

Standard Multi-ligament Reconstruction Rehabilitation Protocol

Phase	Goals	Precautions/Restrictions	Treatment
Days 0-10	<ul style="list-style-type: none"> • Protect surgical site • Decrease pain and inflammation • PRICE principles 	<ul style="list-style-type: none"> • See specific tissue rehabilitation restriction appendix. • Post-op brace on full time. Utilize shower bag to keep limb completely dry. 	<ul style="list-style-type: none"> • Touch weight bearing with brace locked in extension using crutches. • Cryotherapy: 5-7times per day
Day 10 to week 6	<ul style="list-style-type: none"> • Protect surgical site • Decrease pain and inflammation • PRICE principles • Minimize muscle atrophy 	<ul style="list-style-type: none"> • Post-op brace utilized during all rehabilitation exercises, but can be unlocked. • Brace removed for showers only. 	<ul style="list-style-type: none"> • Partial weight bearing (25% body weight) with brace locked in extension using crutches. • Quadriceps sets, gluteal sets, patellar mobilizations, ankle pumps, straight leg raise (flexion). Multi-planar hip strengthening with specific tissue injury restrictions. • Cryotherapy: 5-7times per day • Initial visit: FOTO, LEFS
Weeks 6-16	<ul style="list-style-type: none"> • Maintain integrity of repair. • Establish normal walking mechanics. • Obtain full knee range of motion. • Build core, hip and lower extremity muscle strength and endurance. 	<ul style="list-style-type: none"> • Custom brace should be used 24/7 including rehab. • If patient does not have 90 degrees of knee flexion, contact surgical team. • No isolated hamstrings strengthening until 16 weeks post-op. If combined PCL and PLC no isolated hamstrings strengthening until 24 weeks post-op. 	<ul style="list-style-type: none"> • Begin weight bearing progression by 25% each week crutches and brace unlocked. • Discontinue crutches when able to walk without pain or limp. • Positional restrictions are removed for range of motion exercises. • Core, hip and lower extremity strengthening exercises appropriate for current weight bearing status. • Progress proprioceptive exercises when able to bear full weight. • PRICE principles as needed. • Week 6 and 12: FOTO, LEFS
Weeks 16-36	<ul style="list-style-type: none"> • Maintain integrity of repair. • Develop lower extremity endurance, strength, and power. 	<ul style="list-style-type: none"> • Avoid cutting, running, pivoting and jumping. • Custom brace used 24/7. 	<ul style="list-style-type: none"> • Progress core, hip and lower extremity strengthening exercises. • Multiple plane proprioceptive exercises. • Begin to challenge cardiovascular system with sports specific modifications. • Begin isolated hamstrings strengthening. If combined PCL and PLC delay until 24 weeks. • Week 24: FOTO, LEFS
Weeks 36-48	<ul style="list-style-type: none"> • Initiate return to sport progression • 90% LSI on isokinetic strength and functional testing. 	<ul style="list-style-type: none"> • Custom brace used 24/7. • Return to sport/work based on MD approval. 	<ul style="list-style-type: none"> • Low level sport specific activity. • Isokinetic testing knee flexion/extension at 60, 180, and 300 degrees/second • Single leg hop, Single leg triple hop, and cross-over single leg hop testing • Week 36 and anticipated last visit: FOTO, LEFS

This protocol is not meant to be prescriptive but a recommendation to guide the rehabilitation process. Each patient's progress may vary based on specifics of their injury and procedure.



Standard Multi-ligament Reconstruction Rehabilitation Protocol

Specific Tissue Restrictions

Tissue	Rehabilitation Modifications
ACL	<ul style="list-style-type: none"> No modifications to rehab.
PCL	<ul style="list-style-type: none"> Protect posterior translation of tibia for six weeks. Avoid gravity causing posterior glide (e.g. straight leg raise without a brace) No active hamstrings contractions for 8 weeks. Prone straight leg raise (extension) may only be performed with brace locked in extension and no resistance for 8 weeks. Perform prone passive flexion range of motion with support of posterior tibia x 6 weeks.
PLC	<ul style="list-style-type: none"> Follow PCL rehab modifications for posterior translation of the tibia. Avoid hamstrings contractions for 8 weeks. Avoid rotation and varus stress for a minimum of six weeks. Side-lying abduction straight leg raises may only be performed with brace locked in extension and no resistance for 8 weeks.
MCL	<ul style="list-style-type: none"> Perform range of motion exercises with foot internally rotated. Avoid excessive valgus forces to the knee joint. Protect hyperextension if the capsule is involved for a minimum of 6 weeks. Side-lying adduction may only be performed with brace locked in extension and no resistance for a minimum of 8 weeks.
Meniscus Root/Body Repair	<ul style="list-style-type: none"> Focus on form and control

This protocol is not meant to be prescriptive but a recommendation to guide the rehabilitation process. Each patient's progress may vary based on specifics of their injury and procedure.