

PT Protocol Articular Cartilage Microfracture, OATS, Allograft OATS Michael J Rytel, MD Greater Pittsburgh Orthopaedic Associates

Phase 1: 0-6 Weeks

Goals

Protect the cartilage procedure, decrease pain and swelling, activate quads, ADL strategies

Brace and CPM

Non weight bearing for 3 weeks, then 50% PWB for 3 weeks

If CPM ordered use 6-8 hours daily for 3 weeks, advance flexion as tolerated with goal of 10 degrees per day

Use of brace depends on location of cartilage repair and procedure performed May unlock when not weight bearing when comfortable

Range of Motion

Week 0-1: begin range of motion immediately

Week 2-6: range of motion may advance as tolerated

Strength and Conditioning

SLRs, quad sets, hip abduction and extension, short arc knee extension, open chain unweighted hamstring exercises

UBE

At 3 weeks, when 50% partial weight bearing Supervised gait training with assist device Bike with low resistance Swimming or aqua jogging

Core



Phase 2: 6-12 Weeks

Goals

Full range of motion, WBAT, normalize gait, advance strength

Range of Motion

Achieve full motion

Strength

Body weight squats, wall squats, advance to lunges and single leg squats Core and hip strength Romanian dead lifts (RDLs) Blood Flow Restriction (BFR) training Open chain quad and hamstring

Conditioning

Bike (beginning with low resistance, increase resistance as fitness allows) Elliptical after 8 weeks
Swimming, aqua jogging
Balance, proprioception, advance to include perturbation exercises

Phase 3: 3-6 Months

Goals

Advance strength and fitness, prepare to jog

Range of Motion

Full range allowed

Strength

Weighted squats and dead lifts Core Lateral band walking At 4 months Power cleans BFR



Conditioning

Advance intensity and duration on bike, elliptical Swimming and aqua jogging Rowing Advance balance and perturbation training

Phase 4: Greater than 6 months

Goals

Return to full activity

Conditioning, Plyometrics, and Agility

Jogging
Single leg hops
Jump rope
Box jumps, bounding, broad jumps
Speed ladder
Sprinting and lateral movements
Sport specific drills

Criteria for Return to Full Activity

8 months post op 95% quad and hamstring strength Full sprint without limp Pass all single leg hop tests