

Proposed Rehab Protocol for Total Knee Replacement

Make sure you check with the surgeon before you start using any protocol. Also, obtain a copy of the operative report from the surgeon

Post-Operative Instructions for Total Knee Replacements

Post-op

Make sure that your patient has a follow up appointment for a wound check about 2 weeks after your surgery.

Medicine

- *Lovenox* is one injection every 12 hours for 4 weeks. The injections begin the morning after surgery. The nurse will show the patient how to inject the *Lovenox* before discharge from the hospital.

- Some patients may be on *Coumadin (Warfarin)* instead of *Lovenox*. This medicine is to be taken at the same time every day. Blood work must be done twice a week to make sure the patient is on the right dosage. Patients stay on this medicine for about 4 weeks unless otherwise instructed by their physician.

- *Vicodin* or other pain medications are to be taken as directed

Home Care:

The nurse for a health care agency will contact the patient within the first 24 hours after they arrive home.

Again, if the patient is on Coumadin, then blood needs to be drawn twice a week.

The home care agency will also set up home physical therapy to come in three times a week

Showering:

- Cover the incision with saran wrap while showering until the wound is completely dry without any drainage.
- Do not scrub the incision, let water/soap run over it and then pat it dry.
- Do not soak in a tub or go swimming.

Extension:

- Place a rolled towel under your ankle to help with extension. Never put anything under your knee.
- Getting your knee fully straight (fully extended) is one of the most important things for a successful total knee replacement.
- Inform the surgeon if you and your patient have significant problems with this.

Ice: the knee as needed for 20 minute intervals on/off as needed. Be sure to ice it after your physical therapy sessions.

The knee is going to be warm and swollen for a long time (9 months to 1 year)

Call the surgeon's office immediately

- if the wound site is red
- if there is excessive drainage or pus
- if there are red streaks on the patient's leg
- if the patient has a fever over 101.5°F
- if the patient is experiencing severe pain.

- Prophylaxis

Proposed Rehab Protocol for Total Knee Replacement Total Knee Arthroplasty Physical Therapy Protocol

Phase I

Immediate Postoperative Phase (Day 0 – 10)

Goals:

- Active quad contraction
- Safe independent ambulation with walker or crutches as needed
- Passive knee extension to 0 degrees
- Knee flexion to 90 degrees or greater
- Control of swelling, inflammation, bleeding

Day 0-2:

- Weight bearing as tolerated with walker/2 crutches as needed starting on Day 0-1
Cryotherapy immediately and continuously unless ambulating
- ROM of knee to begin immediately post op
- Exercises
- Ankle pumps
- Passive knee extension to 0 degrees
- SLR
- Quad sets
- Knee flexion to at least 90 degrees
- Knee extension to 0 degrees
- Instruct in gait training - safe transfers

Day 3-10:

- Weight bearing as tolerated with walker/2 crutches as needed
- Cryotherapy
- Exercises
- Ankle pumps
- Passive knee extension to 0 degrees
- SLR
- Quad sets
- AAROM - Knee flexion to at least 90 degrees
- Hip adduction/abduction
- Instruct in gait training – safe transfers
- Start stationary bike, low resistance

Proposed Rehab Protocol for Total Knee Replacement Phase II: Motion Phase (Week 2-6)

Goals:

- Improve ROM
- Enhance muscular strength, endurance
- Dynamic joint stability
- Diminish swelling/inflammation

Establish return to functional activities

Criteria to enter Phase II:

- Leg control, able to perform SLR
- AROM 0-90 degrees
- Minimal pain/swelling
- Independent ambulation/transfers

Weeks 2 -4:

WBAT (weight bearing as tolerated) with assistive device as needed. Wean from walker to cane or from 2 crutches to 1 by 2 weeks. Wean off all assistive devices by no later than 4 weeks.

Exercises:

- Quad sets
- SLR
- VMO recruitment during quad sets and SLR
- Knee extension 90-0 degrees
- Terminal knee extension 45-0 degrees
- Hip abduction/adduction
- Hamstring curls
- Knee flexion to at least 115 degrees

Stretching:

- Hamstrings
- Gastroc/soleus
- Quads
- Passive knee extension stretch
- Continue stationary bike and advance resistance as tolerated
- Continue cryotherapy
- Patellofemoral mobilization
- Incision mobilization

Patients may begin to drive if they are no longer using assistive devices for ambulation (about 2 weeks post op)

Weeks 4-6:

Exercises:

- Continue previous exercises
- Initiate front and lateral step ups
- Advance resistance on stationary bike
- Initiate progressive walking program
- Initiate endurance pool program, swimming with flutter kick

Return to functional activities

Continue compression, ice, elevation as needed for swelling

Patients should be walking and driving independently at this point

Phase III: Intermediate Phase (Weeks 7-12)

Goals:

Progression of ROM to greater than 115 degrees

Enhancement of strength and endurance

Eccentric/concentric control of limb

Cardiovascular fitness
Functional activity performance

Criteria to enter Phase III:

- ROM 0-115 degrees
- Voluntary quad control
- Independent ambulation
- Minimal pain

Weeks 7-12:

Exercises:

- Continue previous exercises
- Continue pool activities
- Continue walking
- Continue stationary bike
- Aggressive AROM 0-115 degrees
- Strengthen quad/hamstrings

Phase IV: Advanced Activity Phase (Weeks 12 and beyond)

Goals:

Allow patients to return to advanced level of function such as recreational sports
Maintain/improve strength and endurance of lower extremity
Return to normal life and routine

Criteria to enter Phase IV:

Full non painful ROM 0-115
Strength 90% of contralateral limb (if contralateral limb is normal)
Minimal pain and swelling
Satisfactory clinical examination

Exercises:

- Quad sets
- SLR
- Hip abduction/adduction
- Step ups
- Knee extension
- Stationary bike
- Swimming
- Walking
- Stretching 0-115 degrees

Return to pre op activities and develop HEP to maintain function of leg.

NO SQUATS OR LUNGES AT ANY TIME!