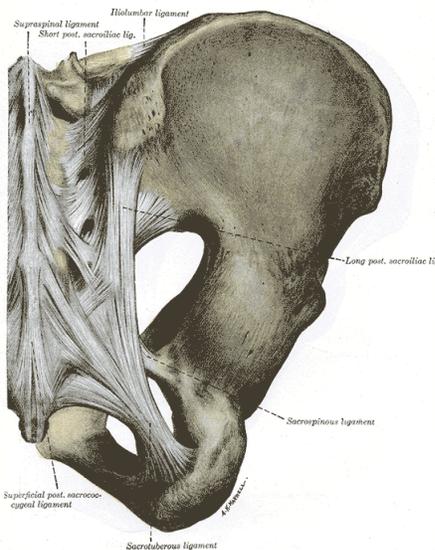
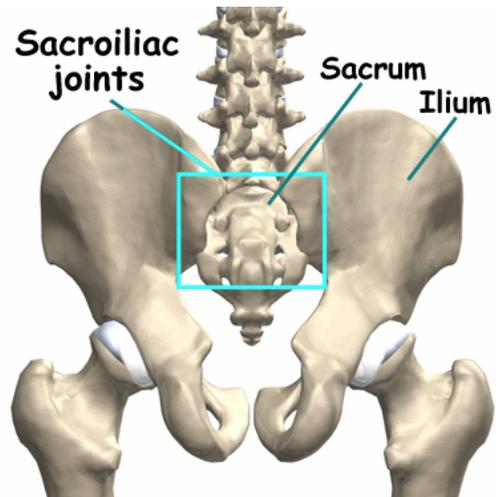


Prone (*On Your Stomach*) Straight Leg Lifts

The purpose of this exercise is to make the sacroiliac (SI) joint more stable. This is not an exercise to make the legs or thighs stronger. If I am recommending that you do this exercise it is likely that you have an unstable sacroiliac (SI) joint.

The sacroiliac joint is the junction between the sacrum and the iliums or the right and left pelvic bones. There is only one sacral bone and this sits in both the right and left sacroiliac joints. So because there is one bone in both joints, usually both joints are involved.

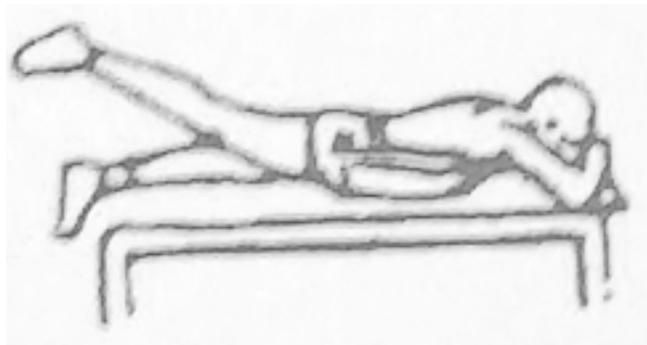
All the weight of the body above the pelvis from the head, ribs, organs, spine, blood vessels ... everything rests on the sacrum and sacroiliac joint before the weight is split between the right and left hip and to the legs. So the strongest ligaments in the body are those that stabilize the sacroiliac joints.



The problem is that as we age the blood supply to ligaments, cartilage, and connective tissue decreases. This is the reason why our professional athletes retire at such a young age. They can usually still perform at a high level but they also usually cannot recover from injuries sufficient to be able to return to high intensity activity.

So the purpose of this exercise is to “trick” the body into increasing blood supply to the sacroiliac joint and its ligaments and connective tissue. That is also why when you do this exercise you should not do it if it causes you any pain, your feel fatigued, or the muscle feels weaker as you continue. We want to stimulate the tissues and joint not over load it.

This straight leg lifting exercise is simple to do. However, to get the maximum benefits for proper joint rehabilitation, it is important that you follow my directions precisely. Doing too many repetitions or doing it incorrectly can cause more harm than good.



