
ACL Rehabilitation Protocol, Operative with Meniscus Repair

I. Preoperative

- a. Rest, ice, compression, elevation
- b. NSAID, preferably COX-2 if early surgery planned
- c. Breg T-Scope is optional for at risk patients
 - d. AROM to regain full mobility, call MD if mechanical block, if there is a known displaced meniscus tear, not ROM therapy, earlier operation planned
 - e. Quad isometrics
 - f. WBAT if no locked meniscus and no gross osteochondral injury
 - g. Preop formal P.T. optional but useful to speed readiness of knee for surgery

II. First postop week, begin POD #1

- a. Rest, ice compression wrap, elevation
 - i. Dressing change ok after POD #2
 - ii. Elevation with knee in maximal extension optimal as much as tolerated (i.e. pillows under calf or heel, not knee crease)
- b. Ankle AROM as much as possible
- c. Quad isometrics with knee in full passive extension
- d. Straight leg raise ok in brace only (locked in full extension)
- e. Gastroc isometrics
- f. Patellar mobilization as soon as pain permits
 - g. Supine heel slides with terminal stretch to increase flexion to 90 degrees by 4 weeks postop; **do not** exceed this ROM goal prior to 4 full weeks postop
 - h. Sit and allow knee flexion over edge of table to facilitate flexion to 90
 - i. Supine knee passive extension with wedge under heel to promote full hyperextension
 - k. Gait training TDWB with brace locked in full extension
 - l. Must sleep in brace

III. Second through fourth postop weeks

- a. Same as first week, primary emphasis on increasing ROM (full hyperextension, flexion to 90)
- b. Continue crutches with brace locked at 0, TDWB
- c. Add supine SLR out of brace when able to do so with no extensor lag
- d. Side lying SLR begins

- e. Must sleep in brace

IV. Weeks five through six

- a. Progress ROM to full, including flexion
- b. Rehab brace open 0 to 90, may wean from nighttime brace use as tolerated
- c. More aggressive patellar mobilization
- d. May begin stationary cycle, no resistance e. Progress to full WBAT
- f. Transition to functional knee brace is not routine but optional for at risk patients at 6 full weeks postop if swelling permits

V. Weeks seven through twelve

- a. Continue aggressive terminal stretching, should be full AROM early in this time frame
- b. Begin treadmill, add incline progressively up to 7 to 10 degrees, backwards treadmill ok
- c. Gradually increase resistance and endurance on stationary cycle
- d. Light sport cord or theraband resisted closed kinetic chain resistance training
- e. May transition to high rep, low resistance weight training after 2 full months postop, if motion full. No open chain knee extension, no flexion greater than 90 degrees during strength exercises
- f. Quarter squats ok, no knee flexion angle greater than 90
- g. Continue functional knee brace full time except sleep
- h. Begin stork stands for proprioception

VI. Weeks twelve through sixteen

- a. As above for stretching
 - b. Increases resistance training, closed-chain. Lunges, leg press, calf press, minisquats, HS curls
 - c. Sport cord resisted forward, backward, and lateral movement
 - d. May cycle outside in brace (road only, must remain seated in saddle)
 - e. Light jogging in brace
 - f. Add slide board and advanced proprioceptive training
 - g. No brace needed except for workouts
 - h. May begin golfing in brace (chip and putt)
 - i. Increase intensity and duration of cardio training
 - j. Stair-stepper, precor, cardioglide ok

VII. Weeks seventeen through twenty-four

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- a. Add plyometrics
 - b. Hill training with jogging and bicycle
 - c. Figure 8 runs, controlled intro to cutting maneuvers and sport specific activities in noncontact, noncompetitive environment
 - d. Advanced strength, proprio and cardiovascular conditioning

VIII. Return to sport criteria

- a. MD clearance
- b. Sports test 20/21 or better
- c. Single-leg hop equal to contra lateral
- d. Adequate stability on ligament testing
- e. No significant effusions or mechanical symptoms
- f. Completed sport-specific functional progression
 - g. Functional knee brace for contact sports, jumping and landing or cutting and twisting until 1 year postop, then d/c