



# Cartilage Repair Center

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## **Autologous Chondrocyte Transplantation Patella/Femoral (Patella, Trochlea or Both) Stage 1- Proliferative Phase (0-6 weeks)**

### **PRIMARY GOALS**

DO NOT OVERLOAD GRAFT  
INCREASE TIBIAL FEMORAL AND PATELLA FEMORAL MOBILITY  
RESTORE QUADRICEPS CONTROL

<b>BRACE</b>	◆Hinged knee Brace locked in full extension for transfers and ambulation
<b>PRECAUTIONS</b>	◆Full Weightbearing with crutches, wearing hinged knee brace. If TTO then 50% wbing.
<b>ROM</b>	◆Gentle AROM flexion as tolerated. Only PROM extension allowed. ◆CPM $\geq$ 6-8 hours daily 0-40 degrees only for first three weeks then full ROM as tolerated by pain. ◆90 Degree leg dangle once an hour each day to regain flexion ROM ◆Minimum 90 degrees flexion by 3 weeks, 110 degrees by 6 weeks, and full ROM by 12 weeks post-op.
<b>THEREX</b>	◆Quad sets, SLR with brace locked, leg curl/heel slides, hip abduction ◆Standing resisted isometrics and closed-chain terminal knee extension (0-30 degrees) with elastic band permitted at 3 weeks post-op. ◆Stationary bicycle with no resistance once 90 degrees knee flexion obtained (4wks).
<b>THERAPY</b>	◆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. ◆Massage/deep friction to hamstring insertions, suprapatellar quadriceps, medial/lateral gutters, and infrapatellar fat pad region at 2 weeks post-op. ◆Whirlpool therapy recommended 3 weeks post-op to enhance motion.
<b>COMMENTS</b>	◆ <b>NO</b> active open-chain due to increased patellofemoral contact forces. ◆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. ◆No leg presses/squats

For Outpatient Physical Therapist:  
2-3x week / 6 weeks



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