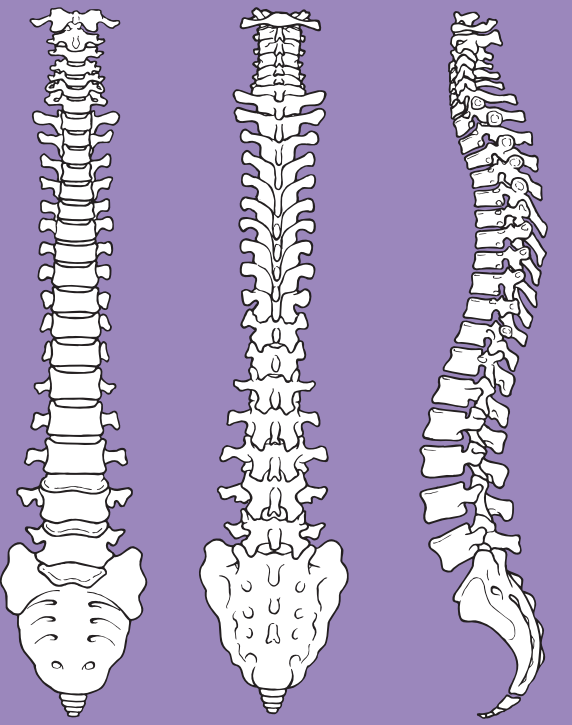
BASS
British Association of Spine Surgeons

Sacroiliac Joint Pain – Injection Treatment



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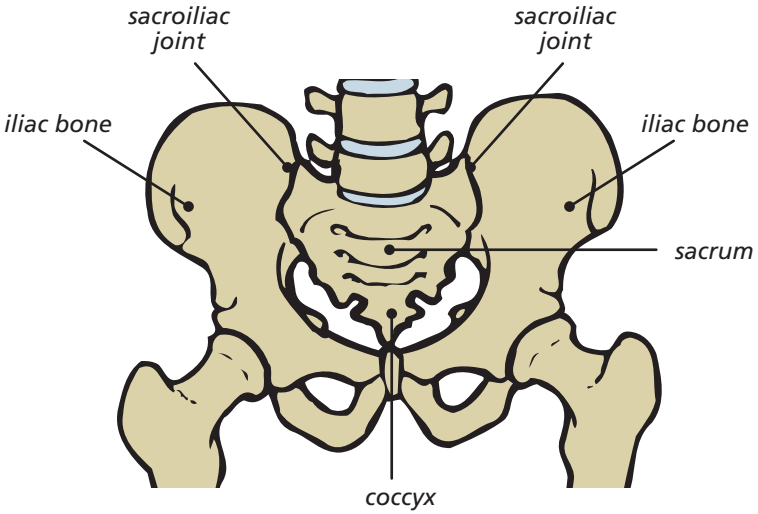
The two sacroiliac joints are positioned in the lower back (lumbar spine), in between the triangular sacrum and iliac bones of the pelvis. They work as a shock absorber to reduce the stress on the pelvis and spine and to transfer the load of the upper body to the lower body, when we stand or walk.

The pelvis



Just like any joint in the body, the sacroiliac joints can become:

- inflamed due to the wear and tear on the cartilage surface and resulting arthritis
- dysfunctional, where there is either too much or too little movement, or
- injured.

This can cause pain and stiffness, directly over the sacroiliac joint itself and the lower back, which can radiate (travel) behind the hips and into the groins and down the back of the legs. The pain suffered from sacroiliac joint degeneration can often be mistaken as a problem with the hip joint, or lumbar spine, as it can be very similar.

If symptoms are prolonged and interfering with day-to-day life, an injection of anti-inflammatory medicine direct to the source of irritation, can be beneficial and provide excellent pain relief. This should be followed a week or so later by an ongoing exercise program to stretch and strengthen the muscles and help reduce the likelihood and severity of pain returning. Injection therapy should not be considered the only treatment for sacroiliac pain. Continued rehabilitation and stronger muscles for your own 'internal corset' is vital for the future 'health' of your spine and pelvis. See pages 6–8 for exercises to help improve sacroiliac joint pain.

About the procedure

The procedure is carried out with either intravenous sedation (so the patient is asleep) or under local anaesthetic injection, to numb the injection site and surrounding area. You will be asked to lie down on a couch on your stomach, usually with your head facing to one side on a pillow. The skin on the back is cleaned with antiseptic solution. Live X-ray is then used as guidance to direct the needle into the sacroiliac joint capsule. A small volume of corticosteroid and/or local anaesthetic is injected. This usually only takes a few minutes to carry out.

You should continue to take your usual pain relief medication until you begin to feel the benefit of the corticosteroid. It is important not to stop taking certain pain relief medication suddenly, such as, morphine or neuropathic medication (gabapentin, pregabalin or amitriptyline). It will be necessary to gradually 'wean' yourself off them – your GP can advise you if necessary.

When sacroiliac joint pain has been confirmed beforehand, more that 85–90% of patients will experience significant benefits from these injections. However, the duration of benefit is variable and may last a few weeks, months or years.

