

ACL Reconstruction Rehab Protocol

Phase I: (Immediately Post-op - 2 weeks)

Exercises:

- Patellar mobilizations (emphasize superior/inferior glides)
- Motion control brace 0-90 if given at time of OR
- Quad sets/straight-leg raises all planes (emphasize straight-leg raise without extension lag)
- Prone/standing hamstring curls
- Passive extension (emphasize full extension)
 - Prone hangs
 - Pillow under heel
- Passive, active, and active-assisted range-of-motion knee flexion
 - Wall slides
 - Sitting slides
 - Prone towel pulls
- Edema control—compression pump
- Electrical stimulation for muscle re-education if poor quadriceps set
- Cryotherapy
- May be weight-bearing as tolerated with crutches or weight-bearing to tolerance without crutches if stable ambulation
- Use brace if given and as indicated

Goals:

- Good Quad Set
- ROM 0°-90° as tolerated
- Emphasize normal gait pattern

Phase II: (2 - 4 weeks post-op)

Exercises:

- Motion control brace full range of motion if needed
- Progress range of motion to 120 by 4 weeks
- Progress straight-leg raises and prone/standing hamstring curls with weights
- Bike for range of motion, begin low-resistance program when range of motion adequate
- Stool scoots

Full weight-bearing with crutches, discontinue crutches when ambulating without limp
Begin double-leg biomechanical ankle platform system, progress to single-leg
Begin double-leg press with light weight/high repetitions
Wall sits at 45-degree angle with tibia vertical; progress time
Lateral step-ups (4 in.) when able to perform single-leg quarter squat
Hip machine and hamstring machine when able to perform straight-leg raises with 10 lbs.
Treadmill (forward and backward) with emphasis on normal gait
Knee extension 90-60 degrees (sub-maximal) with manual resistance by therapist

Goals:

ROM 0°-120°
FWB without crutches, no limp

Phase III: (4-6 weeks post-op)

Exercises:

Progress to full range of motion by 6 weeks
Begin Kin-Com hamstring progression (isotonic/isokinetic)
Begin Kin-Com quad work 90-40 isotonics with antishear pad
Stairmaster (forward and backward)
Progress closed-chain exercises
At 6 weeks, begin Kin-Com quad work 90-40 isokinetics (start with higher speed and work endurance)
Aquatic exercises

Phase IV: (8-10 weeks post-op)

Exercises:

Progress exercises from Phase III
Slow-form running with sport-cord (forward and backward)
Isokinetic quad work at different speeds (60, 90, 120)
Begin lunges
At 10 weeks, begin Fitter, slide board