

Midwest Orthopaedic Center Post-Operative Total Knee Arthroplasty Therapy Protocol 8 weeks of Treatment

Purpose: The purpose of this protocol is to decrease variation in clinical practice and appropriateness of care through development of a standardized post-acute total knee therapy care plan.

Patients Included: Patients with Total Hip Knee Arthroplasty (CPT Code 27447)

Phase 1: 0-4 weeks post-op. PT 3 x week

Emphasis:

Allow soft tissue healing, protect the soft tissue sleeve, and reduce trauma/edema to the soft tissues surrounding the knee joint.

For the first 4 weeks **AVOID**:

- 1. Heavy weights or resistance training, excessive closed chain loading activities such as deep squats, high step-ups, leg press etc.
- 2. Painful or forced ROM beyond pain tolerance or physiologic limit of range. Work slowly into a soft end feel, but don't force through pain or beyond a soft end feel into a hard/springy barrier.

<u>Treatment</u>

- 1. Soft tissue edema mobilization to the knee complex to reduce swelling and improve tissue compliance.
- 2. Soft tissue mobilization of the quads, hamstrings, IT band, and gastroc to reduce pain and muscle guarding with motion.
- 3. Practical/sensible ROM within patient tissue tolerance. <u>No forced motion</u>.
- 4. Full early knee extension achievement (emphasis within the first 1-2 weeks)
- 5. Flexion ROM progression
- 6. WBAT with walker, progressing to cane when good quad control and good knee extension.
- 7. Progressions of functional activities ADL's.
- 8. Gentle open/closed chain exercises of the quad, hamstrings, and core muscle groups
- 9. Balance activities
- 10. Gait drills
- **11**. Light functional activities based on assessment of functional deficits.
- 12. Joint mobilization for pain reduction and light mobility

<u>Goals:</u>

- 1. Extension mobility 0 degrees or less than 5 degrees.
- 2. Flexion mobility to 105-110 PROM- no forceful motion.
- 3. Compliance with HEP.
- 4. Progression toward functional independence with gait and balance performance.

** If 90 degrees of flexion mobility is not achieved by 4 weeks, please contact the surgeon for instructions.

Phase 2: 4-8 weeks post-op: PT 1-2 x week

Emphasis:

Continue to allow soft tissue healing and progress to strengthening to promote functional activities and independence.

Treatment:

- 1. Strengthening of the quads, hips, hamstrings and core muscle groups
- 2. Soft tissue mobilization if needed to assist with further pain reduction and promotion of mobility
- 3. Increase mobility of flexion to functional ROM
- 4. Maintain or achieve full extension mobility to 0 degrees
- 5. Functional training such as stair performance and activities unique to your patient
- 6. Gait training and reduction in assistive device use as able
- 7. Balance training on level and un-level surfaces
- 8. Stationary bike or Nustep if ROM comfortably allows- (Do not force motion on bike)
- 9. Upgrade HEP

<u>Goals:</u>

Discharge from skilled PT services if goals have been met:

- 1. Safe, functional gait pattern on level surfaces.
- 2. Functional balance with ADL's.
- 3. Flexion mobility at 115-120 degrees.
- 4. Full knee extension at 0 degrees.
- 5. Good quadriceps control and LE strength for functional performance.
- 6. Independence with a HEP for mobility, strength and balance.

All patients are unique and may not achieve motion, strength and functional goals within the time allotted. Please use clinical judgment to alter this protocol if needed with regards to motion, pain, and complexity of the repair/surgery. Please always communicate with the surgeon if not progressing out of Phase 1 (not meeting motion goals.) Some patients may progress through the protocol faster and may be discharged early.