

# ACL-PTG RECONSTRUCTION PROTOCOL

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## GOALS OF PHYSICAL THERAPY DURING THE 1ST DAY POST-OP VISIT:

- Wound check
- Dressing changes
- Exercises
  - ROM
    - Quad recruitment and training
  - o SLR
  - Weight bearing push full weight bearing as tolerated. Should be off crutches at 5-6 days.
- ROM
  - By end of Week 2: 0-90 degrees

# **PRE-OPERATIVE (1-3 VISITS):**

- Gait Training emphasize normal extension at heel strike
- Quad contraction
- Active assistive knee flexion/extension
- Lunges emphasize pain free neuromuscular control
- Educate patient as to nature of post-operative rehabilitation

# PHASE I (DAYS 1-6 AT HOME):

- Minimize time up -use ice and elevation to control swelling
- Work on "resting" extension with heel on pillow 10 minutes per waking hour
- Quad contractions with knee extended as able
- Quad contraction SLR as able
- Sitting or supine knee flexion stretch- control with unaffected leg
- Ankle pumps

# PASE II (DAY 7 TO 2 WEEKS POST-OP. 1-3 VISITS):

• Ankle pumps -plantar flexion against theraband

- Passive knee flexion/extension stretch
- Heel on towel extension
- Patella mobilization
- Quad contraction SLR-hip flexion, abduction, adduction, extension
- Long sitting knee extension and prone "hanging" extension stretch
- Electrical stimulation for quad contraction if needed
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- Stationary biking for range of motion (if available)
- Scar management (as needed)
- Modalities for swelling control
- Patient can be on feet more, but limited for swelling control
- Gait training -crutches -normal pattern

#### PHASE III (2-4 WEEKS POST-OP. 1-6 VISITS):

- Continue as on 1st visit -add 1# per week for leg lifts, knee extension (proximal tibia)
- Heel raises
- Prone knee Flexion add 1# per week at ankle
- <sup>1</sup>/<sub>2</sub> lunges with weight bearing as tolerated
- Electrical stimulation to quad -weight bearing
- Bike for ROM
- Ham, ITB, and gastroc stretching
- Gait training progressing to FWB normal pattern

#### PHASE IV (4 TO 8 WEEKS POST-OP. 1-8 VISITS):

- Add weight to exercise -proximal tibia for lifts at 0 degrees extension; at ankle for hams
- Progressive wall squats, weight bearing extension against tubing
- <sup>1</sup>/<sub>4</sub> squats with tubing (proprioception), lateral weight shifts progress to lateral shuffles, step up/down, BAPS, other balance exercise (i.e. one leg balance, mini-tramp)
- Leg press 90 degrees to 0 degrees, stepper -start with light effort progressively increase
- Increased bike workout
- Pool exercise if available
- Eccentric knee extension

## PHASE V (8 TO 12 WEEKS POST-OP. 1-4 VISITS):

- Continue with closed chain exercise
- 1/3 single leg squat with tubing
- Balance on injured leg, kicks against tubing with uninvolved
- Leg press 90 degrees to O degrees, increased stair step program full range, aerobic bike, walk/run in water if available
- More aggressive balance exercise -crossover walking, faster lateral shuffles
- Light, straight plan plyometrics

• If met, 5-8 criteria and 0 degrees and no PF pain, start light sport or work-related proprioception, e.g., shoot baskets, hit golf balls

## PHASE VI (12 TO 16 WEEKS POST-OP. 1 VISIT):

- Instruct in progressive straight running program if 85% hop test distance
- Modify closed chain exercise program if indicated
- Straight plane plyometrics -increased intensity
- Patellofemoral program -if indicated

### PHASE VII (16 TO 24 WEEKS POST-OP. 1-3 VISITS):

- Instruct in figure eight running is 85% crossover hop test
- Instruct in % speed running if 85% hop test time
- Modify closed chain program -if indicated
- More aggressive plyometrics -straight, lateral jumps, etc.
- Patellofemoral program if indicated

This protocol provides you with general guidelines for ACL. Specific changes in the program must be made by the physician for individual patients.

