

Isolated Posterior Cruciate Ligament Reconstruction Guideline

Time	Goals	Precautions/Restrictions	Treatment
Weeks 0 – 6	<ul style="list-style-type: none"> • Reduce pain and swelling • Motion from 0-90° • Maintain patellar mobility • Active quadriceps control 	<ul style="list-style-type: none"> • WBAT • Brace locked in extension • No hyperextension • Avoid posterior tibial translation • No isolated hamstring strengthening • Prone PROM 0-90° • May unlock brace weeks 4-6 at 0-90° for exercises <p><i>**Defer to operative note for surgeon specific WB instructions with concurrent injuries**</i></p>	<ul style="list-style-type: none"> • ROM from 0-90° <ul style="list-style-type: none"> ○ No bike ○ Flexion PROM in prone • Quadriceps recruitment/NMES • Hip strengthening • Gait training with crutches • Blood flow restriction; if applicable
Weeks 6 - 12	<ul style="list-style-type: none"> • Progress ROM to 0-125° • Progress to WBAT • Progression of quadriceps strength/endurance • SLR without extensor lag • Normalized gait mechanics 	<ul style="list-style-type: none"> • Brace unhinged with excellent quad control • Continue with PCL brace • May progress WB up to 100% by week 8 • Avoid isolated hamstring strengthening • Avoid posterior pain with knee flexion motion 	<ul style="list-style-type: none"> • Progress ROM <ul style="list-style-type: none"> ○ Bike with no resistance when ROM greater than 115° • Progress gait during crutch weaning • Initiate closed-chained strengthening at 0-70° (leg press, squat, hamstring bridges on ball, etc.) • Core stabilization exercises • Proprioceptive exercises • Optional therapies: anti-gravity treadmill
Weeks 12 - 18	<ul style="list-style-type: none"> • Full, symmetric and pain-free ROM • Progress quadriceps strength/endurance • No effusion with increased activity • Pass Return to Run criteria (see appendix) 	<ul style="list-style-type: none"> • Continue with PCL brace for activities • Avoid isolated hamstring exercise until week 16 • May increase closed-chain strengthening > 70° at week 12 • No running, jumping, cutting, pivoting, or twisting 	<ul style="list-style-type: none"> • Progressive double and single limb strengthening (0-90°) • End range flexion and extension • Aerobic training on stationary bike, elliptical, stair climber, UBE • Progression of balance/proprioception • Initiate light kicking; 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 painful or swollen knee • No participation in sports 	<ul style="list-style-type: none"> • Progress hypertrophy and strength training • Continue balance/proprioceptive training • Perform Return to Run testing • Initiate running program; if applicable • Increase intensity of plyometric and agility training
Months 6 – 9	<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"> • Continue PRE with strength, power, velocity focus • Progress plyometrics and agility • 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.



Posterior Cruciate Ligament Reconstruction Functional Assessment

Phase	Criteria	Testing
Weeks 18-22 Must meet criteria prior to running	<ul style="list-style-type: none"> • Full, symmetric ROM • Y-balance anterior reach asymmetry < 5 cm • Quadriceps strength for isometric test > 80% of uninvolved side • Hip abduction strength for isometric test > 80% of uninvolved side 	<ul style="list-style-type: none"> • Knee assessment including assessment for effusion • Passive and active ROM • Y-balance anterior reach • Isometric knee extension at 60° and 90° with handheld dynamometer (HHD) • Isometric hip abduction at neutral with HHD • Single leg isometric squat at 60° on 3PQ • Forward step-down assessment • FOTO, IKDC
Month 6	<ul style="list-style-type: none"> • Full, symmetric ROM • 100% limb symmetry (LSI) for isometric testing • 100% LSI for functional testing • ACL-RSI > 56 	<ul style="list-style-type: none"> • Knee assessment including assessment for effusion • Passive and active ROM • Hop Test <ul style="list-style-type: none"> ○ Single Hop ○ Triple Hop ○ Crossover hop • Isometric knee extension at 60° and 90° with HHD • Isometric knee flexion at 60° degrees with HHD • Single leg isometric squat at 90° on 3PQ • Single leg jump on 3PQ • IKDC, ACL-RSI
Month 9+ Must meet criteria prior return to sport	<ul style="list-style-type: none"> • Full, symmetric ROM • 100% LSI for isometric and functional testing • ACL-RSI > 56 • Safe integration and progression to sport 	<ul style="list-style-type: none"> • Knee assessment including assessment for effusion • Passive and active ROM • Hop Test <ul style="list-style-type: none"> ○ Single-leg triple Hop ○ Medial triple hop ○ Medial rotation hop • Isometric knee extension at 60° and 90° with HHD • Isometric knee flexion at 60° with HHD • Single leg isometric squat at 60° on 3PQ • Single leg jump on 3PQ • Agility T-test • IKDC, ACL-RSI

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