

Physical Therapy Protocol: Chondroplasty

Phase 1: Weeks 0 through 6 – Reduce Inflammation & Regain Motion

Physician Goals: Decrease postoperative inflammation and pain, normalize gait, regain full motion

Restrictions: Weight bearing as tolerated, no range of motion restrictions

Exercises: Patella mobilization, prone lying, supine with logroll under heel, gentle stretching to achieve full extension, straight leg raises, full arc quads without weights prone knee flexion, heel slides, gastroc and hamstring stretching, toe raises with weights, step ups (start with 2” and progress as tolerated), body weight core strengthening, progress to closed chain strengthening after 3 weeks – low weight high repetition: leg press, step ups, mini-squats, leg extension, hamstring curls

Total Visits: 12 – once to twice per week with daily at home range of motion exercises, quad sets, ankle pumps

Phase 2: Weeks 6 through 12 – Return to Activity

Physician Goals: Begin to build lower extremity strength and endurance while gradually increasing impact,

Restrictions: Return to running, cutting/agility work, and sports per criteria below

Exercises: Progress all of the above exercises, initiate plyometric program based on patient needs, begin endurance training with elliptical, stationary bike, swimming OK, advance hip/core/glute strengthening

Total Visits: 12 – once to twice per week depending on patient’s ability to perform HEP independent of PT sessions

Return to Running Criteria:

- Trace effusion, flexion within 5° of contralateral side
- Limb symmetric index (LSI) on anterior reach Y balance test $\geq 90\%$
- LSI on quadriceps torque output on isometric measurement $\geq 75\%$
- 12” single leg squat tolerance with good hip control
- Able to walk > 1 mile with no limping or pain
- Able to “hop” with upper extremity assistance on operative leg 5 times without pain or compensation
- Single leg balance with eyes closed ≥ 30 seconds

Return to Cutting / Agility Training Criteria:

- Return to running criteria met above
- No effusion
- Full range of motion
- Quad LSI on isokinetic $\geq 85\%$
- Hamstring LSI on isokinetic $\geq 85\%$
- LSI on anterior reach Y-balance $\geq 95\%$
- Single leg hopping pain free

Return to Sport Criteria:

- LSI $\geq 95\%$ hamstring curl and leg press
- Able to perform single leg squat to 75° with correct form
- Single leg hop LSI $\geq 95\%$
- Y-balance $\geq 95\%$ (mean of 3 trials in anterior, posterolateral and posteromedial $\div 100$)
- Vertical jump test, single leg hop distance, and timed single leg hop over 20 feet $\geq 90\%$ contralateral side