

ACL RECONSTRUCTION PRE- AND POST-OPERATIVE

PRE-OPERATIVE PHASE ("Prehab")

- Isokinetic test (chronic)
- Crutch ambulation training
- Post-op exercise instruction
 - Quad sets
 - Leg lifts
 - Active flexion/passive extension
 - Patella mobilization
 - Quadriceps/Hamstrings isometrics at 90°
- Quadriceps re-education
- Restoration/Improvement of ROM
- Reduction of edema/inflammation

POST-OPERATIVE PHASE

Weeks 0-2

Primary goals: Eliminate swelling; ROM – full extension; FWB; Regain quad control

- WBAT
- Brace locked in extension for sleep
- ROM as tolerated: Start 0-30deg and goal of 0-90° by first post op visit
- Patella mobilization
- Quad sets, heel slides, straight leg raise, towel roll extension bridging exercises
- Unlock brace for ambulation when return of active straight leg raise

Weeks 2-4

Primary goals: Increase ROM; Increase total leg strength; Normalize gait

- Discontinue brace & transition to functional brace when patient is able to straight leg raise
- ROM as tolerated (minimum 0-110°)

- Emphasize patellar mobilization
- Stationary bike
- Step ups: anterior – 4 inches @ 2 weeks; 6 inches @ 3 weeks
- Balance board – Bilateral: frontal and sagittal planes
- Half squats
- BAPs – FWB
- Unilateral stance
- Leg press – Bilateral 0-90°

Weeks 4-6

Primary goals: Normal ADLs; Increase functional capacity; Increase strength

- ROM – WNL
- Treadmill walking (if gait normal)
- Stairmaster – ipsilateral rotation and straight
- Mini squats – bilateral
- Step ups – Anterior: 8 inches
- Step ups – Anteromedial: 8 inches
- Step downs – Anterior & medial: 4 inches, progress to 8 inches
- Unilateral squats
- Unilateral stance on trampoline
- Leg press – unilateral

Weeks 6-10

Primary goals: Increase functional leg strength; Normalize balance and proprioception

- 2lb ball toss on trampoline – unilateral stance – increase dispersion with improved control
- Balance board – unilateral – sagittal & frontal
- Step downs – posterolateral @ 8 inches
- Lunges – anterior and lateral for distance and speed (not depth)
- Increase strengthening especially in frontal and transverse planes

- Stairmaster – contralateral rotation and straight
- Sliding board
- Slow jogging (straight ahead)

Weeks 10-14

Primary goals: Increase agility and speed of training; Normalize strength; Increase muscular endurance

- Sliding board side-side with rotation
- Lunges – anterolateral, anteromedial
- Bilateral hopping – low intensity/high volume
- Fitter side-side

Months 4-6

Primary goals: Gradual return to athletic activity; Discharge into home program

- Jumping
- Unilateral hopping
- Agility drills; running, cutting