

# Centers for Advanced Orthopedics

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## MULTI-LIGAMENT RECONSTRUCTION REHABILITATION PROTOCOL

|                            | <b>WEIGHT BEARING</b>  | <b>BRACE</b>  | <b>ROM</b>                                      | <b>THERAPEUTIC EXERCISES</b>  |
|----------------------------|--|---|---|---|
| <b>PHASE I</b>             |  |   |   |   |
| <b>0 - 3 weeks</b>         | Toe touch weight bearing with crutches   | Locked in full extension  | passive only**<br><b>0-90 degrees</b>           | Quad sets, ankle pumps, SLR, hip ab/adduction, hamstring/calf stretch, calf press with theraband, patellar mobilization   |
| <b>3 - 6 weeks</b>         | 50% weight bearing with crutches   | <b>3 - 6 weeks:</b> locked in full extension for ambulation - removed for exercise  | passive only**<br><b>0-90 degrees</b>           | Add chair slides, passive ROM in prone position   |
| <b>PHASE II</b>            |  |   |   |   |
| <b>6 - 12 weeks</b>        | <b>Weeks 6 - 10:</b><br>Progress 25% per week until full weight bearing at 8 weeks | <b>6-10 weeks:</b> unlocked for all activities<br><b>10 weeks - 4 mo:</b> Varus unloader brace or sports brace as indicated | Maintain full extension and progressive flexion | <b>6-8 weeks:</b> gait training, wall slides, mini-squats, resisted hip exercises in standing***<br><b>8-12 weeks:</b> stationary bike with light resistance (to begin) and seat higher than normal, closed chain terminal knee extensions, Stairmaster, balance and proprioception activities, leg press (limiting knee flexion to 90 degrees) |
| <b>PHASE III</b>           |  |   |   |   |
| <b>12 weeks - 4 months</b> | Full, without use of crutches and with a normalized gait pattern                   | Varus unloader brace or sports brace as indicated   | Gain full and pain-free                         | Advance closed chain strengthening, progress proprioception and balance activities, maintain flexibility  |
| <b>4 mo - 7 mo</b>         | Full   | None  | Full  | Treadmill walking, advance to jog<br>Add hamstring curls for strengthening  |
| <b>PHASE IV</b>            |  |   |   |   |
| <b>7 months and beyond</b> | Full   | None  | Full and pain-free                              | Maintain strength, endurance, and function, begin sport-specific functional progression (backward running, cutting, grapevine, etc.), progress to running, initiate a plyometric program<br>Return to sports with brace until 1 year post-op  |

\*\*Maintain anterior pressure on proximal tibia as knee is flexed - prevent posterior sagging at all times

\*\*\*Resistance must be proximal to knee with hip ab/adduction exercises