



ACL & Posterolateral Corner Reconstruction Rehab Protocol

Phase 1 (0-6 Weeks)

Goals:

- Maximum protection of grafts
- Maintain patellar mobility
- Maintain quadriceps tone
- Maintain full passive extension
- Control pain and swelling
- Introduced early range of motion

Weightbearing

Non-weightbearing ambulation with crutches

Brace

Locked in extension

CPM

Do not exceed 90 degrees of flexion for the first 4 weeks

Exercise Program:

- Strengthening
 - Quad sets – enhance with low intensity electrical stimulation of biofeedback
 - Hip abduction
- Range of motion
 - Patellar mobilization
 - Ankle pumps
 - PROM – do not exceed 90 degrees of flexion for the first 4 weeks
- Stretching exercises
 - Gastrocssoleus stretching
 - Gentle hamstring stretch
- Other
 - Gentle scar massage should be performed once all sites are fully healed

Phase 2 (7-12 Weeks)

Goals:

- Initiate weight-bearing for articular cartilage nourishment
- Increase knee flexion
- Maintain quadriceps tone
- Improve proprioception
- Avoid isolated quadriceps and hamstring contraction

Weightbearing

- Begin partial weightbearing with 25% body weight at week 6
- Increase by 25th body weight per week over the next 4 weeks to full weightbearing by week 10

Brace:

- Unlock brace to full flexion
- Continue to wear her brace at night when sleeping
- Discontinue brace at end of post-op week 12



Exercise Program:

- Passive flexion exercises
 - Try to achieve flexion to 120 degrees by the end of post-operative week 12
- Prone hangs
- Patellar mobilization
- High intensity E-stim at 60 degrees of knee flexion
- Initiate closed chain strengthening once full weightbearing has been achieved and quadriceps strength is 3+ out of 5 or greater; closed chain exercises should be performed from 0-60 degrees of flexion. Exercise include leg press, squats and lunges.
- Stationary bike for range of motion
- Proprioception and weight shift (KAT or BAPS board)
- Hip strengthening
- To maintain cardiovascular fitness, rowing machines, stair climbers, and rapid walking on a treadmill may be initiated

Phase 3 (4-6 Months)

Goals

- Increase knee flexion; ROM should be from 0-120 degrees by the beginning of post-operative month 4
- Improve proprioception
- Maintain full passive extension
- Improve functional skills
- Improve quadriceps and hamstring strength
- Increase cardiovascular endurance

Exercise Program:

At 4 Months:

- Closed chain progressive resistance exercise; avoid flexion beyond 70 degrees
- Isolated quadriceps and hamstring exercises – NO resistance
- Single-leg proprioception exercises (KAT, BAPS, mini trampoline)
- Closed chain conditioning exercises: stair climber, skiing machine, rower, etc.
- Aggressive flexion range of motion
- Hip progressive resistance exercises
- Straight-line jogging is initiated at the end of post-op month 4

At 5 Months:

- Initiate resisted quadriceps and hamstring exercises
- Progress closed chain strengthening and conditioning exercises
- Initiate low intensity plyometrics
- Progress jogging begin sprints
- Advance proprioception training
- Fit for ACL/PLC functional brace

At 6 Months:

- Progression of all strengthening exercises and plyometrics
- Begin agility drills in brace: carioca, figure 8's, zig-zag, slalom running, etc.
- Sport specific drills when the quadriceps and hamstring deficits are less than 20% of the contralateral side
- Isokinetic testing at end of post op month 6

Phase 4 (7-12 Months)

Exercise Program:

- Assess functional strength: single leg hop for distance, timed hop test, shuttle run, etc.
- Return to sports if the following criteria are met:
 - Minimal or no pain or swelling
 - Isokinetic and functional tests within 10-15% of the uninvolved side
 - Proprioception equal to the contralateral side
 - Successful completion of sport-specific drills
 - ACL/PLC functional brace