.
- Bed mobility and transfer training.
- Gait training on flat surfaces and on stairs with appropriate assistive device per discharge plan

### **Phase II: Week 1 – 6**

#### **Therapeutic Exercises: (to be performed 3 times a day after instruction by therapist)**

- Passive/Active Assisted/Active range of motion exercises in supine: ankle pumps and heel slides.
- P/AA/AROM exercise in sitting position: long arc quads and ankle pumps. Including therapist assist for increasing ROM into flexion and full extension to 90 degrees.
- Strengthening: Quadriceps setting in full knee extension, gluteal setting, short arc quadriceps (SAQ), hooklying ball/towel squeeze, bridging.
- Improve knee active range of motion.
- Functional training to promote independence in activities of daily living and mobility.
- Gait training: Assistive devices are discontinued when the patient demonstrates adequate lower extremity strength and balance during functional activities (usually 1-4 weeks)

- Stationary bicycle for ROM, begin with partial revolutions then progress as tolerated to full revolutions (no resistance).
- Patella femoral and tibial femoral joint mobilization as indicated.
- Continue isometric quadriceps, hamstring, and gluteal exercises.
- Supine heel slides and seated Long Arc Quad (LAQ).
- SLR in 4 planes (flexion, abduction, adduction extension)

**Criteria for Discharge to Phase III (at 6 Weeks to Advanced HEP)**

- Minimal pain and inflammation.
- Patient ambulates with assistive device without pain or deviation.
- Independent step over step stair-climbing
- Independent with current daily home exercise program.
- Normal, age appropriate balance and proprioception.
- Progression to driving: must be off all narcotic medications and feel “safe” to drive.

**Phase III: Week 7 +**

**Therapeutic Exercises: (to be performed 3 times a day after instruction by therapist)**

- Maximize post-operative ROM (0-115 degrees plus)
- Continue exercises listed in Phase II with progression including resistance and repetitions. It is recommended to assess hip/knee and trunk stability at this time and provide patients with open/closed chain activities that are appropriate for each patient’s individual needs.
- Endurance training to increase cardiovascular fitness.
- Enhance age appropriate balance and proprioception exercises.
- Minimal to no pain or swelling.