

University of Texas Health Science Center at Houston
School of Medicine
Department of Orthopaedic Surgery
Sports Medicine & General Orthopaedics
Raj Shani, M.D.

ACL Reconstruction and Meniscal Repair Postoperative Protocol Referral for Rehabilitation Services

	Referral for Rehabilitation Services
Patient Name:	Date of Surgery:
	/ Week Weeks
Post Op:	Begin:
Goals:	1. Minimize swelling
	2. Minimize quadriceps inhibition
	3. Protect graft and meniscal repair
	4. Full extension ROM
Exercises:	1. Quad sets, straight leg raises (biofeedback, NMES)
	2. Hamstring stretch, calf towel stretch, ankle pumps
	3. Patella mobs
	4. Prone hip extension
	5. ROM: supine extension stretch and sitting knee flexion
Weight bearing:	Weight bearing as tolerated with crutches and a brace locked in full
ex	tension
Weeks 1-6	Begin:
	ON PAST 90 DEGREES FOR THE FIRST SIX WEEKS!
Goals:	1. 90 degrees flexion ROM, full extension
	2. Independent quad contraction
	3. Ambulation without crutches in full extension with brace
Exercises:	1. Continue with post-op program, add weight to SLR if no extension lag
	2. Add bike for ROM, strength, and cardio benefit; pedal as tolerated
	3. 4-way hip machine, initiate closed kinetic chain to include toe and heel raises
	4. Add prone extension stretch if patient is lacking full extension
	5. Continue patella mobs and add scar mobilization
Weight bearing:	Locked in full extension with brace until 6 weeks post-op
Weeks 6-9	Begin:
Goals:	1. ROM 0-120 as tolerated
	2. Normal gait pattern
	3. Prevent patella femoral pain with exercises



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Exercises:

- 1. Continue with post-op exercises as home exercise program
- 2. Initiate CKC program to include dynamic terminal extension and mini-squats
- 3. Initiate isotonic weight machines
 - a. Leg extension 90-30 degrees (BPTB eccentric x 6 weeks, HS concentric starting at week 3)
 - b. Hamstring curls (start with standing HS curls at week 3 for hamstring graft; progress to weight machine)
 - c. Leg press bilateral and progress to unilateral as tolerated
- 4. Initiate proprioceptive program single leg stance, balance board

Weeks 9-12 Begin:

Goals: 1. Full ROM

2. Swelling < 1-2 cm at midpatella

Exercises: 1. Continue with above program

- 2. Advance proprioceptive/balance program3. Add step-ups and lunges to CKC program
- 5. Add stairmaster for CV conditioning

Weeks 12-16 Begin:

Goals: 1. Quad and hamstring isokinetic difference <30% on side to side

comparison

Tests: 1. Isokinetic test at 16 weeks

Exercises: 1. Continue gym program

2. Begin shuttle plyometrics at week 12

3. Begin isokinetic training from 90-30 degrees at week 12 with a progression from fast to slow velocity spectrum

4. May begin swimming at 12 weeks

Weeks 16-26 Begin:

Goals: 1. KT side to side difference of <3 mm

2. Quad and hamstring isokinetic difference <20% on side to side

comparison

3. Functional hop test <15% side to side difference

Test: KT 1000 isokinetic, functional hop test at 26 weeks





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Exercises:	1. Begin plyometric program	
	2. Begin running progression on flat surface	
	3. May begin golf at 16 weeks	
	4. Initiate sports specific training at 5 months	
	5. Return to sports at 6 months	
I hereby certify these ser	rvices as medically necessary for the patient's plan of care.	
	Date	
Physician's Signature		