

REHABILITATION GUIDELINES FOR MICROFRACTURE/BIOCARTILAGE OF FEMORAL CONDYLE

PHASE I (0-6 WEEKS)

DATES:

Appointments	<ul style="list-style-type: none"> • Begin physical therapy 3 days post-op 1 – 2 x per week
Rehabilitation Goals	<ul style="list-style-type: none"> • Protection of the post-surgical knee • Restore normal knee range of motion and patellar mobility • Eliminate effusion • Restore leg control
Precautions	<ul style="list-style-type: none"> • Femoral Condyle: • NWB x 6 weeks • Brace locked in extension x 1 week, then unlock 0-90 degrees in weight bearing x 6 weeks • Progress ROM as tolerate no restrictions • Patellofemoral: • Avoid open chain strength • Weight bearing 0-90 degrees closed kinetic chain strength with brace
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> • Flexibility exercises • 0-2 weeks: Quad sets (not w/PF), SLR, calf pumps, passive leg hangs to 90 • 2-6 week: Quad, hamstring, and glut sets, SLR, side-lying hip and core
Suggested Cardiovascular Exercise	<ul style="list-style-type: none"> • Upper body circuit training or upper body ergometer
Progression Criteria	<ul style="list-style-type: none"> • 6 weeks post-op • No effusion • Full knee extension

PHASE II (6-8 WEEKS)

DATES:

Appointments	<ul style="list-style-type: none"> • Continue PT 2x week
Rehabilitation Goals	<ul style="list-style-type: none"> • Full ROM – progress as tolerated • Improve gait mechanics • Progress lower extremity strength and endurance • Gradually increase functional activities
Precautions	<ul style="list-style-type: none"> • Advance weight bearing 50% weekly until full at 8 weeks post-op • Avoid loading knee at deep flexion angles, no squat > 90 degrees
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> • Advance Phase I exercises, gait drills, hip and core strengthening; Begin weight bearing exercises, weight shifts, calf raise, TKE with T-Band, Bridging, low resistance squats.
Progression Criteria	<ul style="list-style-type: none"> • Full ROM • Good tolerance to weight bearing progression • No effusion • Normal gait pattern

PHASE III (8-12 WEEKS)

DATES:

Appointments	<ul style="list-style-type: none"> • Continue PT 1-2x week
Rehabilitation Goals	<ul style="list-style-type: none"> • Restore normal gait mechanics • Progress closed chain activities • Increase functional activities
Precautions	<ul style="list-style-type: none"> • None
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> • Wall sits, shuttle, mini-squats • Begin unilateral stance activities, balance training
Progression Criteria	<ul style="list-style-type: none"> • Normal gait mechanics

PHASE IV (12 WEEKS – 6 MONTHS)**DATES:**

Appointments	<ul style="list-style-type: none"> PT 1x week weaning down to home workouts
Rehabilitation Goals	<ul style="list-style-type: none"> Maximize core/glutes, pelvic stability work Light impact running on Treadmill at 12 weeks progress to plyos and outside funning at 18 weeks - 6 months Gradual return to full unrestricted activities
Precautions	<ul style="list-style-type: none"> Post-activity soreness should resolve within 24 hours Avoid knee pain with impact
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> Advance Phase III exercises Core/glute, pelvic stability work, eccentric hamstrings, sport/work specific balance and proprioceptive drills
Cardiovascular Exercises	<ul style="list-style-type: none"> May begin elliptical, bike, and pool as tolerated
Progression Criteria	<ul style="list-style-type: none"> Physician approval

PHASE V (6 MONTHS – 12 MONTHS)**DATES:**

Appointments	<ul style="list-style-type: none"> Schedule MD visit linked to Return to sport testing in PT
Rehabilitation Goals	<ul style="list-style-type: none"> Advance functional activity Return to sport-specific activity
Precautions	<ul style="list-style-type: none"> MD clearance for impact and sport-specific activity after 6 months
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> Return to sport-specific activity and testing

(Resources used: Dr. Brian Cole, Marc Sherry, PT, DPT, LAT, CSCS(msherry@uwhealth.org) and the UW Health Sports Medicine physician group)

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