For a considerable number of patients, the injections can provide excellent pain relief enabling you to continue with physiotherapy, keep active and possibly lose weight if necessary. However, some patients who have had an episode of sacroiliac joint pain are at an increased risk of having a further episode. It may be possible to repeat the injections, if the first has been helpful, although not straight away. Most specialists would wait at least six months before repeating them. If the symptoms have not improved after six weeks or the relief only temporary up to that point, then in certain circumstances, the next stage may be to refer you to a Pain Clinic for further assessment or treatment, including radiofrequency denervation (a procedure which involves the burning of the sacroiliac joint nerves, to interrupt the nerve supply and pain messages).

If however, the injections/physiotherapy or radiofrequency denervation do not improve the symptoms, then future treatment may include surgery to fuse (join together) and stabilise the sacroiliac joints.

Risks and complications

Fortunately, there are very few risks associated with sacroiliac joint injections. Very uncommon risks include:

- bleeding. You must inform your consultant if you are taking tablets used to 'thin the blood', such as warfarin, rivaroxaban or clopidogrel. It is possible you may need to stop taking these before your injection. If your procedure is scheduled with less than a week's notice, please check with your consultant or nurse which drugs need to be stopped to prevent this being delayed
- infection. Although this is rare, it is important that the skin on your back is clear of skin conditions like psoriasis or eczema as these can increase the risk

- facial flushing or (ladies only) interference with the menstrual cycle or post-menopausal bleeding. This can be a temporary side effect of the steroid
- a rise in blood sugar levels for a few days for people who have diabetes.

Sometimes however, it is difficult to place the needle and inject directly into the joint space due to the presence of bony overgrowths. In this situation, the pain relief from the injection may not be quite as effective.

What to expect in hospital

After the injection, you will be helped back into bed and taken to the recovery ward for a short while, where a nurse will check your blood pressure and pulse. Oxygen may be given to you through a facemask to help you wake up, if you were given sedation. You will then return to the ward.

Going home

You will normally be allowed home within a couple of hours of having had the injections, once you are up and about. If you have had intravenous sedation, you should not drive for 48 hours and a responsible adult should remain with you overnight. Please arrange for either a friend or relative to collect you from hospital. If you qualify for patient transport and are likely to require this service, please arrange this through your GP before admission.

Work

You may be advised to take the next day off work, if you had intravenous sedation, however, you may feel that you need longer if the pain persists. It can take several weeks before the full benefit of the injection takes place. The hospital can give you an off-work certificate or you can ask your GP.

Follow-up

Your surgeon will advise you if you need to attend clinic after your procedure, or how to request a further clinic review if necessary. If you have any queries about the information in this booklet, please discuss them with the ward nurses or a member of your consultant's team.

Sacroiliac pain rehabilitation exercises

Hamstring stretch on wall

Quadriceps stretch

Hip adductor stretch

Isometric hip adduction

Gluteal sets

Lower trunk rotation

Single knee to chest stretch

Double knee to chest

- **Hamstring stretch:** Lie on your back with your buttocks close to a doorway, and extend your legs straight out in front of you along the floor. Raise one leg and rest it against the wall next to the door frame. Your other leg should extend through the doorway. You should feel a stretch in the back of your thigh. Hold this position for 15–30 seconds. Repeat three times and then switch legs and do the exercise again.
- **Quadriceps stretch:** Stand an arm's length away from the wall with your injured leg farthest from the wall. Facing straight ahead, brace yourself by keeping one hand against the wall. With your other hand, grasp the ankle of your injured leg and pull your heel toward your buttocks. Don't arch or twist your back. Keep your knees together. Hold this stretch for 15–30 seconds.
- **Hip adductor stretch:** Lie on your back, bend your knees, and put your feet flat on the floor. Gently spread your knees apart, stretching the muscles on the inside of your thigh. Hold this for 15–30 seconds. Repeat three times.
- **Isometric hip adduction:** Sit with your knees bent 90° with a pillow placed between your knees and your feet flat on the floor. Squeeze the pillow for five seconds and then relax. Do three sets of 10.
- **Gluteal isometric sets:** Lie on your stomach with your legs straight out behind you. Squeeze your buttock muscles together and hold for five seconds. Release. Do three sets of 10.
- **Lower trunk rotation:** Lie on your back with your knees bent and your feet flat on the floor. Tighten your abdominal muscles and push your lower back into the floor. Keeping your shoulders down flat, gently rotate your legs to one side, then to the other side as far as you can. Repeat 10–20 times.

- **Single knee to chest stretch:** Lie on your back with your legs straight out in front of you. Bring one knee up to your chest and grasp the back of your thigh. Pull your knee toward your chest, stretching your buttock muscle. Hold this position for 15–30 seconds and return to the starting position. Repeat three times on each side.
- **Double knee to chest:** Lie on your back with your knees bent and your feet flat on the floor. Tighten your abdominal muscles and push your lower back into the floor. Pull both knees up to your chest. Hold for five seconds and repeat 10–20 times.

Produced, researched and revised by spinal nurse specialist Helen Vernau on behalf of the BASS Consent and Patient Information Committee.

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