

Arthroscopic Anteromedial Plica Resection Rehabilitation

PRECAUTIONS:

- Control knee capsular & synovial inflammation
- No pain on anteromedial aspect of knee
- Reduce any fibrosis reaction of resected plica
- Avoid deep squatting, resisted knee extension (deep angles)
- Caution on stairs, sitting, etc...

I. **PHASE I: MAXIMUM PROTECTION PHASE (Weeks 1-4)**

Goals: Reduce inflammation/effusion & reaction of synovium
Allow early healing
Full passive knee extension
Gradually increase knee flexion
Restore quadriceps activation

Stage 1: Immediate post-surgery days 1 through 10

- Ice, compression, elevation
- Compression wrap to control swelling
- Weight bearing on crutches for 2 weeks
- ROM (passive ROM) to tolerance – gradually increase knee flexion
- Patellar mobilizations
- Stretch hamstrings, calf, hip flexors
- Electrical muscle stimulation to quads during quad strengthening exercises
- Strengthening exercises:
 - Quad sets
 - SLR flexion
 - Hip Abd/Adduction
 - Knee extension 60-0 degrees
- Mini-squats (0-45 degrees)
- Avoid resisted knee flexion
- Continue ice before & after treatment

Stage 2: Weeks 2 through 4

- Continue use of ice and compression
- Discontinue crutches at 2 weeks post-operative
- Continue compression wrap etc
- ROM guidelines
 - Gradually increase PROM as tolerance allows
 - End of Week 2: 0-115 degrees
 - End of Week 3: 0-115/120 degrees
 - End of Week 4-5: 0-125/135 degrees

*Discontinue crutches when safe and proper gait (usually 2-3 weeks)

- Continue PROM exercises and stretching
- Strengthening exercises (**see attached sheet Phase 1 exercises**)
 - Continue use of electrical muscle stimulation
 - Quad sets

- Multi-angle isometrics (knee ext) (**non-painful ROM only**)
- SLR (all 4 planes)
- Knee extension 60-0 degrees
- CKC mini-squats 0-45 degrees
- CKC wall squats (0-60)
- Initiate CKC exercise program
 - Front lunges (week 3)
 - Lateral lunges
 - Front step downs
 - Lateral step downs
 - Step-over cones (forward & lateral)
- Balance training (foam drills, tilt board squats, etc)
- Bicycle
- Pool exercises at week week 3-4)

II. PHASE II: INTERMEDIATE PHASE (Weeks 4-8)

Goals: Full PROM & AROM
 No swelling/inflammation
 No anterior knee pain (near plica location)
 Improve muscle strength
 Normalize gait pattern
 Gradually increase functional activities

- Continue use of ice and compression as needed
- Continue ROM and stretching to maintain 0-135 degrees
- Progress strengthening exercises
 - Leg press 70-0 degrees
 - Knee extension 90-40 degrees
 - Hip Abd/Adduction
 - Wall squats 0-60 degrees
 - Vertical squats 0-60 degrees
 - Lateral step-ups
 - Front step downs
 - Hamstring curls (watch knee flexion angle)
- Balance/proprioception training
 - Biodex stability
 - Squats rocker board
 - Cup walking (step overs)
 - Squats on foam
 - Standing on foam with plyoball
- Bicycle
- Pool program (may begin pool running)
 - Pool walking at week 4
 - Pool running at week 6-7
- Elliptical
- Continue stretching & ROM exercises
- Laser to anterior aspect of knee

III. PHASE III: ADVANCED ACTIVITY PHASE (Weeks 9-12/14)

Goals: Improve strength and endurance
 Maintain full ROM
 Gradually increase applied stress

Week 9

- Continue all strengthening exercises listed above (**Phase II exercise sheet**) see attached sheet
- Treadmill walking program
- Continue stretching & ROM exercise

Week 12

- Initiate Interval Throwing Program
- Initiate Interval Hitting Program
- Continue strengthening and stretching program (**Phase II exercises**)
- Progress pool exercises & running

Week 14:

- Initiate interval running program
- Walk & Run program

IV. PHASE IV: RETURN TO ACTIVITY PHASE (Months 4-5)

Goals: Improve strength & endurance
Initiate Sports Specific Programs
Prepare for unrestricted activities

Criteria to progress to Phase IV

- Full non-painful ROM
- No pain or tenderness
- Satisfactory clinical exam
- Satisfactory muscular strength

Functional Drills:

- Begin Infield Drills, fielding drills, & baseball specific drills (week 16)
- Able to perform normal throwing program
- Able to perform batting practice

Exercises

- Continue & progress all strengthening exercises and stretching drills (Phase II & III drills)
- Deep squatting permitted at 4 months
- Perform all exercises in non-painful ROM
- Continue stretching quadriceps, hip flexors, hamstrings & calf