



Total Knee Arthroplasty (TKA) PT Protocol

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- **Strategies for success following a TKA**
 - **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**, **range of motion (ROM)** and **muscle control**
 - Advanced 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 3-5x/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 (HEP)**
- **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 sit to stand, 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 weight bearing on the operative knee (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.
- Weight bearing: as tolerated to full weight bearing as per physician's orders
- Avoid barefoot walking. Wear supportive shoes or sandals to avoid unwanted stress on the knee
- For stairs: when ascending, the "good" leg goes first, followed by the operative leg and the walker or cane. When descending the stairs, the walker or cane go first, followed by the operative leg and then the "good" leg. Remember "up with the good, down with the bad".

Phase I (day 0-1 week post op):

- Exercise can include;
 - Ankle pumps
 - Quad sets
 - Heel slides (can use towel or sheet to get a better stretch)
 - Adduction squeezes
 - SAQ
 - SLR
 - SL hip abduction
 - Knee extension stretch
 - Standing mini squat
 - Standing calf raises
 - Standing lateral weight shift

Phase II (1-4 weeks post op):

- Resistive exercises
 - SLR and hip abd with cuff weight
 - SAQ with cuff weight
 - Retro treadmill walking
 - Standing/prone TKE
- ROM – stationary bike, manual techniques, functional ROM, prone hangs
- GAIT training and stair training
- Emphasize strengthening of quadriceps, especially controlling terminal knee extension

- Pool exercises (depending on the healing of incision)
- Soft tissue massage for edema control
- Patellar mobs – superior/inferior glides

Phase III (4+ weeks post op):

- 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 ADLs (activities of daily living)
 - Independent of all functional activities