
Total/Unicompartmental Knee Arthroplasty Physical Therapy Protocol

Phase I: Immediate Post-operative (Weeks 0 to 2)

Goals

- Active quadriceps contraction
- Safe, independent ambulation
- Passive knee extension to 0 degrees
- Knee flexion to 90 degrees or greater
- Control of swelling and inflammation

Days 0 to 2

Weight Bearing

- As tolerated with walker or two crutches

Exercise

- Range of motion exercises
- Ankle pump
- Quad sets (with neuromuscular electrical stimulation if needed)
- Short arc quads
- Long arc quads
- Straight leg raises
- Cryotherapy with elevation for pain and inflammation every hour for 20 minutes

Days 4 to 10

Exercise

- Continue exercises as listed above
- Progress range of motion
- Four-way straight leg raises
- Sit to stand exercises
- Continue cryotherapy for pain management

Phase II: Motion (Weeks 2 to 6)

Criteria to Progress to Phase II

- Able to perform a straight leg raise
- Active range of motion 0 to 90 degrees
- Minimal pain and swelling
- Independent ambulation and transfers

Goals

- Improve range of motion
- Enhance muscular strength and endurance
- Improve joint stability
- Diminish swelling and inflammation
- Establish return to functional activities
- Improve general health
- Wean from assistive device with ambulation

Weeks 2 to 4

Brace

- Discontinue TED hose at two to three weeks

Exercise

- Continue exercises as listed above
- Terminal knee extensions
- Hamstring curls
- Mini squats
- Bicycle
- Step ups
- Hamstring, gastroc, soleus and quadriceps stretching
- Continue cryotherapy for pain management

Weeks 4 to 6

Exercise

- Continue exercises as listed above
- Lateral step downs
- Leg press
- Wall squats
- Lateral walks with resistance
- Knee extensions
- Pool program
- Continue cryotherapy for pain management

Phase III: Light Activity (Weeks 7 to 12)

Criteria to Progress to Phase III

- Active range of motion 0 to 110 degrees
- Voluntary quadriceps control
- Independent ambulation
- Minimal pain and inflammation

Goals

- Progression of range of motion to 0 to 115 degrees and greater
- Enhancement of strength and endurance
- Eccentric/concentric control of the limb
- Cardiovascular fitness
- Improvement in functional activities

Weeks 7 to 12

Exercise

- Continue exercises as listed above
- Initiate progressive walking program