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RANGE OF MOTION (ROM) STRETCHES

Range-of-motion stretches, or ROMs, should be used your entire life to keep your body limber and ready for action. For those of you having surgery, you will also be asked to do these stretches pre and post operatively. You may already recognize some of them from gym class or sessions at the physical therapist's office.

EXTENSION STRETCHES

ROM #1: Passive Extension

Purpose:

The first step for prepping for surgery and recovering from any knee injury or surgery is to get the knee moving through a full range of motion. This means being able to fully straighten it (extension) and fully bend it (flexion). Extension is usually the tougher of the two for ACL reconstructions, while bending is generally tougher for TKR's and knee arthroscopies.

Starting Position:

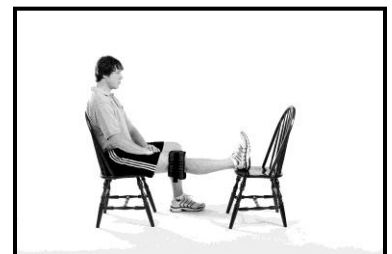
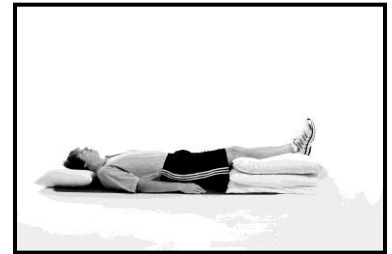
Lie on your back with your heel propped on a firm pillow or stool, or sit with your heel on a chair or edge of a coffee table. To increase the stretch, pull out your saddlebag / purse (10-15 pounds) and drape it over your knee

Action:

Let your knee relax into a completely straight position. To do this, let go of any tension in your quads, hamstrings, and hip muscles. Once you feel completely relaxed, periodically tighten up or "fire" your quad muscles as the knee pushes down toward the floor. Hold for 5 seconds; then go back to relaxing.

Note:

Do passive extension for at least 15 minutes each hour. This is the most critical exercise to do in the first two weeks post-op. Do this habitually, whether you are lying, sitting, or standing.



ROM #2: Prone Leg Hangs

Purpose:

To further promote FULL extension (straightening) using the weight of your lower leg.

Starting Position:

Lie on your stomach with your knees just past the edge of a strong table or workout bench and your legs out straight. The toughest part of this exercise is finding a sturdy, long table to do it on. (The kids might have to eat supper in the family room for a couple of weeks.) If you weigh over 300 pounds, save this exercise for the gym or the physical therapy area.

Action:

Completely relax your muscles and feel a good stretch through your hamstrings. A variation on this theme is to have someone hang the saddlebag or purse on your ankle and put a hot wet towel on your hamstring for further relaxation. Hang for 5-10 minutes, not just a few seconds.



ROM #3: Cat Walk Pose

Purpose:

To promote FULL extension in a standing position.

Starting Position:

Stand with your operative leg fully extended and the other leg slightly bent.

Action:

Gradually tighten your quadriceps and gently push your knee backward to attain full straightening. If you are standing and talking to someone or waiting in line, strike this pose. It is exactly what your injured knee does NOT want to do, but do it anyway!



ROM #4: Standing Full Extension

Purpose:

To achieve full straightening and hamstring flexibility.

Starting Position:

Stand with your injured leg propped on a table or chair with the knee completely straight.

Action:

Press down firmly on the knee as you lean forward to stretch your hamstrings. Bend the standing knee to increase the stretch.

Note:

Perform for 30-60 seconds, 5 times on each leg. Since this is an aggressive stretch, start with your heel on a stair or low chair to ease into the movement.



ROM #5: Towel Stretch

Purpose:

To get the knee as straight as possible—at least as straight as your uninjured knee.

Starting Position:

Sit on a bench or on the floor.

Action:

Wrap a towel around the ball of your foot, holding either end. Pull up, pushing the knee down and thus lifting the foot off the surface. You should feel a good stretch in your hamstrings, calf, and behind the knee.

Note:

As with the above ROM stretches, give a slow, steady pull and with each exhale feel your muscles stretching a bit further. As with most of the ROMs, do this exercise as frequently as possible. Just like your saddlebag / purse, your towel should never be out of arms reach for the weeks pre-op and post-op.



FLEXION STRETCHES

ROM #6: Heel Slides

Purpose:

Active flexion (bending) and extension (straightening) exercise to promote range of motion at the knee.

Starting Position:

Lie on your back with your hands to your sides.

Action:

Slide your heel along the floor, up toward your buttocks. When you feel mild tension, hold for 1 minute and try to stretch a bit further. Then, slide your heel back down until the leg is straight. Repeat 10 times.

Note:

For an increased stretch, use your hands to grab your shin and pull it closer to your buttocks.



ROM #7: Supine Leg Hangs

Purpose:

This stretch serves to improve your knee's bending ability. It is a passive flexion (bending) exercise.

Starting Position:

Lie on your back with your knee bent. Clasp your hands behind your thigh, as shown.

Action:

Relax all your muscles and allow your knee to bend while holding your thigh. Hold for 2 minutes letting gravity do its thing; then slowly straighten the knee out again. Repeat 5 more times.

Note:

The key is to relax your muscles. If the straightening feels hard, roll onto your side and straighten your knee in that position. Then roll onto your back for the next supine leg hang.



ROM #8: Standing Flexion—Forward and Backward

Purpose:

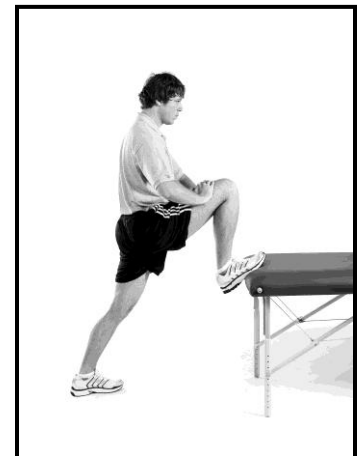
A great stretch to get your knee bending like it is supposed to.

Starting Position—Forward:

Place your foot onto a table or chair.

Action:

Slowly lean forward, allowing your knee to rest periodically before leaning and stretching a bit more. Hold this position for at least 2 minutes, preferably longer. Gravity is doing all the work, not you.



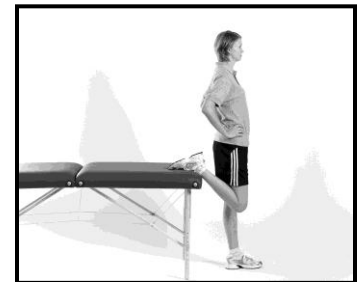
Starting Position—Backward:

Stand with your back to a table or other stationary object.

Action:

Place your foot on the edge of the object. Use your hands to assist as you get into position. Gently lean, or sit back, toward your heel. You are in complete control of how much pressure you want to place on the knee.

Do not force it! Hold this position 2 minutes; release; then repeat 3 or more times.



Note:

Again, the key is to relax your muscles while you strive for more motion. The goal is to touch your heel to your buttocks.

Starting Position— Sitting Flexion:

You can do a variation on the standing backward flexion by kneeling on pillows with a few more pillows under your thighs to prevent flexing too much. Slowly ease down; hold for a minute or two; then repeat.

Remember, all of these exercises are probably best done in front of a TV or other distractions, so that you won't be tempted to rush.

