

Aaron J. Casp, MD
Sports Medicine, Hip, Knee, and Shoulder Surgery
 1201 11th Ave S
 Birmingham, AL 35205
 Ph: (205) 930-8339

ACL Reconstruction Rehabilitation with Meniscus 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>3-4 weeks: 50% partial weightbearing with crutches, brace unlocked 0-90 degrees at all times</p> <p>5-6 weeks: full weightbearing, wean crutches, brace unlocked 0-90 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) ● 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

Aaron J. Casp, MD

Sports Medicine, Hip, Knee, and Shoulder Surgery

1201 11th Ave S

Birmingham, AL 35205

Ph: (205) 930-8339

<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</p> <p>Full ROM</p>	<ul style="list-style-type: none">• Begin full A/ PROM as tolerated• Restore full ROM• Restore normal activities of daily living <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• May begin elliptical when normal gait• 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 uninjured 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

Aaron J. Casp, MD

Sports Medicine, Hip, Knee, and Shoulder Surgery

1201 11th Ave S

Birmingham, AL 35205

Ph: (205) 930-8339

Phase 4 (4-6 months) Goals: <ul style="list-style-type: none">• Jogging without pain/swelling• SL jump w/o difficulty• eliminate patellofemoral tissue complaint	Fit for ACL brace	<ul style="list-style-type: none">• Full A/PROM	<ul style="list-style-type: none">• Continue everything in phase 3• 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
Phase 5 (6+ months) Goals: <ul style="list-style-type: none">• Sport-specific training without pain or swelling	ACL brace for high level activity	<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