



# Cartilage Repair Center

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## HTO with Autologous Bone Graft and Weight-bearing 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

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<b>BRACE</b>	♦Knee immobilizer with ambulation, until good quads control/SLR (~3-6 weeks)
<b>PRECAUTIONS</b>	♦Heel to toe TDWB with crutches
<b>ROM</b>	♦Full AROM and gentle AAROM ♦CPM >= 6-8 hours daily x 6 weeks, progress range as tolerated ♦90 degree leg dangle once an hour each day to regain flexion ROM ♦Minimum 90 degree flexion by 2 weeks, 110 degree by 4 weeks, and full ROM by 6 weeks post-op
<b>THEREX</b>	♦Quad sets, SLR in knee immobilizer as needed, leg curl/heel slides, hip abduction ♦Stationary bicycle with no resistance once 90 degree knee flexion obtained (~4 weeks)
<b>THERAPY</b>	♦Gentle multi-directional patella mobilization immediately after surgery ♦Cryotherapy and Ace wrap 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 ♦Whirlpool therapy recommended 2-3 weeks post-op to enhance motion
<b>COMMENTS</b>	♦When tibial tubercle osteotomy performed, SLR/active knee extension not permitted ♦Contact MD if ROM not achieved within 20 degree of goal ♦No progression of this protocol until cleared by MD at 6 weeks post-op

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



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