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Microfracture for Articular Cartilage Lesions

Post-op Program:

POD 1

1. Ankle pumps – 20-25 per hour
2. Active flexion to 90 as tolerated
3. Gait with crutches. **Strict NWB.**
4. Patellar mobilizations
5. Polar care/ cryotherapy
6. Dressing change
7. Quad sets
8. CPM – 6 hours per day
9. Encourage upper extremity strengthening for overall conditioning

POW 1-6

1. Continue as above
2. Start SLR's: start standing, then sitting, then supine
3. May use e-stim to promote quad recruitment
4. Continue active flexion and encourage full extension
5. Progress ROM to full
6. Gait training with assistive device - **NWB**
7. Start the following open chain exercises
 - a. Sidelying hip abduction and adduction
 - b. Sitting hip flexion
 - c. Ankle theraband
 - d. Standing hamstring curls to tolerance
8. Stationary bike with low resistance

POW 6-12

1. Continue as above
2. Begin weight bearing. Progress from PWB to WBAT

3. Aquatic therapy may start at 6 weeks for LE strengthening
4. Standing terminal knee extension with theraband
5. May increase resistance on stationary bike at 8 weeks

POW 12-16

1. Begin closed chain knee exercises: ENCOURAGE PROPER TECHNIQUE AT ALL TIMES.
 - a. Single leg stance: level to unlevel surfaces
 - b. Therakicks: progress resistance, speed, arc of motion
 - c. Walking forward, retro, and sidestepping
 - d. Standing calf raises, wobble board
 - e. Wall slides
 - f. Leg press with very light weights at 12 weeks
 - g. Stationary bike
2. Continue modalities
3. Encourage upper extremity strengthening for overall conditioning
4. Continue modalities

POW 16-20

1. Continue as above
2. Progress exercises for building strength and endurance
 - 4-6 sets of 15-20 reps
 - progress from double to single leg and concentric to eccentric
 - emphasis on closed chain activities only
 - a. leg press
 - b. squats
 - c. lunges (front/side/back)
 - d. step-ups
 - e. leg curls
 - f. hip strengthening
 - g. resisted walking
3. Exercises for balance and proprioception
 - progress from local to whole body
 - a. mini-tramp
 - b. Sport cord
 - c. Slide board
 - d. Swiss ball
4. Exercises for endurance
 - a. Bike

- b. Stairmaster
- c. Elliptical trainer
- d. Treadmill walking
- e. Aquatic exercise

POW 20-return to sport

1. Progress jump roping to line jumps, then box jumps, and then distance jumps
2. Begin sport specific drills
3. Progress speed and intensity of above activities

Return to Athletics Criteria

1. Satisfactory clinical exam
2. <10% isokinetic strength deficit (Leg Press)
3. Completion of sport replication activity
4. Single leg hop test