Prone (*On Your Stomach*) Straight Leg Lifts

When you do the leg lift it is common for the body to attempt to not use the muscles right over the sacroiliac joint. This is a common condition and do not be worried if you catch yourself doing them improperly. However if you are aware of how to do them properly and are aware of the pitfalls that may happen, you will be able to do this exercise correctly.

There are three common habits that you will need to be aware of when you lift your leg. Please be careful and:

1. Do not turn the leg or foot outward when you lift your leg. (Figure 1)
2. Do not bring your leg away from the midline as you lift your leg (Figure 2)
3. Do not lift your hip on the side of the leg lift. (Figure 3)



Figure 1 – Turning leg outward



Figure 2 – Bringing leg away from midline



Figure 3 – Lifting hip on side of leg lift

The correct way (figure 4) to lift the leg is to keep the leg near the midline, with the foot almost turned inward, and keeping the hip on the bed, floor, or surface on which you are doing the exercise.

The leg lifts will be alternated from side to side and you do not repeatedly lift the same leg. When you lift the leg you hold it for count of 2 seconds, so that the appropriate muscles will engage. The leg lift is slow and holding the leg at the top of the lift for the 2 seconds. However it should not be a high enough lift that it hurts you or makes you feel you need to alter your proper lift dynamics.

To start it is usually better to do 3 alternating lifts and then rest for a full minute and repeat, until you have performed 3 sets of 3 alternating leg lifts (3 on each side) only one time a day for one week. After one week then attempt to increase the lifts to 3 sets of 5 alternating leg lifts. Following that week increase the repetition to 3 sets of 7 alternating leg lifts and ultimately the next week 3 sets of 10 alternating leg lifts.



Figure 4 – Correct leg lift position

Prone (*On Your Stomach*) Straight Leg Lifts

Once you get to 10 alternating leg lifts you will likely need to do these for 3-6 months, just one time a day. More lifts or greater frequency of the lifts has not been found to help and in fact seems to worsen the outcome. Modifications such as adding ankle weights does not help and can also worsen the condition.

But sometimes it may hurt to even lift your leg at all. What can you do?

1. In very acute and painful sacroiliac joint sprains or injuries you may need to allow the back to heal sufficiently before starting these exercises. Don't worry; so far everyone I have treated has been able to eventually do these exercises.
2. Sometimes it helps to put a pillow under your stomach so that your back is not arching too much when you lift your legs.
3. If you are in pain when you lift and a pillow does not help you can still lie on your stomach and attempt to contract your leg, thigh, and hip muscle without lifting your leg at all. You would continue with only 3 sets of 3 alternating leg lifts until you can start actually lifting the leg adequately.
4. It still may hurt to even contract the muscles without lifting and one last option has helped with patients in that situation. While you lie on your stomach with a pillow under you just imagine you are lifting your leg with all the proper dynamics as described. Imagine yourself lifting feeling pain free and try to smile as you do this exercise, 3 sets of 3 alternating leg lifts until you can start getting to the point of actually lifting your leg.

Once you can lift your leg and perform this exercise at 3 sets of 3 alternating leg lifts then you can follow the prior instructions, increasing to 5, then 7, and then 10 alternating leg lifts giving your body a full week to adjust.

If you attempt to increase the number of alternating leg lifts and it hurts then reduce the number to a repetition number that feels good to you.

At all times you should feel that you could do more but are stopping before you really want to, because it doesn't hurt or you don't feel fatigued at all.

Give yourself a full minute between repetitions so that your body can fully recover.

If you feel fatigued or uncomfortable at any point, please stop the exercise.

Remember this is not as much an exercise as it is a way to stimulate increased blood supply to the ligaments and connective tissue helping to stabilize the sacroiliac joint.

If you have questions or do not feel comfortable doing this exercise for any reason whatsoever please do not hesitate to contact me.

I have been using this exercise with patients with sacroiliac joint sprains for over 20 years but I have only found this exercise helps patients that actually do it, and do it correctly.