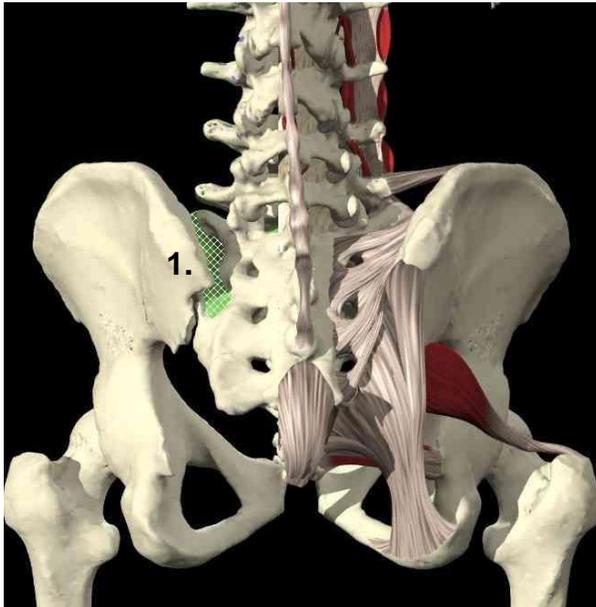


# SACROILIAC JOINT DYSFUNCTION



## What is the Sacroiliac joint?

The sacroiliac joint is where the spine joins the hips. Specifically, it is comprised of the wedge shaped sacrum and wing shaped pelvis (ilium). The irregular surfaces of the joint, and the strong ligaments and muscles which attach around it, provide the joint with great stability. This stability allows weight bearing but restricts movement at the joint.



## What is Sacroiliac joint dysfunction?

There are two sacro-iliac joints, one on the left and one on the right. Movement at the joints usually occur via forward or backward rotation. This movement is symmetrical during some activities, i.e. when bending forwards *both* joints move forwards. This movement is **not** symmetrical in others, i.e. when walking, *one* joint moves backwards whilst the other moves forwards. **Dysfunction** occurs when one sacroiliac joint is **not** moving as it should. This can lead to irritation and inflammation around that joint.

1. (Green Shading) *Left Sacroiliac Joint.*

## What causes Sacroiliac joint dysfunction?

The most frequent cause is direct trauma to the hip, for example, falling from a height or slipping downstairs. There are a number of factors that can contribute to sacroiliac joint dysfunction and pain. These include: a leg length discrepancy (one leg longer than the other), abnormalities in walking pattern, prolonged vigorous exercise, abnormal curvature of the spine, weakening of the ligaments due to surgery or pregnancy, changes in low back posture and hormone induced ligament laxity, which increases the risk of sacroiliac pain. Other arthritic changes can cause the joints to seize up.



## **What are the symptoms of Sacroiliac joint dysfunction?**

- Pain is typically felt over the bony prominence located on one side of the low back. Pain may spread from this area to the buttock, groin, back or front of the thigh, or even into the calf.
- There may be early morning stiffness and pain, which is relieved by movement and made worse with rest.
- Sleep may be disturbed as the pain may wake you when turning over at night. The pain may also be worse when lying on the painful side.
- You may be unable to sit still or stand for long periods.
- Examination may reveal one side of the pelvis to be rotated more than the other. A series of specific tests may reproduce your symptoms.

## **What will Physiotherapy consist of?**

Often sacroiliac dysfunction is accompanied by painful inflammation around the joint, which often causes spasm and tension within parallel muscles. It is important for your therapist to relax these muscles and optimise the inflammation around the joint. When asymmetry is present between the two sacroiliac joints, then a range of techniques and exercises may be employed to address the imbalance. The above can be achieved with:

**Massage** encompassing a variety of techniques and is given with sufficient pressure through the superficial tissue to reach the deep lying structures. It is used to increase blood flow, decrease swelling, reduce muscle spasm and promote normal tissue repair.

