



# ACL REHABILITATION PROTOCOL

(Operative With Meniscus Repair or Microfracture)

## PREOPERATIVE:

- Rest, ice, compression, elevation
- NSAID, pref. COX2 if early surgery planned
- Bledsoe style brace for concomitant gr III MCL injury present
- Fit with functional brace, preop use recommended
- AROM to regain full mobility, call MD if mechanical block. If there is a known displaced meniscus tear
- no ROM therapy, earlier operation planned
- Quad isometrics, straightleg raise
- WBAT if no locked meniscus and no gross osteochondral injury
- Preop formal PT optional but useful to speed readiness of knee for surgery

## POSTOP WEEK 1, BEGINNING POD (post op day) #1:

- Rest, ice compression wrap, elevation
- Dressing change ok after POD #2
- Elevation with knee in maximal extension optimal as much as tolerated (pillows under calf or heel, Not knee crease)
- Ankle ROM as much as possible
- Quad isometrics with knee in full passive extension
- Straight leg raise ok when able to do so without extension lag
- Gastroc isometrics
- Patellar mobilization as soon as pain permits
- Supine heel slides with terminal stretch to increase flexion to full, avoid end range passive stretching in flexion
- Sit and allow knee flexion over edge of table to facilitate flexion to 90 degrees
- Supine knee passive extension with wedge under heel to promote full hyperextension
- Must sleep in brace

**Weight bearing status per Dr. Ryzewicz instructions, toe touch WB with crutches unless otherwise specified**

## POST OP WEEKS 2-4:

- Same as first week, primary emphasis on increasing ROM (full hyperextension, flexion to at least 20)
- Continue crutches and brace
- Add supine SLR out of brace when able to do so with no extensor lag
- Sidelying SLR begins
- May sleep without brace as tolerated
- Continue toetouch weight bearing unless otherwise directed

## POST OP WEEKS 5-6:

- Progress ROM to full, including flexion
- Rehab brace open 0-90, may wean from nighttime brace as tolerated. Transition to functional knee brace at 4-6 weeks postop when swelling permits
- More aggressive patellar mobilization
- May begin stationary cycle, no resistance
- Progress to full WBAT for meniscus repair; remain TDWB for microfracture for 2 more weeks

## POST OP WEEKS 7-12:

- Continue aggressive terminal stretching, should be full AROM early in this time frame
- Begin treadmill, add incline progressively up to 7-10 degrees, backwards treadmill ok
- Gradually increase resistance and endurance on stationary cycle
- Light sport cord or theraband resisted closed kinetic chain resistance training
- 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
- Quarter squats ok, no knee flexion angle greater than 90
- Continue functional knee brace full time except sleep
- Begin stork stands for proprioception

## POST OP WEEKS 12-16:

- As above for stretching
- Increases resistance training, closed chain. Lunges, leg press, calf press, mini squats, HS curls
- Sport cord resisted forward, backward, and lateral movement
- May cycle outside without brace (road only, must remain seated in saddle)
- Light jogging in brace on soft surfaces
- Add slide board and advanced proprioceptive training
- No brace needed except for workouts or hazardous environment
- May begin golfing in brace (chip and putt)
- Increase intensity and duration of cardio training

## POST OP WEEKS 17-24:

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

### Return to sport criteria

- MD clearance
- Sports test 20/21 or better
- Single leg hop equal to contralateral
- Adequate stability on ligament testing
- No significant effusions or mechanical symptoms
- Completed sport-specific functional progression
- Functional knee brace for contact sports, jumping and landing or cutting and twisting until 1 year postop, then D/C

