

Sports Medicine, Shoulder & Knee Reconstruction Direct Line (219) 395-2109

Anatomic Medial Collateral Ligament Knee Reconstruction

Name								_D	ate _						
Procedure _															
Procedure 1	Date	e													
Frequency	1	2	3	4	5	times/week	Duration	1	2	3	4	5	6	weeks	

Anytime the dressing is changed or examined, <u>please wash hands</u> prior with antibacterial soap. Do not apply any ointments or medications to the area. The surgical dressing should be changed by the therapist using <u>sterile</u> technique. This includes sterile field, sterile gloves, betadine or chlorhexidine skin cleanser and sterile supplies when redressing the wounds. Do NOT remove steri-strips. The new dressing should include dry gauze and ACE wrap. For a shoulder arthroscopy the portals may be redressed with band-aids.

Range of motion is an important progression of therapy, but limiting swelling is important. Respecting swelling will decrease pain and improve motion.

	Goals	Weight	Brace	ROM	Therapeutic	Precautions
		Bearing			Exercise	
Phase 1:	Control effusion	Non-	Wear brace at	Emphasize	Cryotherapy for	Cryotherapy for
0 to 2	and pain	weight	full extension	full extension	edema control	edema control
Weeks	Flexion range of	bearing	at all times,	Knee flexion	Range-of-	Range-of-
	motion (within		except for	from 0° to	motion exercises	motion exercises
	safe zone) to 90°		passive	90°	Quadriceps and	Quadriceps and
	of knee flexion		motion for		hamstring	hamstring
	Maintain full		therapy		strengthening	strengthening
	extension					
	Reactivate					
	quadriceps					
	muscle					
	Straight leg					
	raises with no					
	knee extension					
	lag					
	Patellofemoral					
	mobility					

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Phase 2: 2 to 6 Weeks	Effusion resolved Knee flexion range of motion ≥115° Preserve full knee extension Quad sets and straight leg raises with no extension lag	Non- weight bearing	Wear brace when up and about and while sleeping Hinged brace open into flexion per quadriceps functional control	Full extension Progressive flexion as tolerated	Continue per phase 1 Initiate upright stationary bike at week 4 with no resistance Progress to intermediate core and proximal hip strengthening exercises Initiate prone or standing hamstring curls (active flexion, passive extension)	Continue to avoid valgus and internal and external rotation strain through the knee joint
Phase 3: 6 to 8 Weeks	Range of motion with no knee extension lag Quadriceps girth returning Normal gait mechanics performed	As tolerated with bilateral crutches Progress to full weight bearing per quadriceps control with no gait deviation	Gradually open fully per quadriceps control Discontinue use when ambulating with full weight bearing and no gait deviation	Full, symmetrical	Initiate closed- kinetic-chain strengthening in bilateral support ($\leq 70^\circ$ of knee flexion) Continue to progress to intermediate core and proximal hip strengthening exercises Initiate basic lower extremity proprioception and balance drills with bilateral support	Limit bilateral squats to $\leq 70^{\circ}$ of knee flexion No pivoting on a planted foot Observe and correct for knee/hip alignment with closed-kinetic- chain drills Observe for continued effusion, pain with weight bearing, and home exercise program progression
Phase 4: 8 to 12 Weeks	Restore normal gait mechanics with closed- kinetic-chain lower extremity activities Resume normal stair climbing Normalization of walking speed and distance Able to perform single-leg squat	Full weight bearing, no restrictions	Protective use for dynamic activities when out of home, hinged brace open per quadriceps control	Full, symmetrical	Progress closed- kinetic-chain strength drills to single-leg Progress lower extremity proprioception and balance drills to single- leg Initiate light cardiovascular exercise with bike	Continue to observe for proper lower extremity alignment and mechanics with closed-kinetic- chain exercise No use of knee extension machine

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	>45° of knee flexion with normal mechanics				Add bilateral support for large muscle group weight training	
Phase 5: 12 to 16 Weeks	Able to perform single-leg squat ≥60° of knee flexion with normal mechanics	Full weight bearing, no restrictions	No brace	Full, symmetrical	Continue per phase 4 Progress cardiovascular activity with bike, elliptical, walking, and flutter-kick swimming Progress weight training to single-leg Progress lower extremity proprioception and balance drills with surface challenge: BOSU, Airex and DynaDisc	Patient demonstrates good control in concentric and eccentric phases with weight- training exercises Able to preserve proper lower extremity alignment with proprioception, balance, and closed-kinetic- chain drills
Phase 6: 16 to 20 Weeks	Patient demonstrates good self- awareness of proper lower extremity alignment with closed-kinetic- chain and impact drills	Full weight bearing, no restrictions	No brace except for dynamic activities	Full, symmetrical	Directional lunging Interval jogging (straight line, no hills) Initiate basic agility/ footwork drills Initiate basic double-leg plyometric drills Dynamic and directional challenge to lower extremity proprioception and balance drills	Continue to observe for proper lower extremity alignment and mechanics with closed kinetic chain Observe for continued effusion and pain control with initiation of impact activity
Phase 7: 20+ Weeks	Patient to become independent with exercise program and demonstrate	Full weight bearing, no restrictions	No brace except for sports	Full, symmetrical	Continue with weight-room strength training Progress plyometric drills	Avoid functional valgus at knee with deceleration,

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good self-		Progress	cutting, and
awareness of		speed/intensity	jumping drills
proper lower		of agility drills	
extremity		Initiate	
alignment		acceleration/	
during high-		deceleration	
level drills		drills	
Return to sport		Initiate cutting	
once strength		drills	
returns and		Initiate sport-	
clinical/		specific drills	
objective		*	
stability is			
verified			

Comments:

FCE _____ Work Conditioning/Work Hardening _____ Teach HEP_____

Every patient's therapy progression will vary to a degree depending on many factors. Please use your best clinical judgment on advancing a patient. If other ideas are considered to improve patient's outcome do not hesitate to call.

Patient's recovery is a team approach: Patient, family/friend support, therapist, and surgeon. Every team member plays an important role in recovery.

Signature_____ Date _____

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