

Medial Patellofemoral Ligament Repair Rehabilitation Protocol

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General Principles of Arthroscopic Meniscus Repair Rehabilitation

Rehabilitation after arthroscopic meniscus repair is a structured, phased process. Specific rehabilitation protocols may vary based on the repair technique used, such as "all-inside" versus "inside-out" methods. Key differences primarily concern weight-bearing progression and the timing of advanced activities.

The overall goals of this rehabilitation include:

- Controlling pain, swelling, and hemarthrosis.
- Regaining normal knee range of motion.
- Regaining a normal gait pattern and neuromuscular stability for ambulation.
- Regaining normal lower extremity strength, proprioception, balance, and coordination for daily activities.
- Achieving the level of function based on orthopedic and patient goals.

Phase I (0-2 Weeks):

- **Weight Bearing:**
 - **All-Inside Repair:** Patients are likely non weight bearing or partial weight bearing (PWB) with crutches for 2-8+ weeks (dependent on extent of tear/tear type/additional cartilage procedure, etc.). When permitted by your doctor to bear weight during this phase, the brace should remain locked in extension, unless otherwise specified.
 - There is no weight bearing allowed with flexion greater than 90° at any time during this phase.
 - **Inside-Out Repair:** As above. Differences in protocol for inside-out repair will be provided by your doctor if applicable.
- **Brace:** For both protocols, the brace is locked in full extension for sleeping and all activity, but can be removed for exercises and hygiene. The brace must be worn at all times when sleeping during this phase. When at rest while awake, the brace is permitted to be unlocked to allow for range of motion from 0-90 degrees.
- **Range of Motion (ROM):** Both protocols limit flexion to 90° in brace, regardless of allowance of weight bearing status.
- **Exercises:** Both protocols include heel slides, quad sets, patellar mobs, SLR (Straight Leg Raise), and SAQ (Short Arc Quads).

Phase II (All-Inside: 2-6 Weeks; Inside-Out: 2-8 Weeks):

- **Weight Bearing:**
 - All-Inside Repair: From 2-4 weeks, the patient is full weight bearing in a brace unlocked to 0-90°. From 4-6 weeks, the brace is discontinued, and the patient is full weight bearing without it.
 - Inside-Out Repair: From 2-4 weeks, 50% weight bearing with crutches is allowed. From 4-8 weeks, the patient progresses to full weight bearing.

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- **Brace:** For both protocols, the brace is unlocked to 0-90° from 2-6 weeks and is off at night. The brace is discontinued at 6 weeks for both.
- **Exercises:** Both protocols add heel raises, total gym (closed chain activities), and terminal knee extensions. Activities are performed with the brace until 6 weeks, then without as tolerated.

Phase III (All-Inside: 6-12 Weeks; Inside-Out: 8-12 Weeks):

- **Weight Bearing & Brace:** Both protocols involve full weight bearing with no brace.
- **Start Time:** Phase III begins at 6 weeks for all-inside repair, whereas it starts at 8 weeks for inside-out repair.
- **Exercises:** Both protocols progress closed chain activities, begin hamstring work, lunges/leg press (0-90°), proprioception exercises, and balance/core/hip/glutes work. Stationary bike is also initiated.

Phase IV (12-20 Weeks for both):

- **Weight Bearing & Brace:** Both protocols involve full weight bearing with no brace.
- **Exercises:** Both progress Phase III exercises and functional activities, including single leg balance, core, glutes, eccentric hamstrings, elliptical, and bike.
- **Return to Activity:**
 - **All-Inside Repair:** Swimming is permitted at 12 weeks. Advancement to sport-specific drills and running/jumping is allowed after 16 weeks once cleared by your doctor.
 - **Inside-Out Repair:** Swimming is permitted later, at 16 weeks. Running and jumping are typically introduced in a subsequent phase.

Phase V (Inside-Out Only: >20 Weeks):

- **Inside-Out Repair:** This protocol includes an explicit Phase V for activities beyond 20 weeks. In this phase, the patient can advance to sport-specific drills and running/jumping once cleared by a medical doctor. The all-inside protocol incorporates similar advanced activities into its Phase IV timeline.

Common Restrictions/Considerations for Both Protocols:

- For both repair types, any tibial rotation should be avoided for 8 weeks to protect the meniscus.
- The specific weight bearing status may vary based on the nature of the meniscus repair, and patients should refer to their physical therapy prescription for confirmation.