REHABILITATION GUIDELINES ACL REHABILITATION WITH MENISCUS REPAIR OR MICROFRACTURE

PREOPERATIVE

- a. Rest, ice, compression, elevation
- b. NSAID, pref. COX-2 if early surgery planned
- c. Bledsoe style brace for concomitant gr III MCL injury if present
- d. Fit with functional brace, preop use recommended
- e. AROM to regain full mobility, call MD if mechanical block. If there is a known <u>displaced</u> meniscus tear, no ROM therapy, earlier operation planned
- f. Quad isometrics, straight leg raise
- g. WBAT if no locked meniscus and no gross osteochondral injury
- h. Preop formal P.T. optional but useful to speed readiness of knee for surgery

1 WEEK POST-OP DOS:

- 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 when able to do so without extension lag
- e. Gastroc isometrics
- f. Patellar mobilization as soon as pain permits
- g. Supine heel slides with terminal stretch to increase flexion to full, avoid end range passive stretching in flexion
 - 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
 - j. Gait training with brace (locked in full extension X one week)
 - k. Must sleep in brace
- * Weight bearing status per Dr. Levene's instructions, toe touch WB with crutches unless otherwise specified

2-4 WEEKS POST-OP DATE:

- a. Same as first week, primary emphasis on increasing ROM (full hyperextension, flexion to at least 120°
- b. Continue crutches and brace
- c. Add supine SLR out of brace when able to do so with no extensor lag
- d. Side lying SLR begins
- e. May sleep without brace as tolerated
- f. Continue toetouch weight bearing unless otherwise directed

5-6 WEEKS POST-OP DATE:

a. Progress ROM to full, including flexion

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

7-12 WEEKS POST-OP

DATE:

- a. Continue aggressive terminal stretching, should be full AROM early in this time frame
- b. Begin treadmill, add incline progressively up to 7-10°, 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° 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

12-16 WEEKS POST-OP

DATE:

- a. As above for stretching
- b.Increases resistance training, closed chain. Lunges, leg press, calf press, mini-squats, HS curls
- c. Sport cord resisted forward, backward, and lateral movement
- d. May cycle outside without brace (road only, must remain seated in saddle)
- e. Light jogging in brace on soft surfaces
- f. Add slide board and advanced proprioceptive training
- g. No brace needed except for workouts or hazardous environment
- h. May begin golfing in brace (chip and putt)
- i. Increase intensity and duration of cardio training
- i. Stair stepper, precor, cardioglide ok 1

17-24 WEEKS POST-OP

DATE:

- 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

RETURN TO SPORT CRITERIA

- a. MD clearance
- b. Sports test 20/21 or better
- c. Single leg hop equal to contralateral
- 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