

**ACL Reconstruction with Quadriceps Tendon Autograft
 and Meniscal Repair (Inside-Out) Protocol**

| | Weight-baring | Brace | Range of Motion | Exercises |
|-------------------------------|--|--|------------------------------------|---|
| Phase 1 0-2 weeks | Heel touch with crutches (a) | 0-2 week: Locked in full extension for ambulation and sleeping Off for exercises and hygiene only | Gentle Passive 0-90° by 2 weeks | Calf pumps, patellar mobilization, quadriceps tightening sets and SLR in brace. No weight-bearing motion. |
| Phase 2 2-12 weeks | 2-4 weeks: 50% weight bearing with brace unlocked 0- 90° 4-8 weeks: Progress to full with brace unlocked 0- 90° and discontinue brace at 6 weeks. | 2-6 weeks: Unlocked 0-90° for ambulation, remove for sleeping (a). Discontinue at 6 weeks if quadriceps control is adequate (no extension lag) | Gain full and pain-free | Add side-lying hip and core, advance quad set and stretching(a) In brace: Addition of heel raises, total gym (closed chain), gait normalization, eccentric quads, eccentric hamstrings. Advance core work with hip, gluteal and core strengthening. No weight-bearing with flexion >90° Begin toe raises, closed chain quads, balance exercises, hamstring curls, stationary bike, step-ups, front and side planks, hip/glute/core Begin Stationary Bike at 8 weeks |
| Phase 3 12-16 weeks | Full with a normalized gait pattern | None | Full | Advance closed chain strengthening Progress proprioception activities Elliptical at 12 weeks (low flexion angles) Running straight at 14-16 weeks when 8" step down is satisfactory |

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|--|------|------|------|---|
| Phase 4 16 weeks – 6 months | Full | None | Full | 16 weeks: Begin jumping 20 weeks: Advance running to sprinting, backward running, cutting, pivoting, changing direction, initiate plyometric program and sport-specific drills 22 weeks: Advance as tolerated FSA completed at 22 weeks (b) |
| Phase 5 6-12 months | Full | None | Full | Gradual return to sports participation after completion of functional sports assessment (FSA) Maintenance program based on FSA |

SLR – Straight-leg raise

(a) Modified with concomitantly performed meniscus repair/transplantation or articular cartilage procedure

(b) Completion of FSA (Functional Sports Assessment) is not mandatory, but is recommended at approximately 22 weeks post-op for competitive athletes returning to play after rehabilitation