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WOODSON MPFL RECONSTRUCTION REHAB PROTOCOL

General Info:

This is a list of general guidelines for a medial patellofemoral ligament (MPFL) reconstruction rehab program. These guidelines may change based on fixation, condition of repaired tissue, variations in surgical procedures, age, and patient's response to treatment. Please call our office if there are any questions.

Post-Op Weeks 0-6: Phase I

- ROM:
 - 0-1 weeks: flexion to 30°
 - 1-2 weeks: gradually progress flexion to 60°
 - 2-4 weeks: gradually progress flexion to 90°
 - 4-6 weeks: gradually progress flexion to 120°
- Weight bearing:
 - 0-2 weeks: partial weight bearing
 - 2+ weeks: weight bearing as tolerated
- Brace and Crutch Use:
 - 0-1 weeks: brace locked in full extension
 - 2-4 weeks: open brace to 60° if good quad control
 - 4-6+ weeks: Open to full and DC when gait is normal
 - Criteria for full ambulation without assistive device:
 - >3/10 pain
 - Within 2° of normal knee extension and 90° knee flexion
 - Single leg balance > 20 seconds (BESS)
 - MD approval
- Strengthening and Conditioning:
 - Quad sets
 - Straight leg raises
 - Single leg balance
 - Upper body ergometer
 - Hip abduction strengthening

Post-Op Weeks 7-12: Phase II

- ROM:
 - 6+ weeks: progress flexion to full over the next 4 weeks
- Strengthening:
 - Short arc leg press
 - Step-ups
 - Romanian deadlifts
 - Squat progression (bodyweight squats → single leg squats)
 - Resisted hip abduction
 - Lateral band walks
 - Core exercises (V-ups, single-leg bridging)

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- Conditioning:
 - Stationary biking (initiate at 115° flexion)
 - Elliptical and rowing machine after 10 weeks
 - Initiate jogging program if following criteria is met:
 - At least 12 weeks post-surgery
 - Pain less than 3/10
 - Within 2° of normal knee extension and 120° of normal knee flexion
 - Quad and hamstring strength >60% normal
 - At least 1 minute of single leg squats
 - MD approval

Post-Op Weeks 12-16: Phase III

- Strengthening:
 - Gym strengthening (barbell squats and deadlifts)
 - Core exercises (mountain climbers, planks, V-ups)
 - Biodex quad and hamstring fatiguing protocols
- Conditioning:
 - Road or stationary biking
 - Jogging program
 - Swimming (progress kicking gradually and when pain-free)
- Plyometrics and light agility:
 - ladder drills, box jumps (up to 12"), side shuffle
- Criteria for heavy agility and sport specific movements
 - 16 weeks post-surgery
 - Pain less than 2/10
 - Quad and hamstring strength >80% normal; >50% H/Q ratio for females
 - At least 2 minutes of single leg squats (resisted)
 - <5 on landing error scoring system
 - MD approval

Post-Op Weeks 16-20+: Phase IV

- Strengthening:
 - Progress gym strengthening (squats, deadlifts, Olympic lifting)
 - Biodex quad and hamstring fatigue protocols and core exercises
- Conditioning:
 - Jogging, biking, swimming, and interval sprint workouts
- Plyometrics (2-3 times per week):
 - Max effort box jumps (progress with rotation)
 - Lateral and rotational agility
 - Single leg hops
 - Unpredictable cutting agility and contact drills
- Criteria for return to play:
 - 2/10 max pain
 - Quad and ham strength >90% of normal, >60% H/Q ratio for females
 - At least 3 minutes of single leg squats (resisted)
 - 90% normal on single-leg hop tests
 - 95% normal figure of 8, 5-10-5 pro-agility and S-L vertical jump
 - MD approval