



# Cartilage Repair Center

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## **Autologous Chondrocyte Transplantation**

### **DFVO/TTO+PF**

#### **Stage 1- Proliferative Phase (0-6 weeks)**

#### **PRIMARY GOALS**

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

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<b>BRACE</b>	♦Hinged knee Brace locked in full extension for transfers and ambulation
<b>PRECAUTIONS</b>	♦Heel-toe TDWB with crutches
<b>ROM</b>	♦Gentle AROM flexion as tolerated. Only PROM extension allowed.
tolerated	♦CPM $\geq$ 6-8 hours daily 0-40 degrees for first 3 week then full ROM as tolerated
<b>ROM</b>	♦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, NO SLR ♦Stationary bicycle with no resistance once 90 degrees knee flexion obtained (4wks). ♦90 Degree Leg dangle once an hour each day to regain flexion ROM
<b>THERAPY</b>	♦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. ♦Standing resisted isometrics and closed-chain terminal knee extension (0-30 degrees) with elastic band permitted at 3 weeks post-op. ♦Massage/deep friction to hamstring insertions, suprapatellar quadriceps, medial/lateral gutters, and infrapatellar fat pad region at 2 weeks post-op. ♦Whirlpool therapy recommended 2-3 weeks post-op to enhance motion.
<b>COMMENTS</b>	♦Avoid active open-chain extension and repetitive knee flexion 40-70 degrees due to increased patellofemoral contact forces. ♦Contact MD if ROM not achieved to within 20 degrees of goal. ♦No progression of this protocol until cleared by M.D at 6 weeks post-op. ♦No leg presses/squats. ♦NO active open-chain due to increased patellofemoral contact forces

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



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at St. Mary's Medical Center