



Mayo Clinic

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<u>Combined Cartilage Restoration Rehabilitation Protocol</u> (Patellar Facet and Femoral Condyle)

Phase	Goals	Precautions/Restrictions	Treatment
Weeks 0-6	 Protect surgical site Manage swelling and pain Achieve and maintain good quadriceps activation Reduce muscle atrophy 	 TWB with knee brace locked in extension with crutches ROM as tolerated (Do not force) 	 PRICE Quadriceps activation and strength should be emphasized Knee flexion and terminal extension ROM Gentle stretching of hamstrings, calf to tolerance Ankle strengthening OKC straight leg raises all planes (locked in extension) Initiate stationary biking without resistance (within ROM limitations) Modalities as indicated Initial Visit: FOTO, LEFS
Weeks 6-8	 Progressive ROM Reduce effusion to knee Minimize muscle atrophy Ambulate community distances by 12 weeks 	 WBAT progressing to WBAT in brace Progressive range of motion (Do not force) No impact (running, cutting, pivoting) Avoid excessive patellar loading (avoid deep knee flexion, knees over toes) 	 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) 	 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

This protocol is not meant to be prescriptive but a recommendation to guide the rehabilitation process.

Each patient's progress may vary based on specifics to their injury and procedure.









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Weeks 12-24

- Preparation for more advanced exercise/activity
- Initiation of sport specific drills (per MD)
- Ready to begin impact by 6-9 months (per MD)
- Normalize asymmetries
- Loaded range of motion <90 degrees)
- Proper exercise form and control during exercise performance
- Progress strength, endurance, and proprioception
- Advance cardiovascular conditioning
- Week 24: SGYM with testing
 - Y- balance
 - o Body weight single leg press
 - Humac testing (90/180 deg/sec)
 - o 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
- Advance progressive exercises in all planes
- Initiate plyometric activity
- Jumping progression (double to single leg)
- Return to run program (walk/jog)
- Anticipated final visit: SGYM with testing
 - Y- balance
 - Humac testing (90/180 deg/sec)
 - Single leg vertical jump
 - Single leg jump for distance
 - Single leg triple jump
 - o FOTO, LEFS

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