

PHYSICAL THERAPY PRESCRIPTION

DIAGNOSIS (LEFT / RIGHT) CARTILAGE REPAIR (MICROFRACTURE / OATS / ALLOGRAFT OATS) (MEDIAL
FEMORAL CONDYLE / LATERAL FEMORAL CONDYLE / TROCHLEA / PATELLA)

DATE OF SURGERY _____

PHASE 1 EARLY 0-6 WEEKS

****Knee brace** thru 6 weeks

****Non-weight bearing with crutches** x 6 weeks (TTWB ok for patella/trochlea)

****CPM** ~ 3-4 hours daily x 6 weeks, start 0-60° post-op, progress to 110° by 6 weeks, and full ROM by 12 weeks post-op.

ROM Exercises: Week 0-6: 0-110°

(goal 90° flexion by week 3, 110° by week 6)

Isometric quad sets and SLR:

- start immediately post-op
- wear knee brace during SLR
- may apply e-stim for poor quad function

Pre Progression - Emphasize VMO Strengthening

- Multiple angle isometrics
- Eccentric closed chain isotonic
- Concentric closed chain isotonic
- Eccentric open chain isokinetics (performed in 90° - 30° arc)
- Concentric open chain isokinetics, submaximal
- Eccentric open chain isotonic
- Concentric open chain isotonic, submaximal
- Concentric open chain isotonic, maximal
- Gentle multi-directional patella mobilization immediately after surgery
- Massage/deep friction to hamstring insertions, supra patellar quadriceps, medial/lateral gutters, and infrapatellar regions 2-3 weeks post-op
- Hamstring/adductor/abductor/quadriceps/Achilles stretching
- Whirlpool therapy if available at 2-3 weeks post-op to enhance motion
- Stationary bicycle with no resistance once 90° knee flexion obtained (~ 4 weeks)
- Anti-inflammatory modalities as needed (US/massage/e-stim)
- Cryotherapy and compression stockings/TE OS for swelling and pain control

PHASE 2 TRANSITIONAL PHASE

****Weight-bearing status:** use bathroom scale to progress as follows:

- Week 7: PWB 1/3 body weight
- Week 8: PWB 2/3 body weight
- Week 9: FWB with crutches
- Week 10+: crutch, cane, or no device as tolerated

ROM Exercises: continue full AROM and gentle PROM exercises CPM may be discontinued

- Low weight (max 10 - 20 lbs.) open-chain leg extension and curl
 - Stationary bicycle with gradual increased tension per level of comfort
 - Continue quad sets, SLR in brace, leg curl and heel slides
 - Strengthen quads, hamstrings, and hip abductors/extensors using ankle weights and/or elastic band resistance through full ROM as tolerated
 - Gentle closed-chain terminal knee extension 0-40° (TKE) permitted starting at 9-10 weeks as tolerated per weight bearing restriction
- Continue multi-directional patella mobilization
 - Hamstring/adductor/abductor/quadracept/Achilles stretching
 - Whirlpool therapy if available to enhance motion and quadracept/hamstring muscle control
 - E-stim for VMO/quadracept muscle re-education/biofeedback as needed
 - Gentle massage/deep friction to hamstring insertions, suprapatellar quadracepts, medial/lateral gutters, and infrapatellar regions
 - Activity level should be modified if increased pain, catching, or swelling occurs

PHASE3: REMODELING PHASE 13 WEEKS+

****Weight-bearing status:** full weight-bearing as tolerated with crutch or cane as needed/pain allows

ROM Exercises: continue full AROM and gentle PROM exercises CPM may be discontinued

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- Resisted open-chain exercise with ≤ 20 lbs to be progressed as tolerated after 6mos
 - Closed-chain exercise to promote knee stability and proprioception through full ROM as tolerated
 - Cycling on level surfaces permitted with gradual increase intension per level of comfort
 - Treadmill walking encouraged
 - Rollerblading permitted at 6-7 months
- Continue multi-directional patella mobilization
 - Hamstring/adductor/abductor/quadracept/Achillees stretching
 - Whirlpool therapy if available to enhance motion and quadracept/hamstring muscle control
 - E-stim for VMO/quadracept muscle re-education/biofeedback as needed
 - Gentle massage/deep friction to hamstring insertions, suprapatellar quadracepts, medial/lateral gutters, and infrapatellar regions
 - Activity level should be modified if increased pain, catching, or swelling occurs
- **no pivoting sports should be started without MD clearance
- **no squats, no leg presses allowed

Treatment: _____ times per week Duration: _____ weeks

Physician's Signature: _____