ORTHOPEDIC & SPORTS
INSTITUTE OF THE FOX VALLEY™

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REHABILITATION PROTOCOL

ACL Reconstruction with Meniscus Repair

Phase I: Immediate Post-op Phase (Weeks 0 to 5)

Goals: protect the reconstruction/repair; minimize pain and swelling; achieve full extension; minimize quadriceps atrophy; progressive ROM

- Patient is WBAT without use of brace; will likely require crutches early after surgery due to pain and poor quadriceps control
- Progressive ROM exercises; focus on achieving full extension early in rehab; no flexion limitation
    - Use gentle joint and patellar mobilizations as the patient tolerates
- Quadriceps activation and isometric exercises
    - Quad sets, straight leg raise (4-way); electrical stimulation if delayed quad activation
- Begin gentle ambulation training as the patient tolerates
- May begin balance and proprioception training with light exercises such as weight shifting
- Hamstring, calf, and glute stretches; calf raises and ankle strengthening exercises

Phase II: Intermediate Post-op Phase (Weeks 6 to 10)

Goals: progress to full knee ROM; normalize gait mechanics; minimize post-rehab pain; progress in quadriceps strengthening

- Progress in gait training and mechanics exercises to normalize gait
- Progress in knee ROM to restore full motion; goal of full motion by week 10 postop
    - Stationary bike, joint and patellar mobilizations
- Progress in quadriceps strengthening exercises to include closed kinetic chain exercises
    - 4-way straight leg raise, mini squats, leg press, wall sit, step up/downs, knee extension PREs, etc.
- Continue balance and proprioception exercises
    - Double leg balance exercises, balance board; no single leg exercises in this phase
- Hamstring, calf, glute stretches and exercises; hamstring curls, toe/heel raises

Phase III: Progressive Strengthening Phase (Weeks 10 to 20)

Goals: maintain/achieve full knee ROM; progress in quadriceps/leg strengthening exercises

- Exercises to ensure normal gait mechanics
- Achieve/maintain full knee ROM
    - Stationary bike, joint and patellar mobilizations
- Begin light endurance exercises such as treadmill walking, water walking, elliptical, stair stepper
- Progress in quadriceps strengthening exercises
    - Progressive squat program, wall sits, leg press, step up/downs, lateral step ups, lunges, knee extension PREs, resisted/weighted straight leg raises
- Progress in balance and coordination exercises
    - Transition from double leg to single leg exercises as the patient shows good control
- Stretching/strengthening exercises for hamstring, calf, glutes as needed
- Patient may begin light straight-line jogging at 16-20 weeks postop as long as they show proper gait mechanics, progress in quadriceps strengthening, and coordination control

Phase IV: Progressive Return to Sport/Activity (Weeks 20 to 30)

Goals: progress in quadriceps/leg strengthening exercises; begin return to activity progression with plyometric and agility program

- Progress in endurance/cardiovascular activities
- Progress in quadriceps strengthening exercises with increasing weight, reps, duration, etc.
- Progress in running program as tolerated; absent post-exercise pain and swelling
- Begin light plyometric and agility program at postop week 24-28; emphasize good mechanics
    - Cutting, carioca, figure-8s, etc.
    - Jump rope, grip hopping, jump over gate, box jumps, single leg hop, etc.
- Begin sport-specific rehab exercises as indicated

Phase V: Full Return to Sport/Activity (Months7-8+)

Goals: minimize/absent post-exercise knee pain and effusion; good mechanics in all rehab exercises; psychological trust in the knee

- Continue endurance/cardiovascular exercises
- Continue quadriceps/leg strengthening exercises as indicated by strength deficits
- Progress in plyometric and agility program
- Progress in sport-specific exercises to full return to sport

Return to Sport Criteria:

- No post-exercise knee pain or swelling
- Full knee ROM
- Successful completion of running, plyometric, agility, and return to sport program
- Strength testing <10% deficit compared to non-operative side
    - Single leg hop for distance, isometric peak torque, objective isokinetic testing