



LAKE COOK
ORTHOPEDICS

T : 847.381.0388
F : 847.381.0811

Partial and Total Knee Arthroplasty/Replacement

Post-Operative Rehabilitation Protocol

Lake Cook Orthopedics

The intent of this protocol is to provide the clinician with a guideline for the postoperative rehabilitation course of a patient that has undergone a total knee replacement. This protocol is by no means intended to be a substitute for one's clinical decision making regarding the progression of a patient's post-operative course based on their physical exam/findings, individual progress, and/or the presence of rare post-operative complications. If a clinician requires assistance in the progression of a post-operative patient they should consult with the referring surgeon.

General Instructions/Information:

Use pain medication when the knee hurts.

Take pain medication before doing exercises and apply ice to the knee after exercises.

The immediate goal is **not** to get off the pain medication (this will happen with time and there will not be addiction to it). Knee replacement is painful, major surgery that will usually require powerful pain medications initially to optimally recover.

Ice knee frequently – up to 30 minutes 2-3 times a day.

Antithrombotic compression stockings are highly recommended for 4 weeks.

Do **not** use heat or heat creams on the operative knee/leg.

Do **not** use pain/anesthetic patches on the knee incision in the post-operative period

Do **not** lay with a pillow under the operative knee. A pillow/bump may be placed under the heel/ankle to promote straightening (extension) of the knee.

Do **not** twist, pivot or jump on the operative knee/leg.

Do **not** immerse the operative knee under water (no bathtubs/pools x6 weeks)

Do **not** drive until cleared to do so by the doctor (typically 3-6 weeks)

Physical Therapy/Rehabilitation:

General Guidelines

Weight Bearing as Tolerated (WBAT)

Walker or crutches should be used until able to progress to a cane on advice of therapist (usually progressing to 1 cane/crutch within 2-3 weeks)

Goal Range of Motion (ROM) 0°-120°+

Change position at least once an hour, while awake, to avoid stiffness

Wear Knee Immobilizer brace as needed or on advice of therapist (this is only for early post-op comfort and safety and is **NOT** critical to the operation's success)

Active participation in the rehab and diligent performance of prescribed exercises is absolutely essential for optimal outcome

Phase I - Immediate Postoperative Phase (days 1-10)

Goals:

1. Active quadriceps muscle contraction
2. Safe (isometric control), independent ambulation
3. Discontinue knee immobilizer use
4. Passive knee extension to 0° – terminal extension emphasized
5. Control of swelling, inflammation, bleeding and clotting risk

Days 1-2

WBAT with walker or 2 crutches

CPM 0°-50° to start (increase motion gradually as tolerated)

Ice therapy

Exercises:

- Ankle pumps
- Passive knee extension
- Straight leg raise (SLR)
- Quad sets
- Gentle knee flexion stretches

Days 3-10

WBAT

CPM 0°-90° as tolerated

Safe/independent transfers

Ice therapy

Additional Exercises:

- Active assisted ROM knee flexion
- Hip adduction/abduction

Phase II – Motion Phase (weeks 2-6)

Goals:

1. Improve range of motion (ROM)
2. Enhance muscular strength/endurance
3. Dynamic joint stability
4. Diminish swelling/inflammation
5. Establish return to functional activities and normalize gait

Weeks 2-4

WBAT with assistive device as needed

CPM 0°-90°+

Additional Exercises:

Terminal Knee Extension 45-0
 Hamstring curls
 ¼ squats
 Stretching – hamstrings, gastroc-soleus, quads
 Bicycle ROM
 Passive extension stretch

Weeks 4-6

Wean assistive device if appropriate

Discontinue CPM by this point

Additional Exercises:

Front and lateral step-ups
 ¼ front lunge

Phase III – Intermediate Phase (weeks 7-12)

Goals:

1. Progressive ROM 0°-120°+
2. Enhance strength/endurance
3. Eccentric/concentric limb control
4. Cardiovascular fitness
5. Functional activity performance

Additional Exercises:

Initiate progressive walking program
 May initiate pool program
 Return to functional activities
 ½ squats
 Core strengthening

Phase IV – Advanced Activity Phase (weeks 13-24+)

Goals:

1. Allow selected patients to return to recreational sports (golf, biking, swimming, walking, etc.)
2. Maintain/Improve strength and endurance
3. Return to normal lifestyle

Continued Exercises:

Quad sets
 SLR
 Hip abduction/adduction
 ½ squats
 Step-ups
 Stretching

Antibiotic Prophylaxis

It is **strongly** recommended that joint replacement patients take prophylactic antibiotics before any dental work, ear/nose/throat or other invasive procedures (GI scopes are excluded) to prevent normal body bacteria entering the bloodstream from reaching and attaching to the prosthetic joint causing serious infection. The surgeon recommends this for life. Most dental practices have protocols in place but the surgeon will be happy to write the prescriptions for these antibiotics and/or discuss with the treating doctor any concerns that may arise. **In addition**, seek medical treatment **immediately** for suspected urinary tract infections, skin infections (boils, etc) or other infections. If the replaced joint should ever become red, hot, swollen and painful suddenly and the patient is not on antibiotics, **DO NOT** let any doctor give antibiotics until consulting with the orthopedic surgeon (this may seriously complicate the treatment if the joint is found to be infected).