



ACL Reconstruction with Meniscus Root Repair Protocol (Graft: _____)

Phase/ Goals	Immobilization	ROM	Therapeutic Exercises
<p>Phase 1 (0-6 weeks)</p> <p>Goals:</p> <ul style="list-style-type: none"> • SLR x 20 without lag • Protect graft and meniscus repair • Control effusion • Normal gait on level surface 	<p>Hinged knee brace x 6 weeks</p> <p>0-2 weeks: toe-touch weightbearing, locked in extension for ambulation, 0-90 with PT</p> <p>3-6 weeks: 25% partial weightbearing with crutches, brace unlocked 0-90 degrees at all times</p>	<ul style="list-style-type: none"> ○ Weeks 0-2: brace unlocked 0-90 with PT, locked in extension for mobilization ○ Weeks 3-6: brace unlocked 0-90 at all times ○ Avoid forced flexion ○ Begin PROM 0 – 120 deg (by end of 6 weeks) ○ Immediate patellar mobilization all directions <p>Modalities:</p> <ul style="list-style-type: none"> ○ NMES if unable to perform SLR without lag ○ Cryocuff/Game Ready Compression/ Ice 	<ul style="list-style-type: none"> ○ Quad recruitment, NMES as needed ○ Quad, hamstring, glute strengthening ○ Flexion: heel slides, seated knee flex ○ Extension: heel prop, prone hang ○ Long sitting HS stretch ○ Quad sets, glut sets ○ SLR in all planes with assist until no lag ○ Gastric/soleus stretch ○ Closed kinetic chain quad exercises as tolerated (mini squats, wall sits) ○ Balance/proprioception



<p>Phase 2 (7-10 weeks)</p> <p>Goals:</p> <ul style="list-style-type: none"> ○ No effusion ○ Restore normal gait ○ Maintain full extension ○ Progress to full ROM ○ Hip, quad, HS, calf strength 	<p>Discontinue brace if able to maintain SLR without lag Wean crutches starting week 6</p> <p>Full ROM</p>	<ul style="list-style-type: none"> ○ Begin full A/ PROM as tolerated ○ Restore full ROM ○ Normalize ADLs <p>Modalities:</p> <ul style="list-style-type: none"> ○ Hi-volt IFC for edema control/ice ○ Scar STM when incision healed ○ Patellar mobs all directions ○ Gentle prone quad stretch/knee flex ○ Manual assist extension/passive stretch 	<ul style="list-style-type: none"> ○ Bike for ROM ○ Closed kinetic chain quad strengthening and progress as tolerated ○ Stairmaster, elliptical ○ Lateral band stepping ○ LE stretching: HS, quads, ITB, piriformis (pain free) ○ Quad sets/glut sets, clams/mini-hydrants/glut pushes ○ Calf raises on leg press ○ Single leg press ○ Standing TKEs ○ Gait training- when gait WNL, progress to reverse incline
<p>Phase 3 (11-16 weeks)</p> <p>Goals:</p> <ul style="list-style-type: none"> ○ Full ROM ○ Protect patellofemoral joint ○ Normal running mechanics ○ Strength approximately 70% of uninvolved lower extremity 	<p>Maintain ROM and full weightbearing</p> <p>Avoid overstrengthening graft</p>	<ul style="list-style-type: none"> ○ Full A/PROM <p>Manual:</p> <ul style="list-style-type: none"> ○ Joint mobs PRN for full flex and ext ROM ○ Patellar mobs/ Scar STM with extractor <p>Modalities:</p> <ul style="list-style-type: none"> ○ Ice/stim PRN 	<ul style="list-style-type: none"> ○ Bike, elliptical, stair master ○ Step ups/lateral step over's- progress to faster pace ○ Lunges- stationary (may progress to walking at week 12) ○ Lateral walks with sport cord ○ SLS dynamic surfaces with ball toss and perturbation training ○ Begin walk-jog progression week 14 if full ROM/no edema/full strength and can perform SL hops x10 pain-free (SUPERVISED) ○ No cutting or pivoting
<p>Phase 4 (4-6 months)</p>	<p>Fit for ACL brace</p>		<ul style="list-style-type: none"> ○ Continue everything in phase 3

Aaron J. Casp, MD

Sports Medicine, Hip, Knee, and Shoulder Surgery

p: (303) 835-8561

f: (303) 879-4036



<p>Goals:</p> <ul style="list-style-type: none">○ Jogging without pain/swelling○ SL jump w/o difficulty○ eliminate patellofemoral tissue complaint		<ul style="list-style-type: none">○ Full A/PROM	<ul style="list-style-type: none">○ Increase walk-jog progression to easy pace with incline○ Jogging patterns at 50-75% speed○ Muscular power – squads, split jumps, sled drags○ Agility progression: side steps, crossovers○ Treadmill running
<p>Phase 5 (6+ months)</p> <p>Goals:</p> <ul style="list-style-type: none">○ Sport-specific training without pain or swelling	<p>ACL brace for high level activity</p>	<ul style="list-style-type: none">○ Continue Full A/PROM○ Modalities PRN	<ul style="list-style-type: none">○ Figure 8 running patterns/running progression○ Ladder/footwork drills○ Gym-program activities○ Sport-related strengthening Gym-program activities○ Progress plyometric progression