

REHABILITATION FOLLOWING ACL RECONSTRUCTION

(ACL reconstruction with autograft or allograft)

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NO OPEN CHAIN QUAD EXERCISES!!!!

Pre-operative

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

Post-operative week 1

- VMO quad 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
- Gastroc/hamstring stretching
- Cryotherapy
- AROM 0° to 90°
- Patient should be WBAT with crutches and brace locked at 0°

Post-operative week 2-3

- Continue previous treatment
- AROM 0° to 120°
- Isotonic program hip abduction/adduction
- Leg curls
- Wall slides 0° to 30°; Mini squats 0° to 30°
- Joint mobilization at 30° and 90° if ROM problem persists
- Bicycle for ROM, ½ arcs progressing to full ROM
- Balance/proprioception training
- Aggressive patella and soft tissue mobs
- Progress in WB status, and discontinue crutches ASAP (patient demonstrates good quadricep control - no quad lag with straight leg raise)
- Unlock brace for ambulation when patient has quad activation and control.

Post-operative week 4-8

- Continue with previous program
- **Discontinue brace by week 4, once patient has demonstrated normalized gait**
- AROM 0 ° to 135 ° progress to full as patient tolerates
- Continue isotonic program (hips, hamstrings, leg press)
- Heel/toe walking
- Treadmill forward and backward walking
- Step ups
- Trampoline single leg standing
- Balance board
- Prone hangs
- Quad/hams stretching
- Chair squats
- Wall slides
- Cross friction massage
- Biofeedback for neuromuscular VMO re-education
- Interval stationary bike program

ACL pg. 2

Post-operative week 9-12

- Continue with previous treatment.
- Lunges
- Elliptical
- Trampoline
- Single leg bouncing
- Stepping with high knee

Post-operative week 12-20

- Continue with previous program
- Controlled slow forward and backward jogging on level surface
- Trampoline jogging
- Low intensity impact activities

Post-operative 6 months

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

Post-operative 8 months

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