



Centers for  
Orthopaedics  
*Experience in Motion*

33 Sewall Street  
Portland, ME 04102  
(207) 828-2100

[www.orthoassociates.com](http://www.orthoassociates.com)

## Total Knee Arthroplasty Protocol

Developed with Michael Becker MD

### General Information:

- Walker or crutches should be used until discontinued by Doctor or Physical therapist
- Ice knee frequently with cryocuff, up to 30 minutes out of every 2 hours
- Change knee position at least once an hour, while awake, to avoid stiffness
- Home exercises should be performed 3x/day

### Reminder for stair use:

- Upstairs - the nonoperative leg goes first, then the operative leg, lastly the crutches or cane
- Downstairs - the crutches or cane go first, then the operative leg, lastly the nonoperative leg

### Rehabilitation:

#### **0-3 weeks**

##### Goals

1. safe ambulation with walker, crutches or cane (level surface and stairs)
2. range of motion 0-100 degrees
3. independent transfers

##### Exercise

1. Quad sets- tighten knee muscles of out stretched leg by pushing the back of the knee into the bed, hold 5 seconds
2. Gluteal sets- squeeze buttocks together, hold 5 seconds
3. Ankle pumps- pump ankles to move feet back and forth
4. Heel slides- bend knee, sliding foot toward buttocks
5. Hip abduction- slide leg out to side keeping the knee straight
6. Knee flexion- sitting in firm chair, slide foot back bending knee as far as possible, hold 5 seconds
7. Stationary Bike - can begin at 2 weeks

*\* First five exercises to be done lying on back and repeated 20 times.*



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### **3+ weeks**

#### Goals

1. Range of motion 0-120 degrees
2. continue physical therapy for exercise instruction, gait training and scar/swelling management

#### Exercise

1. Straight leg raises, no greater than 2 lbs. (flexion, abduction, adduction)
2. Hamstring curls
3. Heel raises
4. Standing terminal knee extensions
5. Standing hip flexion
6. Standing hip abduction
7. Bridges
8. Short arc quad
9. Pool therapy

### **12+ weeks**

#### Goals

1. safe ambulation on uneven surfaces with straight cane
2. safe ambulation without assistive device or gait deviation on level surface
3. independent with all ADLs
4. independent with advanced home exercise program

#### Exercise

1. Squats (as able)
2. Single leg balance (challenges with airex, if able)
3. Forward step ups (advance in 2 inch increments)
4. Forward step downs (advance in 2 inch increments)
5. Leg press

#### Discharge Criteria:

- Safe ambulation without assistive device
- Ascend and descend stairs independently
- Independent home exercise program
- Normal ADL function