



# Cartilage Repair Center

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## Autologous Chondrocyte Transplantation PT Protocol Stage 1- Proliferative Phase (1-6 weeks)

### Femoral Condyle Defect

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#### PRIMARY GOALS

DO NOT OVERLOAD GRAFT

INCREASE TIBIOFEMORAL AND PATELLOFEMORAL MOBILITY

RESTORE QUADRICEPS CONTROL

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- BRACE**
- ◆ Knee immobilizer with ambulation, until good quad control/SLR (~3-6 weeks)
- PRECAUTIONS**
- ◆ Heel-toe TDWB with crutches
- ROM**
- ◆ Full AROM and gentle AAROM.
  - ◆ CPM  $\geq$  6-8 hours daily x 6 weeks. Progress range as tolerated.
  - ◆ Goal: Minimum 90 degrees flexion by 3 weeks, 110 degrees by 6 weeks, and full ROM by 12 weeks post-op.
- THEREX**
- ◆ Quad sets, SLR in knee immobilizer as needed, leg curl/heel slides, hip abduction
  - ◆ Stationary bicycle with no resistance once 90 degrees knee flexion obtained (~ 4 weeks).
  - ◆ Dangle knee over side of the bed 5 times per day to achieve 90 degrees.
- THERAPY**
- ◆ Gentle multi-directional patella mobilization immediately after surgery.
  - ◆ Cryotherapy and compression stockings/TEDS for swelling and pain control.
  - ◆ E-stim for VMO/quadriceps muscle re-education/biofeedback encouraged early after surgery if needed.
  - ◆ Gentle massage/deep friction to hamstring insertions, suprapatellar quadriceps, medial/lateral gutters, and infrapatellar fat pad region at 2-3 weeks post-op.
  - ◆ Pool therapy recommended 2-3 weeks post-op to enhance motion.
- COMMENTS**
- ◆ Contact MD if ROM not achieved within 20 degrees of goal.
  - ◆ No progression of this protocol until cleared by M.D at 6 weeks post-op.



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