PHASE I - IMMEDIATE POSTSURGICAL PHASE (DAYS 1 - 14)

Goals
1. Maintain integrity of the repair
2. Diminish pain and inflammation/effusion
3. Prevent muscular inhibition
4. Full passive knee extension
5. Gradually increase knee flexion

Days 1 - 14
- Elevation
- Brace locked at 0 degrees for ambulation and sleeping
- Cryotherapy/ice for pain and inflammation - 15-20 minutes every hour
- PROM 0-45 degrees
- Patella mobilization
- Stretch hamstrings and calf
- Strengthening exercises
  1. Quad sets
  2. SLR flexion of hip
  3. Hip abduction/adduction
  4. Knee extension
- Foot Flat Weight Bearing (FFWB), weight of leg, with two crutches

PHASE II - PROTECTION PHASE (WEEKS 2 - 4)

Goals As above

Precautions: AVOID TWISTING, DEEP SQUATTING, AND STOOPING

Weeks 2 – 4
- Continue cryotherapy/ice
- Continue brace locked for ambulation
- Strengthening exercises
  1. Multi-angle quad isometrics
  2. SLR in all 4 planes
  3. Knee extension 90-0

ROM Guidelines
- Week 2: 0-45 degrees
- Week 3: 0-65 degrees
- Week 4: 0-90 degrees
- Week 5: 0-100 degrees
- Week 6: 0-110 degrees
- Week 7: 0-120 degrees
- Week 8: 0-135 degrees

Weight Bearing Guidelines
- Week 2: FFWB
- Week 3: FFWB
- Week 4: FFWB
- Week 5: 25% WB
- Week 6: 50% WB
- Week 7: 75% WB
- Week 8: 100% WB
(Will discontinue crutches and brace by week 8)
PHASE III – MODERATE PROTECTION PHASE (WEEKS 5 - 8)

Goals
1. Full PROM
2. No swelling/inflammation
3. Re-establish muscle control
4. Proper gait pattern

Precautions: AVOID TWISTING, PIVOTING, RUNNING, AND DEEP SQUATTING

Weeks 5 - 8
- Cryotherapy/ice as needed
- Continue ROM and stretching to maintain 0-135 degrees
- Strengthening exercises
  1. Leg press 70-0 degrees
  2. Knee extension 90-40 degrees
  3. Hip abduction/adduction
  4. Lateral step-ups
- Balance/Proprioception training

PHASE IV – CONTROLLED ACTIVITY PHASE (WEEKS 9 - 16)

Goals
1. Improve strength and endurance
2. Maintain full ROM
3. Gradually increase applied stress

Weeks 9 - 16
- Continue all strengthening exercises as above
- Initiate light-resisted hamstring curls
- Initiate stair stepper
- Toe calf raises
- Progress balance training
- Progress to isotonic strengthening program

PHASE V - RETURN TO ACTIVITY PHASE (WEEKS 24+)

Goals
1. Improve strength and endurance
2. Prepare for unrestricted activities

Criteria to progress to Phase V
1. Full, pain-free ROM
2. No pain or tenderness
3. Satisfactory clinical exam
4. Satisfactory isokinetic test or other comparisons (need 85% strength of contralateral)

Exercises
- Continue and progress all strengthening exercises and stretching drills
- Deep squatting permitted at 4 months
- Initiate straight line running at 4 months
- Initiate pivoting and cutting by 5 months
- Initiate agility training by 5 months
- Return to sports by 6 months