Unicompartmental Knee Replacement

Post-Operative Rehabilitation Protocol

General Considerations:

- Timing and prognosis are approximate and will depend on many factors including but not limited to surgical complexity, compliance with recommendations made by Surgeon and Physical Therapist, individual physiological factors, and positive mental outlook
- Protocols are not absolute and clinical judgment should be used in each individual case to determine best practices for favorable outcomes.
- Protocols are not to be substituted for care under a Physical Therapist's supervision.

Goals/Focus:

- Patient are weight bearing as tolerated with the use of crutches, a walker, or a cane to assist in walking until able to demonstrate normal walking mechanics, upon which time they will become full weight bearing and may discontinue use of the assistive device.
- Emphasis on full extension in the first few weeks post operatively, equal to the opposite side as soon as possible.
- No Active or Passive Range of Motion greater than 90 degrees until sutures are removed.
- Regular scar mobilization (manually) should be conducted to the incision and patella so that they remain mobile.
- Recruitment of the quadriceps muscle is crucial in the early phase of rehabilitation.
- No resisted leg extension machines should be used at any time in the rehabilitation process.

Week 1

Goals: Decrease pain and edema, range of motion 0-90 degrees until sutures are removed.

- M.D./ P.A./ Nurse visit after hospital discharge to change dressings and review home exercise program.
- Icing, elevation, and edema control are especially important during the first few days after surgery.

Manual: soft tissue treatments and gentle mobilization to posterior muscle groups, patella, and incision to prevent contractures

Exercises: Initiate quadriceps/gluteal sets, ankle pumps, gait training, balance/proprioception, Straight leg raise with quad set (standing and sitting). Passive, Active and Active Assistive range of motion exercises. General wellness cycling and upper body conditioning.

Week 2-4

Goals: Decrease pain and edema; range of motion ≤10 degrees extension to 100 degrees flexion.

- Nurse/PA visit at 14 days post-op for suture removal and check up

Manual: Continue with soft tissue treatments and gentle mobilization to posterior muscle groups, patella, and incision to prevent contractures.

Exercise: Continue with home exercise program, progress range of motion with emphasis on extension or straightening, gait training, soft tissue treatments, balance and proprioception. Incorporate functional exercises as tolerated (standing/sitting marching, hip and glute exercises, hamstring curls, and core stabilization). Begin Aerobic exercise as tolerated (stationary bicycle, upper body ergometer)

Week 4-6

Goals: Gait without a limp, range of motion ≤5 degrees of extension to 110 degrees of flexion.

- M.D. visit at 4 weeks post-op.

Manual: soft tissue treatments and gentle mobilization to posterior muscle groups, patella and incisions to avoid contracture.

Exercise: Increase intensity of functional exercises (progress to outside walking, etc.) Continue with balance and proprioception exercises. Pool exercise once incisions are completely closed.

Week 6-8

Goals: Resolution of gait abnormalities, least restrictive assistive device or no device, Range of motion should be 0 to 115 degrees of flexion.

Manual: Continue with soft tissue treatments, joint mobilizations, patellar glides.

Exercise: Add lateral training exercises as tolerated, single leg exercises

Week 8-12

Goals: Range of motion within functional limits, return to all functional activities.

Manual: Continue soft tissue treatments, joint mobilizations, patellar glides.

Exercises: Introduce activity specific training and higher-level functional activities. Exercises are to remain low impact until 12 weeks post-op. No twisting or pivoting until 12 weeks post-op. Progress patient to independent home/gym program with emphasis on functional activities/sports/occupational needs.