Patellofemoral Cartilage Restoration Rehabilitation Protocol

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This protocol provides general guidelines for rehabilitation following patellofemoral cartilage restoration. Progression should be individualized based on the procedure, healing, and patient response, with modifications as directed by the surgeon. Patellar facet.

Phase	Goals	Precautions / Restrictions	Treatment
Weeks 0-6	• **Protect surgical site** • Manage swelling and pain • Achieve and maintain good quadriceps activation • Reduce muscle atrophy	• WBAT in knee immobilizer • ROM as tolerated (**Do not force)**	**General guidelines** • PRICE • Quadriceps activation and strength should be emphasized • Knee flexion and terminal extension ROM • Gentle stretching of hamstrings, calf to tolerance • OKC hip strengthening in all planes • Ok to initiate stationary biking without resistance (within ROM limitations) • Modalities as indicated **Initial Visit** • FOTO, LEFS
Weeks 6-8	• Achieve full ROM by 12 weeks • Ambulate community distances by 12 weeks	• WBAT progressing to full without immobilizer • Progressive range of motion (**Do not force)** • **No impact (running, cutting, pivoting)** • **Avoid excessive patellar loading (avoid deep knee flexion, knees over toes)**	**General guidelines** • Begin CKC strengthening (**avoid anterior knee pain)** • Limit loaded knee flexion angle to **30 degrees** or less • **Normalize calf, hamstring, quadriceps mobility** • Modalities as indicated **Week 6** • FOTO, LEFS
Weeks 8-12	• Achieve full ROM by 12 weeks • Achieve full weight bearing by 12 weeks • Wean fully from crutches • **No effusion to knee** • Restoring strength of quadriceps, hamstrings, hips	• Discontinue knee brace when quad control achieved • **No impact (running, cutting, pivoting)**	**General guidelines** • Progress CKC into greater ROM (<90), single leg, multi-planar, and with resistance as tolerated • Initiate proprioceptive training • Initiate bike/elliptical for cardio fitness **Week 12** • FOTO, LEFS
Weeks 12-24	• Preparation for more advanced exercise/activity • Initiation of sport specific drills (**per MD)**	• Loaded range of motion **<90 degrees**) • Proper exercise form and control during exercise performance	**General guidelines** • Progress strength, endurance, and proprioception • Advance cardiovascular conditioning

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	● Ready to begin impact by 6-9 months (**per MD)**
	● **Normalize asymmetries**
			Week 24
			● Testing
			  ● Y- balance
			  ● Body weight single leg press
			  ● Humac testing (**90/180 deg**/sec)
			  ● FOTO, LEFS

Weeks 24+	● Begin impact training once cleared by MD (jumping, running etc.)
	● Unrestricted return to activity (Months 9-12)
		● **Avoid running/jumping on a painful or swollen knee**
		● Proper form and control during exercise performance
			General guidelines
			● Advance progressive exercises in all planes
			● Initiate plyometric activity
			● Jumping progression (double to single leg)
			● Return to run program (walk/jog)
			● FOTO, LEFS
			Anticipated final visit
			● Testing
			  ● Y- balance
			  ● Humac testing (**90/180 deg**/sec)
			  ● Single leg vertical jump
			  ● Single leg jump for distance
			  ● Single leg triple jump