



Racewalking advice Bulletin board

By Mark A Donahoo

Lower back pain, stomach and diaphragm soreness

Walkers as a rule only suffer from a handful of injuries; most of these are overuse injuries and often cause lower back, hip, stomach or leg pain. Is there anything that can be done for the injury or to stop the injury from occurring? The answer is YES.

What can be done?

One of the major causes of these types of injuries is a poor posture that is, the lower back has an excessive arch and this arch causes the body to move incorrectly. So over time, the body starts to pick up minor soreness that eventually leads to major injuries.

So why is the back ached?

There are two problems that will cause this. The first is poor use of the lower and upper abdominal (stomach) muscles. The second cause is a muscle called the psoas, also called the iliopsoas. In this article I will deal with the psoas. A later article will deal with correct use of abdominal muscles.

What is the psoas muscle?

The psoas originates at the base of the pelvis and passes through the lumbar vertebrae and joins at the thoracic vertebrae 12 or T12. Its role is as a hip flexor, this allows the hip and upper legs to work efficiently.

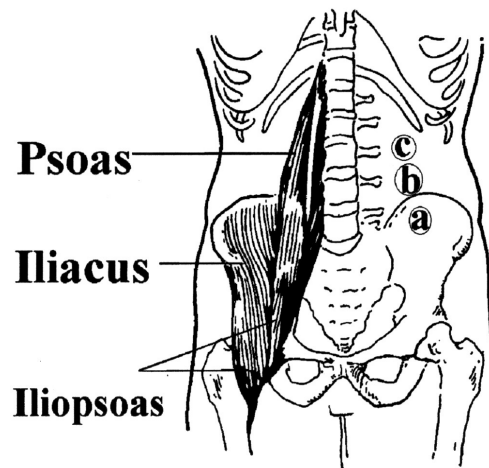


Figure 1 Position of the psoas muscle. A, B, and C refer to the points for self massage, the massage can be on either side of the body.

If the psoas becomes tight, the lower back will have an increased lordosis, or an increased back arch, which affects the rotation of the pelvis. As the lordosis gets worse, the psoas cramps and the pelvis tilts backwards instead of upright. This will lead to

- a sore back
- soreness developing in the stomach region
- soreness developing in the diaphragm
- restricted flexion and extension at the hip joint
- tenderness at one or both psoas
- tightness of the iliotibial band
- tightness of the piriformis
- lack of strength in raising the leg

How to treat the psoas muscle?

1. Self massage

The belly of the psoas muscle is located and pressed firmly by three fingers while the hip is flexed with the knee near the chest. After the pain has subsided, sometimes up to 90 seconds later, straighten out the leg while pressing on the belly of the muscle.

To find the belly of the muscle (a, b, and c on the previous diagram) find the top of the pelvis near the left or right hip, and then hold three fingers in from the hip. Where the third finger rests, turn the hand 90 degrees and using three fingers press in on the muscle. Have the knee bent when doing this and hold it at the knee. If you let go of the leg when it is bent, then the muscle should be easier to find.

2. Massage, osteopath, physiotherapist or chiropractor

Visit your local masseur, osteopath, physiotherapist or chiropractor; they are trained to release the spasm and work on the muscle.

3. Stretching

To stretch the muscle, use the stretch that looks like a sprinter start.

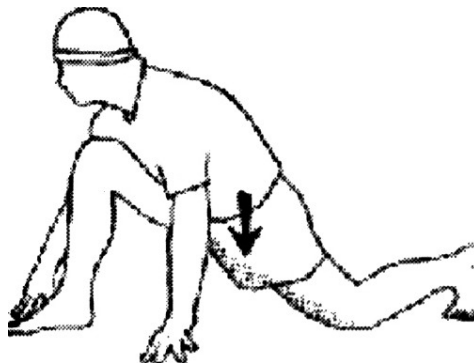


Figure 2: The runner's stretch

Crouch down on the floor with both hands and knees on the ground. Put one leg forward with your foot on the floor so that your front leg is bent at the knee at about 90 degrees. Now extend your rear leg in back of you so that it is almost completely straight and so that the weight of your rear leg is on the ball of your rear.

Keep the back straight and in line with your rear thigh, exhale and slowly try to bring your hips down to the floor. Hold for 15 seconds. Repeat the same stretch with the other leg in front.

In the next paper, I will show how to strengthen the abdominal muscles. In the third paper I will explain why some athletes get severe stomach pain or pain in the diaphragm and how to avoid it.