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# ANTERIOR CRUCIATE LIGAMENT REPAIR REHABILITATION PROGRAM

## STAGE 1: WEEKS 0-1

**GOALS: Maintain knee brace in locked in extension (during gait) until good quadriceps control (typically 5-6 weeks)**

- Continuous Passive Motion (CPM) machine for 8-10 hours daily at a slow comfortable speed (i.e. 1-2 cycles per minute)
- WBAT in locked knee brace at 0 degrees extension
- Discontinue CPM when ATC or PT initiates therapy (typically 7-10 days post-op)

## STAGE 2: WEEKS 1-2

- Wall slides
- Isometric hip adduction
- Quadriceps sets with support
- No active terminal extension from 40 degrees to 0 degrees
- Hamstring sets
- Ankle plantarflexion with theraband

## STAGE 3: WEEKS 2-6

- Closed-chain exercises
- Hamstring curls
- Hip adduction
- Hip abduction (if no patellofemoral maltracking)
- Hip extension
- Heel slides (if they have 120-125 degrees knee flexion)
- Begin stationary bicycle if patient demonstrates 115-120 degrees of knee flexion
- Short Arc Quad (SAQ) with co-contraction of the quadriceps and hamstrings at 4-6 weeks post-op.
- **No active terminal extension from 40 degrees to 0 degrees**

## STAGE 4: WEEKS 6-12

- Joint mobilization techniques by ATC or PT as needed (i.e. patellofemoral maltracking)
- May begin hip abduction, if not started secondary to patellofemoral joint complications
- Discontinue use of post-op brace with weight bearing

*continued ...*



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# ANTERIOR CRUCIATE LIGAMENT REPAIR REHABILITATION PROGRAM

## STAGE 4: WEEKS 6-12 (continued)

- May begin functional activities if doing well with PRE's
- Heel raises
- Eccentric quadriceps exercises
- Resisted tibial internal and external rotation (if necessary)
- Standing hip flexion

## STAGE 5: MONTHS 3-6

- PRE's to full extension
- Initiate return to run criteria (see program below)
- Initiation of functional exercises
- Return to sports if completed functional training

## RETURN TO RUN CRITERIA

- Time to return to run: 3-6 months
- Walking: 15 minutes treadmill at the fastest speed possible (just short of jogging)
  - Patient must demonstrate a normal gait pattern
- One repetition maximum leg press:
  - Post-operative knee must demonstrate at least 70% strength of the uninvolved limb
- Step and holds:
  - Must perform 30 steps from the uninvolved to the involved leg, with the patient demonstrating full dynamic control
  - The involved leg may not move out of the sagittal plane into genu varum or genu valgum
  - The step should be at least the distance of the patient's normal stride length
- Single leg squats:
  - Patient must perform 10 consecutive single leg squats on the post-operative limb to at least 45 degrees of knee flexion
  - The patient must maintain balance and control of the involved leg in the sagittal plane, without deviating into genu varum or genu valgum, a Trendelenburg sign, or excessive femoral internal rotation