**Trigger Point Release** involves applying sustained pressure to palpable areas of muscle tension in the area. The aim is to release the small “knots” of muscle tension and pain by hold the pressure for approximately 30-50 seconds.

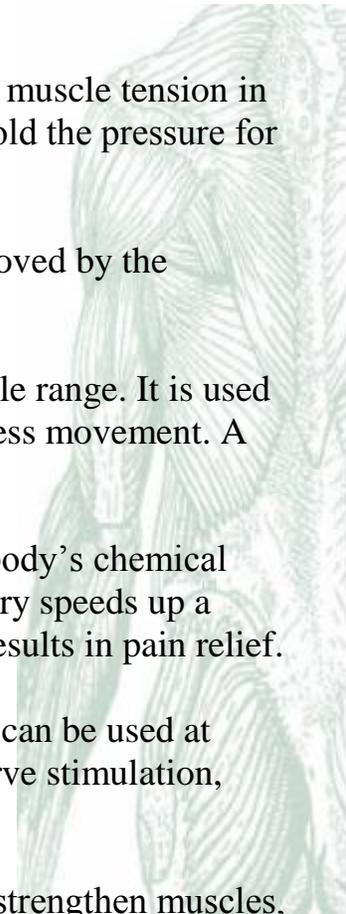
**Mobilisation** is a manual technique where the joint and soft tissues are gently moved by the physiotherapist to restore normal range, lubricate joint surfaces, and relieve pain.

**Manipulation** is a high speed, short movement thrust given at the end of available range. It is used to break down adhesions, remove a blockage within a joint and restore full painless movement. A click or noise may be experienced during this treatment

**Ultrasonic Therapy** transmits sound waves through the tissues stimulating the body’s chemical reactions and therefore healing process, just as shaking a test tube in the laboratory speeds up a chemical reaction. It reduces tissue spasm, accelerates the healing process and results in pain relief.

**Interferential Therapy** introduces a small electrical current into the tissues and can be used at varying frequencies for differing treatment effects. E.g. pain relief, muscle or nerve stimulation, promoting blood flow and reducing swelling/inflammation.

**Exercise Programmes** encompassing a wide range of techniques to stretch and strengthen muscles, lengthen tissues, improve postural alignment, and develop co-ordination and balance.



## Other treatments that could be used:

**Short Wave Diathermy** emits electromagnetic waves deep into the tissues. This results in increased blood flow to the area to promote healing, gives pain relief and can produce a heating effect to soften the tissues in preparation for mobilisation/manipulation.

**Laser Therapy** emits beams of light into the tissues of the body, stimulating chemical reactions and having a similar effect to ultrasound though using light energy instead of sound energy.

**Acupuncture** is an oriental technique of introducing needles into the skin to increase or decrease energy flow to promote pain relief and healing.

**Podiatry** - an analysis of the foot mechanics and structure during walking or running with correction as appropriate.

## What can you do to help your condition?

**Analgesia / Anti-inflammatory medication**– In consultation with your GP or Pharmacist these types of medication may provide significant pain relief.

**Heat Packs**- The application of a hot pack to the painful area may be beneficial in helping the muscles to relax, promote blood flow to the area and provide pain relief.

**Posture** – good posture enables the muscles of the spine to act as a supporting structure and decreases the strain on the joints of the spine.

**Ergonomics** - ensure that all your seating is encouraging you to attain good posture and your mattress is supporting your spine adequately.

In the past, some people have been informed to rest during a “flare up” of back/ sacroiliac pain. It is now known that if you rest and immobilise your joints for too long, it will cause the back to “stiffen up” which may exacerbate the symptoms. It is recommended to keep moving regularly whilst paying attention to good posture.

