



JOINT PRESERVATION INSTITUTE

ACL Rehabilitation Protocol

The following protocol is directed toward optimizing the outcome of ACL reconstruction surgery. Along the way, if you have any questions, please contact our office.

First week:

The goal in the first week is to get the pain and swelling under control. You will receive a cold therapy unit which is a very important part of the first week regimen. Additionally to protect the knee during this period, we keep you in a knee immobilizer. However, you can have confidence that the ACL graft can tolerate simple range of motion. The objective of the knee immobilizer is to protect the graft in the first six weeks. We recommend that you keep it on at all times for the first 4 weeks except during range of motion exercises. We recommend that you keep it on during walking activities for the first 6 weeks. It is vital to perform passive range of motion exercises on your own in the first few weeks, particularly to work on knee extension or straightening.

Weeks 2-4:

Exercises on your own.

Passive range of motion. Sit at the edge of a bench with your nonsurgical leg supporting the surgical leg. Gradually allow the surgical leg to bend until the point of discomfort. It is critical to maintain up to a 90 degree bend in the knee.

Active range of motion. In the first few weeks, the main goals are to perform isometric quadriceps exercises where the leg is kept straight with the knee immobilizer and the quadriceps muscle is contracted in this position. Do 3 sets of 10 of these exercises. Straight leg raises with the knee immobilizer are also very helpful in this time period. Do 3 sets of 10 of these while lying flat on the bed.

After 4 weeks:

You can start doing light squats at the side of balance beam down to a 30 degree bent position and up. Do 3 sets of 10. Do heel raises, 3 sets of 10 off the ground with only your body weight.

Start the stationary bike at 10 minutes at a time with the seat at the highest level and at the lowest torque possible. Avoid excessive rates of spinning.

After 6 weeks:

Start working on passive range of motion up to 120 degrees at the side of the bench.

Increase stationary bike up to 20 minutes at a time again at lowest torque initially. May increase to moderate torque after 8 weeks.

May now start resisted knee flexion exercises with a resistance band of leg curl machine at very light settings.

May start proprioceptive exercises with your physical therapist on a balance board after 8 weeks.

After 12 weeks:

May start light jogging, May be fit for ACL functional brace. Gradually start sports specific training regimen.

After 24 weeks:

May return to sports assuming cleared by MD and by PT.

Goals will be 75% normal strength compared to nonsurgical leg.

Normal knee stability.

Full range of motion.