

ACL Rehabilitation Guidelines – No Meniscal Repair

The following is a guideline for the post-operative rehab of individuals who have undergone ACL reconstruction using patellar tendon auto and allografts. This schedule will vary from patient to patient based on individual tolerance. The following **MAJOR OBJECTIVES** for this rehab:

1. 0 degrees of extension should be reached as soon as possible
2. 120 degrees of flexion should be reached by the end of 3 weeks
3. Full resisted extension is allowed at 6 weeks from the date of surgery
4. The post-op brace is needed for **SIX** weeks. It should remain **LOCKED** for ambulation through the first 3 weeks. As quad tone improves and once past 3 weeks, ambulation with the brace **UNLOCKED** is allowed. The brace must remain with the **FLEXION** block at 90 degrees.
5. 3 months post-op, first Isokinetic test. Second is at 6 months.

These instructions are intended to be administered by a physical therapist. If questions arise, please do not hesitate to contact your surgeon or his assistant.

Day 1

Immediate full weight bearing as tolerated with long leg brace locked in extension, with crutches
Administer cold over your surgical wraps 6 times, keeping the ice on for 15 minutes each session
or utilize Polar Care cryotherapy system.

Use the CPM machine for 6 to 8 hours per day.

Start quad sets as soon as possible. Hold for 6 seconds, do 30 reps 4 times a day.

Days 2-10

ROM goal by day 10 is 0-90 degrees

Continue to use the CPM for up to 6 to 8 hours a day.

When out of the CPM, emphasis is on **EXTENSION**. Keep the knee straight.

Continue with the quad sets as described above

Start straight leg raising in the brace **ONLY IF** you are able to keep the knee perfectly straight.

Perform 20 reps 3 times a day.

Begin Patellar Mobilization – move the kneecap side-to-side, up and down

Day 3 – may remove the brace and wrappings to shower. Please sit when showering and avoid letting the water fall over the operated leg.

Days 10 to 14

ROM goal by day 14 is 0-105 degrees

Physical therapy is initiated 10 to 14 days following surgery

Begin wall slides, heel slides and AAROM to increase knee flexion.

Initiate prone hangs if full extension is not reached. Emphasis is on low weight for longer time.

Start 4 way leg raises with weight **PROXIMAL** to the knee. SLR only if able to keep the knee locked in full extension

Begin hamstring curls – standing through available ROM. Can place weight at ankle as tolerated.

Begin bilateral bridging – progress to unilateral as tolerated through protocol.

Use modalities to control inflammation. Use electric stimulation for quad facilitation.

Weeks 2 to 6

ROM goal by the end of the 4th week is 0-120 degrees. Do not force Passive knee flexion up to week 4.

ROM goal by the end of the 6th week is for symmetrical knee flexion.

Begin CKC exercise in protective range 0-60 degrees of knee flexion weeks 4 and 5.

Emphasis is on closed chain exercise, beginning as tolerated. These include, but are not limited to the following: step-ups, ¼ squats, wall sits at angles above 45 degrees, and standing terminal knee extension with the theraband behind the back of the knee.

Start aerobic exercises as tolerated, such as: bike, stairmaster, cross-country skier, TM forward/retro and others.

Begin quad isotonic 90 degrees to 30 degrees with weight on the proximal tibia until 6 weeks post surgery

Begin manual resistance for hamstrings and quadriceps. For the quadriceps, limit ROM to 90 degrees to 30 degrees flexion. Full ROM resistance is to be done for the hamstrings

Discontinue crutches as gait pattern improves

Continue with the electric stimulation to the quadriceps

Begin proprioception training as Quad tone allows. This involves single support standing, BAPS or wobble board or other exercises

Weeks 6 to 12

Begin full extension with resistance at 6 weeks with weights at the ankle

Continue with manual resistance through full ROM. Initiate isokinetic exercises if available.

Functional knee brace should be ordered about 6 to 8 weeks post-op. Once brace is obtained and muscle tone is adequate, begin jogging on a treadmill as well as slide board exercises.

Months 3 to 6

Isokinetic test at 3 months postop at 90 – 180 – 300 degrees/sec

If involved leg is 75% greater @ 180 degrees/sec as compared to the un-operated leg, functional training can be started

At month 5, sport specific activities can be started if strength is unattained in the leg