

Microfracture Protocol

The following protocol has been designed as a guideline for rehabilitation after microfracture of the femur or tibia. It is imperative to limit weightbearing on the operative leg to allow for the site to heal and not to dislodge the clot.

Phase I: Maximum Protection *(surgery to 6-8 weeks)*

- **Goals:**
 - Protect the microfracture site
 - Full ROM
- **Weightbearing: Strict NWB** with TTWB for transfers with crutches
- **Bracing:** None
- **Cryotherapy:** Cold with compression/elevation
 - First 24 hours or until acute inflammation is controlled: every hour for 15 min.
 - After acute inflammation is controlled: 3x a day for 15 min
- **Range of Motion:**
 - Passive flexion/extension of the knee with 500 reps 3x/day
- **Therapeutic Exercises**
 - Standing 1/3 knee bends with all weight on uninvolved leg
 - Stationary biking w/o resistance may begin at 2 weeks

Phase II: Increase Activity *(approx. weeks 8-16)*

- **Goals**
 - Full ROM
 - Improve strength & endurance
- **Weightbearing:** WBAT → FWB
- **Range of Motion**
 - Bike: rocking-for-range → riding with low seat height
 - Flexibility stretching for all major groups
- **Therapeutic Exercises**
 - Elastic resistance cord exercises
 - Quads: Mini squats (90°), lateral step-ups
 - HS: curls, resistive SLR with sports cord/TB
 - Neuromuscular training: wobble board, rocker board, single-leg stance w/wo equipment, slide board, fitter

Phase III: Advanced *(approx. weeks 16-24)*

- **Goals**
 - Return to sport

- **Strengthening:**
 - Free weights or machine weights can be started when early goals of rehab have been met, but NO SOONER THAN 16 weeks after surgery
- **Therapeutic Exercises**
 - Patients must not resume sports that involve pivoting, cutting, and jumping for 4-6 months after a microfracture procedure
 - Surgeon must give the OK for patient to begin RTP activities

This protocol has been adopted from the Steadman Clinic (http://thesteadmanclinic.com/knee_microfracture/recov.asp)