

PRE-OPERATIVE ACL GUIDELINES

This program is designed for the patient that will be undergoing ACL reconstruction within 6 weeks of their injury.

Goals:

1. Decrease inflammation
 - a. No swelling
 - b. No to minimal pain
2. Restore patellar mobility and knee ROM
 - a. Normal patellar mobility
 - b. ROM: Full extension as compared to contralateral knee and flexion 125° or greater
3. Restore quadriceps tone and leg control
 - a. Normal quadriceps tone
 - b. Leg control: SLR without knee extensor lag
4. Restore proprioception
 - a. Equal unilateral stance with 5-10° of flexion

Guidelines

1. Local modalities to decrease pain and swelling.
2. Patella mobilization as indicated.
3. AROM, AAROM, and/or PROM as indicated.
4. Electrical stimulation protocol to sensitize patient to high intensity electrical stimulation.

Pad placement: Proximal: femoral triangle
Distal: distal quadriceps including VMO

Frequency: 50 PPS with carrier frequency of 1500 PPS

Time on/off: 15 seconds on, 45 seconds off with 3 second ramp up and down

If possible have patient control stimulator with manual control, Patient should do active quad set just prior to and during stimulation.

5. Straight Leg Raise in 4 directions. Active quad set before and during each repetition.

6. Mini-squat program. 0 to 45° with active quad set at terminal extension.
7. Quadriceps and hamstring PRE's through a pain-free range of motion.
***Begin when the patient has no swelling and good leg control.
8. Proprioception program.
 - a. Unilateral stance with full extension on stable surface.
***Begin when patient has no pain and can maintain with position.
 - b. Unilateral stance with 5-10° of flexion on stable surface.
***Begin when patient has no swelling and good leg control.
 - c. Unilateral stance on foam or pillow with full extension.
***Begin with patient has equal unilateral stance with 5-10° of flexion.

Patients may use the bicycle, ski machine or stepper for cardiovascular training if there is no pain or swelling in the knee. Any signs of inflammation and these exercises should be terminated.