

**Total and Partial Knee Arthroplasty (TKA and UKA) Protocol**  
**Andrea Saterbak, MD**

**Strategies for Success:**

- **Regain Functional Independence**
  - Walk with an assistive device (walker/cane)
  - Transfer to and from bed, chairs, commode, shower/tub, and cars
  - Ascend and descend stairs
  - Balance on level and uneven ground
  - Able to get dressed – especially shoes and socks
- **Perform Progressive Exercises**
  - Early phase exercises for circulation, edema control, ROM, and muscle control
  - Advance phase exercises for strengthening, flexibility, and endurance
  - Individualized functional exercises to meet patient and therapist goals
- **Utilize Ice and Elevation to Decrease Pain and Swelling**
  - Ice the knee at least 3 to 5 times per day (15-20 minutes each time) and make sure leg is elevated above the heart
  - Ice after exercises to decrease post-exercise soreness
- **Compliance with Home Exercise Program**

**Precautions:**

- No pivoting or twisting on the operative leg
- Monitor the incision for signs of infection including: redness, discoloration, or excessive drainage (pus or blood)
- Keep the operative leg in front of the non-operative leg (especially when going from sitting to standing) for the first 2 weeks or until the knee is able to bend to 90°
- Do not apply any form of heat to the knee or aggressively massage it for the first 2-3 weeks
- No direct weightbearing on the operative knee (i.e. kneeling, hands and knees)
- Do not place a pillow under the operative knee while sleeping or resting. You want the knee to straighten as much as possible. You may use a pillow between your knees while sleeping for comfort.
- Weightbearing: as tolerated to full weightbearing as per physician's orders
- Avoid barefoot walking – Wear supportive footwear to avoid unwanted stress on the knee
- For stairs: When ascending, the “good” leg goes first, followed by the operative leg and the walker/cane. When descending, the walker/cane go first, followed by the operative leg and then the “good” leg. Remember “up with the good, down with the bad.”

### **Stage I (0-1 week):**

- Exercises include:
  - Ankle pumps
  - Quadriceps sets
  - Heel slides (can use a towel or sheet to get a better stretch)
  - Adduction squeezes
  - SAQ exercises
  - Straight leg raise
  - Side laying hip abduction
  - Knee extension stretches
  - Standing mini squat
  - Standing calf raises
  - Standing lateral weight shift

### **Stage II (1-4 weeks):**

- Resistive exercises:
  - Straight leg raise and hip abduction with cuff weight
  - SAQ exercises with cuff weight
  - Retro treadmill walking
  - Standing/prone terminal knee extension
- ROM: Stationary bike, manual techniques, functional ROM, prone hangs
- Gait training and stair training
- Emphasize strengthening of quadriceps, especially controlling terminal knee extension
- Soft tissue massage for edema control
- Patellar mobilization: Superior and inferior glides

### **Stage III (4+ weeks):**

- Progress to cardiovascular activities with physician's approval
- Progress to lesser gait device
- Progress with functional exercise activities and progression of exercises as able
- Goals for 4-6 weeks
  - 0° extension to 115-125° flexion
  - Near normal strength in quadriceps and hamstrings
  - No extensor lag of the operative knee
  - Normal gait pattern (no pain, no assistive device, no limp)
  - Independent with activities of daily living
  - Independent of all functional activities

**If you have any questions or concerns, please contact Dr. Saterbak's office at 651-351-2618 or [SaterbakAcareteam@tcomn.com](mailto:SaterbakAcareteam@tcomn.com)**