

ACL RECONSTRUCTION REHABILITATION PROTOCOL

PHASE 1 (0-6 Weeks)

Goals:

- Maintain and protect the integrity of the repair
- Gradually increase passive range of motion
- Control Pain and swelling
- Prevent muscular atrophy
- Regain normal gait pattern

Precautions:

- **Weight Bearing:** Partial weight bearing using crutches and brace locked in extension until good quad control, then brace may be opened 0-90 degrees
- **CPM:** To be used starting post op day 1. Brace off, begin with CPM settings of 0-45 degrees, increase 10 degrees per day until 90 degrees by day 7.
- **Wound care:** Post operative dressings may be changed at day 2-3. You may shower on day 3 if wounds are not red or draining with waterproof bandaids covering incisions. Cover the wound with a clean dry dressing until post operative day 7. Do not submerge the incisions underwater for 2-3 weeks postop.

Therapeutic Exercises:

- Flexion range of motion: Wall slides, sitting PROM, prone PROM
- Extension Range of Motion: propping heel with towel, prone hangs
- Patellar mobilizations: Including tendons
- Strength: Quad sets, SLR, TKE's, hamstring isometrics
- Hip adduction/adduction/extension isometrics
- Pre-gait training exercises
- Balance and proprioception exercises
- Bike without resistance once ROM allows
- Aquajogging once incisions are healed
- 1/3 knee bends initiate when appropriate

Criteria for progression to phase II:

1. Full passive range of motion, equal to the uninvolved leg
2. Normal gait without an assistive device
3. Good quad control with straight leg raise, single limb stance, terminal knee extensions and 1/3 knee bends.
4. Weaned from brace

PHASE II (6-12 weeks)

Goals:

- Improve quad/hamstring strength
- Achieve full AROM
- Tolerance to closed chain activities

Therapeutic Exercises:

- Stationary bike-low resistance (approx.60-120 RPM's)
- Begin closed chain exercises; low weight, high reps
- Progress to ¾ squat
- Step-ups; step-downs; side steps

- Eccentric single leg quad strengthening

Criteria for progression to Phase III:

1. Patient will be able to perform single leg eccentric exercises for 2 min. (may begin light jog when achieved)
2. Patient will be able to tolerate lateral agility side jumps with body weight for 1 minute.
3. Patient maintains full range of motion equal to other side
4. Patient able to tolerate 30 minutes of cardiovascular exercise with bike, treadmill or elliptical trainer.
5. Progress to next phase with pain and swelling as a guide.

PHASE III (12-20 Weeks)

Goals:

- Return to sport
- Incorporate high intensity sport specific drills

Therapeutic Exercises:

- Increase intensity of strengthening activities
- Incorporate eccentric strengthening
- Begin low level plyometrics: jumping, hopping, skip rope
- Progress to higher level plyometrics once able to complete lower level with good form and no residual pain or stiffness following activity
- Begin cutting 4-4 ½ months post-op

Criteria for Return to Sport (20wks and beyond)

1. Symmetrical thigh girth
2. 90% of uninvolved leg for quad (SL squats to fatigue) and ham (SL ham curl) as compared to uninvolved leg
3. Complete pain-free double leg line jumps front/back and side/side with good form for 2min.
4. Completion of sports performance test
5. Clearance from M.D.