



# Cartilage Repair Center

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## HTO w/ Autologous Bone Graft & Weightbearing Condyle PT protocol

Stage 1- Proliferative Phase (0-6 weeks)

### PRIMARY GOALS

DO NOT OVERLOAD GRAFT

INCREASE TIBIAL-FEMORAL AND PATELLA-FEMORAL MOBILITY

RESTORE QUADRICEPS CONTROL AND KNEE ROM

- BRACE** ♦Knee immobilizer with ambulation, until good quads 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 2 weeks, 110 degrees by 4 weeks, and full ROM by 6 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).
- 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 2-3 weeks after surgery.  
♦Whirlpool therapy recommended at 2-3 weeks post-op to enhance motion.
- COMMENTS** ♦When tibial tubercle osteotomy performed, SLR/active knee extension not permitted  
♦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.



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