

ACL RECONSTRUCTION Physical Therapy Protocol

This protocol is a model for ACL reconstruction with autograft or allograft reconstruction.

PRE-OP PHYSICAL THERAPY

Instruct the patient in quad sets, ankle pumps, SLRs, gait training with crutches, WBAT, ice and elevation guidelines.

POST-OP: WEEK 1

- VMO quadriceps sets with biofeedback
- Straight leg raises
- Gentle patellar mobilization/scar mobilization
- TheraBand ankle exercises
- EMS especially important if patient unable to initiate quad sets or independent SLR
- Prone extension
- Gastrocnemius/hamstring stretching
- Cryotherapy
- AROM zero to 90°

Note: patient should be WBAT with crutches and brace locked at zero degrees.

POST-OP: WEEKS 2-3

- Continue previous treatment
- AROM zero to 120°
- Isotonic program hip abduction/adduction
- Leg curls
- Mini squats 0-30°
- Wall slides 0-30°
- Posterior tibial glide joints mobilization at 30° and 90° if ROM problem persists especially in extension
- Bicycle for ROM: half arcs progressing to full ROM
- Balance/proprioception training
- Single leg press
- Aggressive patella and soft tissue mobs

Note: progress in weight-bearing status

POST-OP: WEEKS 4-8

- Continue with previous program
- AROM zero to 135°
- Once patient has normal gait you may D/C brace
- Continue Isotonic program (hips, hamstrings, leg press)
- Heel walking/toe walking
- Treadmill forward and backward walking
- Step-ups
- Trampoline- single leg standing
- Balance board
- Prone hangs
- Quadriceps/hamstring stretching
- Chair squats
- Wall slides
- Patella mobs
- Cross friction massage
- Biofeedback for neuromuscular VMO re-education
- Interval stationary bike program

POST-OP: WEEKS 9-12

- Continue with previous treatment
- Isokinetic limited range (90-45°), high speed above 150° to 180°/sec at 10 weeks (if pain free and no patellofemoral problems)
- Isotonic squats- smith machine bar weight only
- Lunges
- Stairmaster
- Slide board
- Trampoline
- Single leg bouncing
- Stepping high knee
- Weight shifting forward, sideways, diagonally

POST-OP: WEEKS 12-20

- Continue with previous program
- Isotonic terminal knee extension, low resistance high repetition
- Controlled slow forward and backward jogging on level surface

- Trampoline jogging
- Low intensity impact activities
- Functional closed chain evaluation

POST-OP: MONTH 6

- Continue with previous program
- Introduce running program
- Plyometrics low intensity
- Broad jump
- Vertical jumps
- Agility limits

POST-OP: MONTH 8

- Plyometrics medium to high intensity
- Begin pivoting motions with doctor's approval
- Begin sport specific activities with doctor's approval

ADDENDUM

This protocol provides general rehabilitation guidelines following ACL reconstruction procedures. It is subject to modification depending on the degree of the lesion, any concomitant injuries, the type of and extent of the surgical intervention and other factors. For any further questions, please call our office at (561) 465-8884.