

MICHAEL E. TRICE, M.D.

JOHNS HOPKINS CENTER FOR CARTILAGE RESTORATION
4940 EASTERN AVENUE
BALTIMORE, MD 21224
PHONE 410-550-0452 FAX 410-550-2899

**CARTICEL IMPLANTATION REHABILITATION GUIDELINES
FEMORAL CONDYLE REPAIR**

PHASE 1: PROTECTION PHASE
WEEKS 0-6

Goals:

- *Protect healing tissue from load and shear forces
- *Decrease pain and effusion
- *Gradually improve knee flexion
- *Restore full passive knee extension
- *Regain quadriceps control

Brace:

- *Locked at 0 degrees during weight-bearing activities
- *Sleep in locked brace for 2-4 weeks

Weight-Bearing:

- *Toe touch weight-bearing for 8 weeks (approx. 10 lbs)
- *Partial weight-bearing (approx. $\frac{1}{4}$ of body weight) at weeks 9-15

Range of Motion:

- *No active knee extension exercises for the first 6-8 weeks
- *Full passive knee extension immediately
- *Initiate Continuous Passive Motion (CPM) day 1 for total of 6-8 hours a day (start at 0-40 degrees increase 10 degrees per day up to 135 degrees) for 4-6 weeks.
- *Allow the leg to hang over the side of the bed to increase bending motion. Goal is to reach 90 degrees of flexion by week 2, 110 degrees of flexion by wk 4, and full ROM by week 6. Be careful not to get stiff, but don't push beyond the point of moderate pain.
- *Straight leg raises 10 per set 5 sets per day
- *Patellar mobilization (100 times per day)
- *Motion exercises throughout the day
- *Passive knee flexion ROM 10 per set 5 times daily
- *Knee flexion ROM goal is 90 degrees for up to the first 2 weeks

Strengthening Program:

- *Ankle pump using rubber tubing
- *Quad setting
- *Multi-angle isometrics (co-contractions Q/H)

Functional activities:

- *Gradual return to daily activities
 - *Extended standing should be avoided
- If symptoms occur, reduce activities to reduce pain and inflammation

Swelling Control:

- *Ice, elevation, compression, and edema modalities as needed to decrease swelling
- *Take pain medication 30-45 min. before PT.
- *Aquatic therapy may begin 3 weeks post operatively. Wound must be well healed with no open skin areas.

****WHEN DONE IN COMBINATION WITH A TIBIAL TUBERCLE OSTEOTOMY****

- *NO STRAIGHT LEG RAISES UNTIL ORDERED*

PLEASE CONTACT HOLLY MCDANIEL R.N. WITH ANY QUESTIONS AT: HOXFORD1@JHMI.EDU