

## REHABILITATION FOLLOWING PATELLOFEMORAL ARTHROPLASTY

### Phase I: Immediate Postoperative Phase (Day 1 -10)

- Goals:
1. Active quadriceps muscle contraction
  2. Safe (isometric control), independent ambulation
  3. Passive knee extension to 0 degrees
  4. Knee flexion to 90 degrees or greater
  5. Control of edema, inflammation and bleeding

#### Day 1 to 2:

Weight Bearing – Walker/two crutches WBAT

Brace- 0-20 degrees when walking

CPM – 0 to 70 degrees as tolerated

Cryotherapy – Commercial unit if available – continuous first 10 Days (appx) or as needed for comfort.

#### Exercises:

Ankle pumps with leg elevation

Passive knee extension

SLR

Quad sets

Knee extension – 90 – 30 degrees

Knee flexion stretches (gentle)

#### Day 4 to 14:

Continue WBAT

CPM – 0 to 90 degrees, increasing as tolerated

-Discontinue CPM once maximum flexion attained for 2 days

#### Exercises:

Ankle pumps with leg extension

Passive knee extension

Active assistive ROM knee flexion

Quad sets

SLR

Hip abd/adduction

Knee extension - 90 – 0 degrees

Continue cryotherapy

Gait training – Continue safe ambulation WBAT

Brace – 0-20 when walking. Once quad contraction obtained may increase brace flexion to 90 degrees.

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Phase II: Motion Phase (Week 2 – 6)

- Goals:
1. Improve ROM
  2. Enhance muscle strength/endurance
  3. Increase dynamic joint stability
  4. Diminish edema/inflammation
  5. Establish return to functional activity

Criteria to enter Phase II:

1. Quad control – Good SLR
2. Active ROM 0 – 90 degrees
3. Minimal pain/edema
4. Independent ambulation/transfers

Week 2 – 4:

Weight Bearing as Tolerated

Begin weaning from crutches, goal 1 crutch by end of 4<sup>th</sup> week

Brace- Goal to discontinue by end of Week 3

Exercises:

Quad sets

Knee extension 90 – 0 degrees

SLR

Hip abd/adduction

Hamstring curls

Mini squats

Stretches – lower extremity

Bike for ROM

Continue passive knee extension stretches

Continue cryotherapy

Patellar/Scar mobilization

VMO recruitment – EMS during isometrics/SLR

Week 4 – 6:

Exercises:

- Continue all exercises listed previously
- Initiate front/lateral step ups (minimal height)
- Front lunges – partial
- Continue compression, ice, elevation for edema control

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Phase III: Intermediate Phase (Week 7 – 12)

Goals:

1. Progress ROM – 0 – 120 degrees or greater
2. Enhance strength and endurance
3. Eccentric/Concentric control of lower extremity
4. Cardiovascular fitness
5. Functional activity return

Criteria to enter Phase III:

1. ROM 0 – 120 degrees
2. Quad control
3. Independent ambulation
4. Minimal pain/inflammation

Week 7 – 10:

Exercises:

- Continue all exercises listed in Phase II
- Initiate progressive walking program
- Initiate pool program – if available
- Return to functional activity
- Lunges, ½ squats, step ups ( start with 2 inch height)
- Emphasize eccentric/concentric knee control

Phase IV: Advanced Activity Phase (Week 14 – 20)

Goals:

1. Return to advanced level of function
2. Maintain/Improve strength/endurance
3. Return to normal lifestyle

Criteria to enter Phase IV:

1. Full non-painful ROM – 0 – 120 degrees
2. Strength of 4+/5 or 85% contralateral limb
3. Minimal to no pain and swelling
4. Satisfactory clinical examination

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Exercises:

Quad sets

SLR

Hip abd/adduction

½ Squats

Lateral step ups

Knee extension 90- 0 degrees

Bike for ROM and endurance

Stretching

(knee extension to 0 degrees  
flexion to 120 degrees).

Initiate return to golf, tennis, swimming, bike,  
and walking program