Patellofemoral Arthroplasty Rehabilitation Protocol

Description of Procedure: A bone and joint sparing resurfacing technique. The affected arthritic cartilage and a small amount of underlying bone in the patellofemoral compartment are removed and then replaced with metal (trochlea) and plastic (patella) components with attention to soft tissue balancing and alignment.

Safety Warning: Quadriceps weakness may persist many days. Until full quadriceps function is present, collapse and fall are risks to be avoided.

Phase I (Weeks 0 to 6)

Weight Bearing
- Weight bearing as tolerated once a straight leg raise can be performed without extension lag with the use of two crutches
- Progress to one crutch as tolerated then full weight bearing with normalized gait pattern; no limping

Brace
- Brace is worn when ambulating until independent straight leg raise can be performed without extension lag

Range of Motion
- Goal: To achieve active range of motion as soon as tolerated

Therapeutic Exercise
- 1 to 4 Days
  - Prone hangs, heel props, heel slides, quad sets, straight leg raises (SLR), hamstring isometrics; complete exercises in brace if quad control is inadequate
  - Core proximal program
  - Normalize gait
  - Functional electrical stimulation (FES) biofeedback as needed standing, with two crutches for support
  - Perform mini dips (0 to 20 degrees)
  - Progress from majority of weight on non-operative extremity to operative extremity
- 4 Days to 2 Weeks
  - Continue heel props and prone hangs
  - Begin wall slides and mini dips to 30 degrees in brace
- 2 to 4 Weeks
  - Incorporate use of stationary bike (high seat, low resistance) and patellar mobilization exercises after suture/staple removal
- 4 to 6 Weeks
  - Maintain full range of motion (ROM)
  - Continue core exercise program
  - Stationary bicycle
  - Proprioceptive training
  - Continue patellar mobilizations
Phase II (Weeks 6 to 8)

**Weight Bearing**
- Full weight bearing with normal gait

**Brace**
- None

**Range of Motion**
- Full active range of motion

**Therapeutic Exercise**
- Begin walking program; increase endurance and strength
- Continue core exercise program and use of stationary bike