



# Cartilage Repair Center

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## Autologous Chondrocyte Transplantation PT Protocol Stage 2- Transitional Phase (7-12 weeks)

### **Femoral Condyle + Patellofemoral**

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#### **PRIMARY GOALS**

DO NOT OVERLOAD GRAFT

INCREASE TIBIOFEMORAL AND PATELLOFEMORAL MOBILITY

RESTORE QUADRICEPS CONTROL

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| <b>BRACE</b>    | <ul style="list-style-type: none"><li>◆ Hinged knee brace may be discontinued once independent SLR achieved</li></ul>  |
| <b>GAIT</b>     | <ul style="list-style-type: none"><li>◆ Weeks 7 &amp; 8: 50% weightbearing, weeks 9+: full weightbearing</li></ul>   |
| <b>ROM</b>      | <ul style="list-style-type: none"><li>◆ Gentle A/AAROM flexion and extension permitted</li><li>◆ Progress towards full ROM by 12 weeks</li></ul>   |
| <b>THEREX</b>   | <ul style="list-style-type: none"><li>◆ Stationary bicycling without resistance for short intervals (5 min 2-3x/day) as tolerated</li><li>◆ Strengthening of quadriceps, hamstrings, and hip abductors/extensors using elastic band isometrics and closed-chain terminal knee extension 0-40 degrees only</li><li>◆ Backward treadmill walking with safety bars recommended for reduced patellofemoral compressive forces.</li><li>◆ Pool exercise using kickboard allowed- flutter/straight leg scissor kick only (no whip kick)</li><li>◆ <u>No</u> open-chain strengthening permitted until 6 months after surgery.</li><li>◆ <u>No</u> closed-chain leg press or squatting</li></ul> |
| <b>THERAPY</b>  | <ul style="list-style-type: none"><li>◆ Gentle multi-directional patella mobilization</li><li>◆ Cryotherapy and compression stockings/TEDS for swelling and pain control</li><li>◆ E-stim for VMO/quadriceps muscle re-education/biofeedback encouraged</li><li>◆ Gentle massage/deep friction to hamstring insertions, suprapatellar quadriceps, medial/lateral gutters, and infrapatellar fat pad region</li><li>◆ Pool therapy recommended to enhance motion</li></ul>  |
| <b>COMMENTS</b> | <ul style="list-style-type: none"><li>◆ Activity level should be modified if increased pain, catching, or swelling occurs. Progression of activity may resume once comfort level returns</li><li>◆ No progression of this protocol until cleared by M.D at 12 weeks post-op.</li></ul>   |



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