Colorado Springs Orthopaedic Group

Well Beyond.

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Knee Exercise Guide

Purpose

This guide offers step-by-step explanations for how to do the exercises in your rehabilitation protocol. Use it prior to your physical therapy appointments to anticipate what you will be doing at the visit. The guide also serves as a reference for maintaining proper form while doing exercises at home. Please discuss with your physician before starting any new exercise program.

Supine Heel Slides

Instructions

While lying on your back with your knees bent, slowly slide your heel fordward on the floor and then slide it back. Contract your stomach muscles to keep your spine from moving.

Tips

Use therapy band or towel wrapped around the ankle to assist with flexion.

Seated Heel Slides

Instructions

While in a seated position with your foot forward and rested on the floor, slowly slide your foot closer towards you. As flexion improves, move forward on the chair to allow greater range of motion.

Tips

Using a chair with wheels on a hard floor adds additional resistance to the exercise.

Heel Prop

Instructions

While seated, prop your foot up on another chair and allow gravity to stretch your knee towards a more straightened position.

Tips

Add weight such as a back pack, ankle weight, or other item on the knee for an increased stretch.

Quad Sets

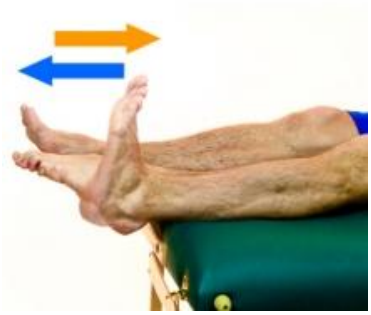
Instructions

While lying or sitting tighten your top thigh muscle to press the back of your knee downward towards the ground.

Tips

Add a towel under the heel to allow for more aggressive extension and quadriceps firing.

Ankle Pumps



Instructions

Bend your foot up and down at your ankle joint as shown.

Tips

These shoulder be performed as much as possible after surgery to promote circulation.

Straight Leg Lifts

Instructions

While lying on your back, raise your leg with a straight knee. Hold at 45^0 for 1-2 seconds then lower slowly. It is very important to keep your knee completely straight throughout the exercise.

Tips

You may need to slowly work up to the number of repititions on your protocol.

Short Arc Lift

Instructions

Place a rolled towel or ball under your knee and slowly straighten your knee as you raise your foot. Hold for 5 seconds, then lower slowly.

Tips

Your knee should be at 30-45^0 of flexion with the towel or ball underneath.

Standing Hamstring Curls

Instructions

While standing, bend your knee so that your heel moves towards your buttock. Lower back down until first contact with floor and repeat.

Tips

Use a wall or balance bar for support.

Prone Ankle Hang

Instructions

While lying on your stomach, allow your leg to hang off the end of a table or bed. Position yourself so that your knee cap is just off the edge of the table or bed. Allow gravity to stretch your knee into a straightened position.

Tips

Add an ankle weight for increased stretch.

Standing Toe Raise

Instructions

Standing and facing the wall, fire both the quadriceps to keep the knee straight and raise up on the toes for one second, then lower slowly.

Tips

Use balance aid (wall, bar, chair) as little as possible to work on balance.

Hip Abduction

Instructions

Lie on the unoperated side. With the knee held straight, raise the operated leg to the side 45^0. Hold for one second, then lower slowly.

Tips

The bottom leg can be bent to stabilize your body.

Wall Slides

Instructions

Stand with your back touching the wall and feet facing forward about 6-12 inches from the wall. Lower your body by flexing through both the hips and knees until knees are flexed to 45^0, pause for 5 seconds, then slide up to the original position

Tips

A door may provide less friction than a wall. Knees should bend in line with the second toe and not go over the front of the foot.

Alternate Version

Single-leg wall slides: hold the non-operative leg off the ground while doing the rest of the exercise as instructed above

Squat To Chair

Instructions

Stand with feet shoulder width apart in front of a stable support for balance if needed, bend your knees and lower your body towards the floor. Gently touch the chair with your buttock and return to standing position.

Tips

Push through your heels during the exercise. Add hand weights as strength improves.

Step-up/Step-down

Instructions

Place the operated leg on a low, flat, stable stool. Bend the operated leg so that the unoperated leg just touches the ground. Straighten the operated leg to return to the original position. Maintain a balanced, upright posture throughout.

Tips

Stool height can be increased to 3, 6, and 9 inches as strength and balance progress

Stationary Bicycle

Instructions

This can help with motion and strength. Set the seat so the operative leg is at full extension at the bottom of the pedal cycle. Start at low resistance and increase slowly over four weeks.

Note

Requires special equipment or gym membership

Seated Leg Press

Instructions

Sit on machine with back on padded support. Place both feet on platform with knees at 90^0. Push plate forward until knees are straight but not locked. Start with easily lifted weight and add weekly as strength improves. Do not increase additional weight beyond body weight. Do not bend knees past 90^0.

Note

Requires special equipment or gym membership