

Multi-ligament Repair ACL/MCL/PCL/LCL/PLC combinations

Individual patient circumstances may affect the guideline
(tear configuration, fixation used, associated procedures, etc.)

Phase	Goals	Precautions/Restrictions	Treatment
Weeks 0-2	<ul style="list-style-type: none"> • Protect surgical site • Reduce muscle atrophy • Reduce swelling • Decrease pain and inflammation • Initiate knee extension 	<ul style="list-style-type: none"> • Brace locked in extension • NWB with crutches • Avoid hyperextension • Knee flexion 0- 30° <ul style="list-style-type: none"> • No hamstring AROM or stretching • No extension open chain or isolated hamstring exercises <p><i>**Defer to operative note for surgeon specific WB instructions with meniscal injuries**</i></p>	<ul style="list-style-type: none"> • ROM <ul style="list-style-type: none"> ○ Extension focus <ul style="list-style-type: none"> • Gradual progression with PLC repair • Quadriceps recruitment/NMES • Gait training with crutches • Initiate BFR; if applicable
Weeks 2-6	<ul style="list-style-type: none"> • Reduce swelling and pain • Restore patellar mobility • Full passive knee extension rom • SLR without lag • Restore quadriceps control • Normalized gait <p style="color: red; font-weight: bold;">Please contact surgical team if full knee extension and unassisted straight leg raise without extension lag not achieved by week 6.</p>	<ul style="list-style-type: none"> • NWB on crutches • Wean from brace with excellent quad control • Knee flexion PROM <ul style="list-style-type: none"> ○ Week 3 0-60° ○ Week 4 0-90° ○ Week 6 as tolerated • Avoid varus/valgus moves 	<ul style="list-style-type: none"> • ROM <ul style="list-style-type: none"> ○ Can progress into hyperextension if available ○ Flexion can be accelerated if MCL repair is not proximal or midsubstance • Multi-angle isometrics for quad control <ul style="list-style-type: none"> ○ Continue with NMES if needed • Gait training progression for assistive device • Initiate hamstring AROM after 4 weeks • Core stabilization exercises
Weeks 6-12	<ul style="list-style-type: none"> • Full, symmetric and pain free ROM • Progress quadriceps strength/endurance • Progress functional activities • Discontinue brace with normalized gait mechanics 	<ul style="list-style-type: none"> • Progress to full WB by 8 weeks • Knee flexion ROM as tolerated • Initiate open kinetic chain exercise <ul style="list-style-type: none"> ○ 90-0° at 6 weeks (BW only) ○ 90-0° with progressive loading at 10 weeks • No running, jumping, cutting, pivoting or twisting 	<ul style="list-style-type: none"> • Progressive double and single limb strengthening • Can begin isolated isotonic hamstring exercises at 8 weeks • Full knee flexion PROM by 12 weeks • Aerobic training on stationary bike, elliptical, stair climber, UBE
Weeks 12-16	<ul style="list-style-type: none"> • Full, symmetric ROM • Progressive resistance training • Pass Return to Run criteria (See Appendix) • No effusion with increased activity 	<ul style="list-style-type: none"> • Avoid painful activities/exercises • No jogging on painful or swollen knee 	<ul style="list-style-type: none"> • Progress hypertrophy and strength training • Continue balance/proprioceptive training • Perform Return to Run testing (Between 12-16 weeks) • Initiate running program; if applicable
Months 4-6	<ul style="list-style-type: none"> • Full, symmetric ROM • Progress sport specific training • Successful progression of return to run program • Initiate plyometric and agility training 	<ul style="list-style-type: none"> • Avoid painful activities/exercises • No jogging on a painful/swollen knee • No participation in sports 	<ul style="list-style-type: none"> • Progression of return to jogging program • Continue progressive resistive exercise (PRE) • Increase intensity of plyometric and agility training
Months 6-12	<ul style="list-style-type: none"> • Continue to progress functional strengthening • Sport-specific training • Pass Return to Sport criteria 	<ul style="list-style-type: none"> • No participation in sports unless specified by care team • Avoid painful activities 	<ul style="list-style-type: none"> • Initiate ARC • Continue PRE with strength, power, velocity focus • Begin sport-specific training • Gradual RTS progression if criteria passed

This guideline is not meant to be prescriptive but a recommendation to the rehabilitation process. Progress may vary based on specifics of injury and procedure.