

ACL Reconstruction Physical Therapy Protocol

WEEKS 0-2:

GOALS: Decrease and control pain and swelling; Initiate early ROM with focus on full extension; Initiate quad control

ROM:

Flexion: 0-90* by end of week 1; attempt to reach 0-120* by end of week 2

- Wall slides/Heel slides/AAROM
- Continuous passive motion (CPM) Guidelines for HEP
 - Days 0 to 2: Continuous use of CPM immediately post-op if tolerated. Initial CPM ROM is set at 0° extension to 60° flexion. Initial speed is set at the slowest setting (1-2 cycles per second). Goal: 0° knee extension and 90° knee flexion
 - Days 3 to 7: 6 - 8 hours per day at the slowest speed (e.g., 1 - 2 cycles/min.).
 - Week 2: Continue use of CPM 4 hours per day. Goal: maximum available CPM flexion range of motion (ROM).
 - Discontinue at 6 weeks once patient has reached and maintained maximum CPM ROM

Extension: full

- Heel props/Prone hang

THERAPEUTIC EXERCISES:

Quad sets

Ankle pumps to 4 way theraband

Controlled weight shifts (med/lat; ant/post)

SLR- 4 hip direction without lag (assistance if needed)

Prone/Standing hamstring curls

Mini-Squats

Gait training- progress from PWB to FWB *must have good quad control*

Russian stimulation for muscle re-education

IFC and cryotherapy

MANUAL THERAPY:

Patellar Mobilization (all directions)/ STM (Quad, hamstring, ITB)

WEEKS 2-5:

GOALS: Minimize joint effusion; Maintain full knee extension and achieve full flexion (125-135*); FWB with normal gait pattern

ROM:

Flexion: achieve full

- AAROM
- heel slides/wall slides; CPM (HEP)

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Extension: Maintain full

- AAROM
- heel props/prone hang (add weight after 2 weeks if needed)

THERAPEUTIC EXERCISES:

Gait training- focus return gait to normal FWB

Gait drills- forward/backward walk; soldier walk; side steps; step overs; hurdle walk

Begin Stationary Bike without minimal resistance (must have minimal 110* flexion)

SLR- 4 hip direction without lag- progress to adding weight

Prone/Standing hamstring curls- progress to adding weight

Heel Raises

Mini-Squats/wall squats with swiss ball

Step ups and step downs (forward, retro, lateral)

Stool scoots, progress bilateral to unilateral

TKE- pain free ROM (0-30*)

Hip and Core strengthening

Russian stimulation for muscle re-education

IFC and cryotherapy

PROPRIOCEPTION:

Balance Board

Double leg balance progressing to unilateral balancing exercises on affected leg progress (even to uneven surfaces; eyes closed; reaching; trunk rotation, etc...)

MANUAL THERAPY:

Patellar Mobilization (all directions)/ STM (Quad, hamstring, ITB)

CARDIOVASCULAR:

UBE

Elliptical and/or Stairmaster @ week 5 as tolerated

WEEKS 6-8

GOALS: Maintain full ROM; Continue to progress lower extremity strength, balance and proprioception

THERAPEUTIC EXERCISES:

Continue to advance exercises from weeks 2-5

Progress closed chain strengthening of glutes and quads with split squats; leg press, etc.

Lunges- straight plane progress to multi directional

Multi directional hip strengthening

Treadmill forward/ retro walk

Hip and Core strengthening

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MANUAL THERAPY:

Patellar mobilization (all directions)/ STM (Quad, hamstring, ITB)

PROPRIOCEPTION:

Progress single leg balance/proprioception

CARDIOVASCULAR:

Stationary bike with resistance

Elliptical/ Stairmaster

WEEKS 9-12

GOALS: Maintain full ROM; Continue to progress lower extremity strength, balance and proprioception

THERAPEUTIC EXERCISES:

Continue to advance exercises from weeks 2-8

Single leg squats

Begin mini trampoline (hopping, jogging)

Line jumping- DL forward/backward, side to side, directional progress to SL

Progress to walking lunges with rotation

Hip and Core strengthening

CARDIOVASCULAR:

UBE

Stationary bike, Elliptical and Stairmaster with resistance

Aqua jogging

WEEKS 13-21

GOALS: To progress Quad Index Testing of patient must have achieved 70% of involved quad strength for DL straight line running; SL 85% of involved quad strength; Must be able to do 30 single leg squats on involved leg without difficulty to progress to running

THERAPEUTIC EXERCISES:

Continue advancement of strengthening exercises from weeks 2-12

Begin treadmill jogging (if criteria is met in goals week 13-21) progress to running

Begin low amplitude agility drills progress to high velocity

- forward/backward skipping; side shuffle; quick steps; carioca; crossovers; skater's quick stepping; high knees; shuttle run
- ladder drills
- cutting, pivoting, figure eights
- landing mechanics (DL to SL)

Hip and Core stabilization

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PROPRIOCEPTION:

Work related or sport specific balance/proprioception drills

MANUAL THERAPY:

As needed

WEEKS 22-26:

GOALS: Progress to return to sport and full participation

Begin practicing the drills of the sport, gradually progressing to full participation at 6 months PO.

Note: *Return to sport based on provider team input and appropriate testing.*

All times and exercises are to serve as guidelines. Actual progress may be faster or slower, depending on each individual patient, as agreed upon by the patient and his/her team of providers.

If you have any further questions, feel free to contact Dr. Domb's team at 630-920-2323 or dombassistant@drdomb.com.