



## Low Back Pain Exercises

### Interactive Video Series Transcript

July 2013

**\*\* Note: If an exercise causes an increase in your pain, stop the exercise.\*\***

## Introduction

*[Music introduction; Dr. John Sheehan onscreen]*

Aloha, my name is John Sheehan. I'm a physician at Kaiser Permanente Hawaii trained in pain and physical rehabilitation medicine. I'd like to welcome you to the Kaiser Permanente Low Back Pain Exercises video series.

Low back pain is a common problem that affects most of us at some point in our lives. It can negatively impact one's personal life, as well as work duties, and keep people from doing things they enjoy.

Through many years of treating patients suffering from low back pain, it has become clear to me that exercise can truly be the best medicine. The basis for exercises targeting low back pain is to improve pain, daily function, and reduce the risk of further injury. Although results may not be immediate, with patience and persistence, you will undoubtedly see improvements in these areas.

There are many different causes of low back pain, including muscle strains, bulging discs, lumbar stenosis, and others. Muscle imbalances often exist that need to be addressed and improved upon to optimize care of your lower back.

This video demonstrates proper technique for exercises designed to strengthen and promote flexibility in the muscles important for low back pain health—specifically, the lower back, buttock, hamstrings, abdominals, and upper back muscles. It is this group of core muscles that are essential in performing daily activities.

The exercises on the video are divided into three phases.

*[SLIDE: Phase I, Phase II, Phase III; Dr. Sheehan voiceover]*

We start with the most basic exercises and progress to more functional movements in each phase.

*[Music conclusion; Dr. John Sheehan onscreen]*

So have fun, be diligent, and let's get started.

## Phase I Exercises – Glute Sets

*[Music introduction; woman lying flat on back onscreen; Dr. Sheehan voiceover]*

**Glutes:** The primary focus is on glute and hamstring contraction. Start by drawing in the abdominal muscles. Then gently, but firmly, contract the glutes. As you contract the glutes, push down with your heels and feel the muscles in the back of the legs tighten.

Hold for 5-10 seconds.

Relax. Then, repeat for 5-15 repetitions.

*[Woman lying flat on stomach onscreen; Dr. Sheehan voiceover]*

This exercise can be performed in a face-up or a face-down position.

## Phase I Exercises – Bridges

*[Music introduction; woman lying on back with knees up onscreen; Dr. Sheehan voiceover]*

**Bridges:** Start by drawing in the abdominal muscles. Contract the gluteal muscles and raise the hips off the floor. Raise up gradually until the thighs and trunk are in a straight line.

Hold for 5-10 seconds.

Then, smoothly lower your hips back to the floor.

Repeat for 5-10 repetitions.

## Phase I Exercises – Hip Flexor Stretch

*[Music introduction; woman in lunge position with one knee on ground onscreen; Dr. Sheehan voiceover]*

**Hip Flexor Stretch:** Start by placing one knee onto a pad or towel. The front leg is placed out in front of the body into a lunge position. Tighten abdominals, and gently shift your hips forward until tension is felt in the front of the hip and thigh regions.

Hold for 10-15 seconds.

Return to the starting position. Perform 5-10 repetitions.

Then, repeat on the other side.

## Phase II Exercises – Quadruped

*[Music introduction; woman with hands and one knee on ground and one leg extended backward onscreen; Dr. Sheehan voiceover]*

**Quadruped:** Start on your hands and knees with a neutral spine position. Draw in the abdominal muscles. Then, gently extend one leg back by contracting the glutes and hamstring muscles.

Hold for 5 seconds.

Then, lower the leg smoothly to the starting position. Be careful not to arch the spine.

Repeat for 5-10 repetitions.

Then, perform on the other side.

## Phase II Exercises – Hip Hinge

*[Music introduction; woman standing and holding a pole behind her back onscreen; Dr. Sheehan voiceover]*

**Hip Hinge:** This exercise is meant to teach you how to maintain a neutral spine by bending over at the hip joint—instead of bending from the lower back. It is essential for proper lifting technique and can be applied to many daily activities, such as sitting and rising from a chair.

First, find a straight pole, such as a broomstick. Place it along the back, ensuring that it maintains three points of contact—the tailbone, the upper back, and the back of the head.

Start by drawing in the abdominal muscles and tightening the buttocks. Then, gently bend at the hips with minimal bending of the knees. Maintain the three points of contact as you descend, making sure not to arch or round the lower back.

Return to the starting position by firmly tightening the buttocks and hamstrings.

Repeat for 5-10 repetitions.

## Phase II Exercises – Piriformis Stretch

*[Music introduction; woman lying on back with one foot on ground and other leg crossed over opposite thigh onscreen; Dr. Sheehan voiceover]*

**Piriformis Stretch:** This exercise is meant to stretch the piriformis and gluteal muscles. Start by lying on your back with your knees bent. Then cross one leg over the opposite thigh. Making sure the back is flat, gently stretch by pulling the knee toward the opposite shoulder.

Hold for 10-15 seconds.

Then, release. Repeat for 5-10 repetitions.

## **Phase III Exercises – Prone Plank**

*[Music introduction; woman hovering above ground on elbows and feet; Dr. Sheehan voiceover]*

**Prone Plank:** Start by lying on your stomach and pull your elbows up under your chest. Initiate by firmly pulling in the abdominal muscles and tightening your glutes. Gently raise your hips off the floor. Make sure the back is not arched.

Hold for 5-10 seconds.

Then, descend. Make sure to keep your abdominal and glute muscles tight at the top of the exercise, and maintain a straight line with your body.

Repeat for 3-10 repetitions.

## **Phase III Exercises – Chair Squat**

*[Music introduction; woman squatting above a chair; Dr. Sheehan voiceover]*

**Chair Squat:** For this exercise, place a chair just behind you and stand in front of it with your feet approximately shoulder-width apart. You may use a door handle to hold on to it first to help maintain your balance.

Begin by pulling in your abdominal muscles and tightening the glutes. Then, descend very slowly by pushing your buttocks back towards the chair while maintaining good posture in the torso. Allow the knees to bend in line with the toes. When your buttocks contact the chair, again contract the glutes and hamstring muscles as you straighten your legs and return to the upright position.

Repeat for 5-10 repetitions.

## **Phase III Exercises – Torso Stretch**

*[Music introduction; woman sitting on heels with head down and arms placed on discs on ground onscreen; Dr. Sheehan voiceover]*

**Torso Stretch:** Begin in a kneeling position. Place your hands on the floor in front of you. Then, shift your buttocks onto your legs while sliding your hands out in front. You should feel the stretch in the muscles of the upper and lower back.

Hold for 10-15 seconds.

Release, and repeat for 5-10 repetitions.

## **Proper Lifting Technique**

*[Music introduction; woman holding wooden block in squat position; Dr. Sheehan voiceover]*

**Proper Lifting Technique:** Proper lifting technique combines elements of the hip hinge and chair squat exercises. The focus is on maintaining a neutral spine and using the large muscles of the hips and legs to perform the lift.

Position your body as close to the object as possible. Keep your abdominals, glutes, hamstrings, and back muscles tight as you descend. Hold the object close to your body throughout the lift. Then, contract the glutes and quadriceps while extending the hips and legs to the upright position.

Repeat for 5-10 repetitions.