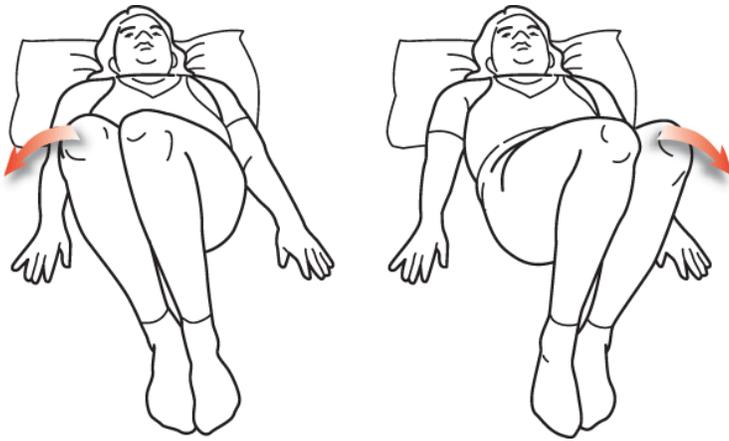
**Exercise/ Postural Programme** - Comply with the prescribed programme. Your physiotherapist will instruct you as to which of the following exercises to begin with, when to add the others, as well as how to progress the exercises.

### 1. Pelvic rotation.



**1. Starting Position:** Lie on your back on a firm surface. Bend one knee and keep the other straight.  
**Action:** Bring one the bent knee toward your chest using your arms. Hold this position for 30 seconds. Lower your leg to the starting position. Then repeat on opposite knee.

## 2. Knee Swings.



## 3. Hip Rotations



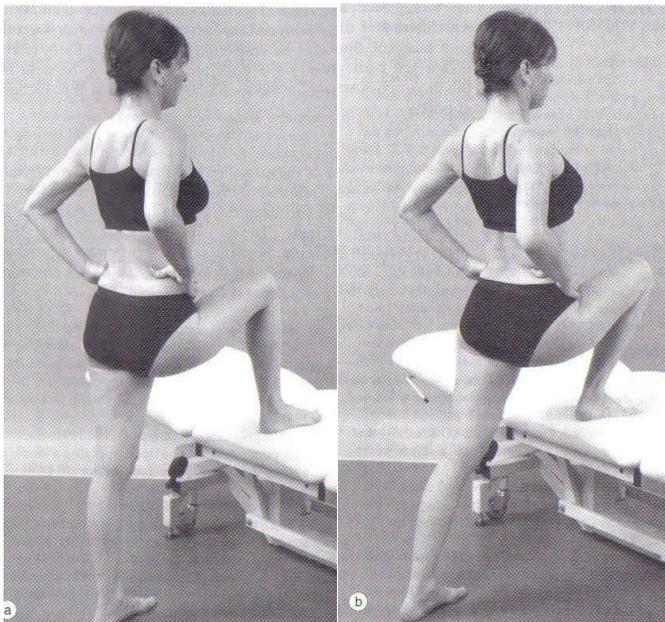
**2. Starting Position:** Lie on your back on a firm surface. Both knees bent, with feet flat on the surface.

**Action:** Keeping your shoulders flat on the surface, slowly allow your knees to relax and move downwards to one side. Hold for 10 seconds and then bring knees back to the middle. Repeat in the opposite directions. Repeat 10 times.

**3. Starting Position:** Lie on your back on a table or firm surface. Bend one knee and cross it over the other knee.

**Action:** Using the opposite hand to the knee which is bent, slowly pull your knee across your body. Stretch until resistance is felt and hold for 30 seconds. Repeat 5 times.

## 4. Pelvic Rotation in Standing.



**4. Starting Position:** Stand with one leg on a stool. Place your thumbs over the two dimples either side of your low back (as shown).

**Action:** Make a lunging movement forwards. As you do this, bend the hip and extend/ straighten your back. Hold this position for 10 seconds and repeat 10 times.

Your therapist will instruct which knee to lunge onto when performing this exercise. This is important as it encourages movement of the joint in a specific direction depending on which leg is on the stool.

## What if physiotherapy does not help or resolve my condition?

It is very rare that physiotherapy does not give great benefit, in these cases an epidural injection may be appropriate and in very extreme cases surgery is a possible option. These options can be discussed with your therapist if appropriate.