



Knee Femoral Condyle Microfracture Rehabilitation Protocol

GENERAL GUIDELINES

- Touch-down weight bearing for the first 6 weeks
- Crutches are utilized for the first 8 weeks post-surgery
- Continuous passive motion machine for the first 6 weeks 4-6 hours/day

GENERAL PROGRESSION OF ACTIVITIES OF DAILY LIVING

Patients may begin the following activities at the dates indicated (unless otherwise specified by the physician):

- Bathing/showering without brace after suture removal
- Driving:
 - 1 weeks for automatic cars, left leg surgery
 - 4 weeks for standard cars, right leg surgery

REHABILITATION PROGRESSION

The following is a general guideline for progression of rehabilitation following micro-fracture of the femoral condyle. Progression through each phase should take into account patient status (e.g. healing, function) and physician advisement. Please consult the physician if there is any uncertainty concerning advancement of a patient to the next phase of rehabilitation.

PHASE 1 (0 - 6 weeks)

- 1-2 visits/week
- Begins immediately post-op through approximately 6 weeks
- Brace locked in extension

Goals:

- Continuous passive motion for first 6 weeks to encourage fibrocartilage formation
- Continuous motion for minimum 4 hours/day
- Range of motion 0-90 degrees in brace
- Control inflammation (ice, elevation, etc.)



- Quad sets and straight leg raises
- May ride stationary bike with seat elevated to prevent flexion past 90 degrees

Weight-Bearing Status:

- Toe-touch weight bearing only for the first 6 weeks

Therapeutic Exercises:

- Heel slides
- Quad sets, hamstring sets (consider NMES for poor quad set)
- Patellar mobilization
- Non-weight-bearing gastroc/soles, hamstring stretches
- SLR, all planes, with brace in full extension until quadriceps strength is sufficient to prevent extension lag

PHASE 2 (6 - 8 weeks)

- 1-2 visits/week
- Begins approximately 6 weeks post-op and extends to approximately 8 weeks

Goals:

- Restore normal range of motion
- Restore normal gait
- Progress weight bearing to full

Therapeutic Exercises:

- 4-way hip
- Stationary bike (begin with high seat, low tension to promote ROM. Progress to single leg)
- Closed chain terminal extension with resistive tubing or weight machine
- Toe raises
- Balance exercises (e.g. single-leg balance, KAT)
- Hamstring curls
- Aquatic therapy with emphasis on normalization of gait



PHASE 3 (8 - 12 weeks)

- 1-2 visits a week
- Begins at approximately 8 weeks and extends through approximately 12 weeks

Goals:

- Full range of motion
- Improve strength, endurance and proprioception of the lower extremity to prepare for functional activities
- Full weight bearing with crutches or a brace

Therapeutic Exercises:

- Continue and progress previous flexibility and strengthening activities
- Stairmaster (begin with short steps and avoid hyper-extension)
- Nordic Track
- Advance closed kinetic chain activities (leg press, one-leg mini-squats 0-45° of flexion, step-ups beginning at 2" and progress to 8", etc.)
- Progress aquatic program to include pool running, swimming (no breaststroke)

PHASE 4 (12 weeks - 6 months)

- Begins at approximately 12 weeks and extends through approximately 6 months
- Discharge after completion of appropriate functional progression

Goal:

- Continue and progress previous flexibility and strengthening activities
- May begin jogging after 3 months once effusion has subsided
- Functional progression including:
 - Walk/job progression
 - Forward/backward running at ½, ¾ and, full speed

Therapeutic Exercises:

- Progress resistance training
- Return to functional sporting activity when effusion resolved, range of motion within normal limits, and strength has returned to at least 90% normal side