

Cartilage Restoration: Femoral Condyle

For more detailed MACI protocol please visit
<https://www.raleighsportsmed.com/pdf/knee-maci-procedure-rehabilitation-protocol.pdf>

<u>Postop</u>	<u>Goals</u>	<u>Precautions</u>	<u>Exercises</u>
Weeks 0-2 HEP daily	Full passive extension Edema and pain control Promote independence	TTWB (20%) Brace locked at 0° except for approved exercises and CMP CPM (6hrs/day) Weeks 0-2: 0-40° Advance 5-10° per day as tolerated	Quad sets/SLR Calf pumps Passive leg hangs to 90° Stretches: hamstring and gastrocnemius
Weeks 2-6 PT 1-2x/week HEP daily	Full passive extension 120° knee flexion Prevent quad inhibition Edema and pain control Promote independence	TTWB (20%) Brace locked at 0° except for approved exercises and CMP CPM (6hrs/day) Weeks 2-4: 0-90° Weeks 4-6: 0-120°	AA/PROM pain-free Towel extension Patella mobilization Quad re-education SLR in all planes Hip/core resisted exercises LE flexibility exercises
Weeks 6-12 PT 2-3x/week HEP daily	Full ROM Normal gait pattern Ascend 8" step with control Normal patella mobility Improve ADL endurance	Progress WB 25% per week until full DC brace when adequate quad Avoid descending stairs reciprocally Avoid painful activities No running	Continue above exercises Gait training Closed chain activities: wall sits, mini-squats, toe raises, stationary bike, leg press 0-60° Proprioception training Initiate step-up program
Weeks 12-20 PT 2-3x/week HEP daily	Return to normal ADLs Improve endurance Descend 8" step with control 85% limb symmetry Improve strength/flexibility	WBAT Avoid painful activities No running Forward step-down test and isokinetic testing at 4 months	Continue and advance above Progress squat program Leg press (emphasize eccentrics) Retrograde treadmill Initiate step-down program Advance to elliptical, bike, pool Open chain extension to 40°
Weeks 20+ PT 1x/week HEP daily	No apprehension with sport specific movements Maximize strength and flexibility to meet sporting demands	Avoid painful activities No running until: Strength >70% contralateral No agility training until: Strength >90% contralateral No RTP until: Passes RTP evaluation, MD clearance	Continue and advance above Begin forward running Begin plyometric program

Ryan R. Fader, M.D.

For more info: www.ryanfadermd.com
ryanfadermd@gmail.com
 call 952-946-9777