

ACL Reconstruction with Bone-Patellar Tendon-Bone (BTB) Autograft and Meniscal Repair All Inside Rehabilitation Protocol

| | Weight-bearing | Brace | Range of Motion | Exercises |
|---------------------------------------|--|--|-----------------------------|--|
| Phase 1 0-6 weeks | Full in brace ^a | <p>0-2 week: Locked in full extension for ambulation and sleeping</p> <p>Off for exercises and hygiene only</p> <p>2-6 weeks: Unlocked 0-90° for ambulation, remove for sleeping^b</p> | Passive 0-90° by 2 weeks | <p>Calf pumps, patellar mobilization, quadriceps tightening sets and SLR in brace. No weight-bearing motion.</p> <p>Add side-lying hip and core, advance quad set and stretching^a</p> <p>In brace: Addition of heel raises, total gym (closed chain), gait normalization, eccentric quads, eccentric hamstrings.</p> <p>Advance core work with hip, gluteal and core strengthening</p> <p>No weight-bearing with flexion >90°</p> |
| Phase 2 6-12 weeks | Full, progressing to normal gait pattern | Discontinue at 6 weeks if quadriceps control is adequate (no extension lag) | Gain full and pain-free | Begin toe raises, closed chain quads, balance exercises, hamstring curls, stationary bike, step-ups, front and side planks, hip/glute/core |
| Phase 3 12-16 weeks | Full with a normalized gait pattern | None | Full | <p>Advance closed chain strengthening</p> <p>Progress proprioception activities</p> <p>Begin stair climber, elliptical at 8 weeks and running straight at 12 weeks when 8" step down is satisfactory</p> |
| Phase 4 16 weeks – 6 months | Full | None | Full | <p>16 weeks: Begin jumping</p> <p>20 weeks: Advance running to sprinting, backward running, cutting, pivoting, changing direction, initiate plyometric program and sport-specific drills</p> <p>22 weeks: Advance as tolerated</p> <p>FSA completed at 22 weeks^b</p> |
| Phase 5 6-12 months | Full | None | Full | <p>Gradual return to sports participation after completion of functional sports assessment (FSA)</p> <p>Maintenance program based on FSA</p> |

SLR – Straight-leg raise

^aModified with concomitantly performed meniscus repair/transplantation or articular cartilage procedure

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