What is a diagnostic SI joint injection?

A diagnostic SI joint injection is the injection of a local anesthetic medication into the SI joint.

What is the purpose of a diagnostic SI joint injection?

A diagnostic SI joint injection is an important diagnostic procedures to confirm that pathologic changes (i.e. arthritis) and inflammation within the SI joint is the underlying cause of your pain. If this injection works, it will give you relief for several hours. After that, the pain is expected to return to normal. This test is always performed twice (usually a week or two apart) because two successful tests are required to move onto treatment. If both diagnostic tests are positive, then we schedule a treatment. The treatment may involve a steroid injection to decrease the inflammation within the joint. Alternately, your doctor may choose to treat the problem with a procedure called radiofrequency (RF) ablation. In this procedure, nerves that feed the SI joint are cauterized, which typically leads to pain relief for 12-18 months (please see the link for SI Joint Radiofrequency Ablation to learn more about this procedure). If this process works well on one side, it can be performed on the other side if needed.

How is the procedure performed?

You will be placed on the procedure table. The injection site is sterilized with either iodine or chlorhexadine. The site to be injected is numbed with a local anesthetic, and a needle is directed to the target area. X-ray guidance is used to ensure proper placement and positioning of the needle. Contrast (x-ray dye) may be injected to be sure the needle is in the proper position. Once proper needle placement is confirmed, the steroid solution is slowly injected.

Will the procedure be painful?

The injection can be painful and we therefore provide the option of receiving IV sedation. IV sedation, combined with local anesthetic, can make the injection nearly pain free. It allows you to remain very still during the procedure, which can also make the injection easier, faster, and more successful. If you decide to have IV sedation, you must have a driver to get you home safely afterwards. In addition, you cannot have anything to eat or drink within 6 hours of your appointment (clear liquids are allowed until 2 hours before the procedure). If you take medications for diabetes, these medications may need to be adjusted the morning of the procedure. Your primary care physician can help you with this adjustment.
What are the discharge instructions?

If you received IV sedation do not drive or operate machinery for at least 24 hours after the procedure. You may return to work the next day following your procedure. You may resume your normal diet immediately. Do not engage in any strenuous activity for 24 hours. Do not take a bath, swim, or use a hot tub for 24 hours (you may take a shower). Call the office if you have any of the following: severe pain afterwards (different than your usual symptoms), redness/swelling/discharge at the injection site(s), or fevers/chills.

What are the risks and side effects?

The complication rate for this procedure is very low. Whenever a needle enters the skin, bleeding or infection can occur. Some other serious but extremely rare risks include paralysis and death.

You may have an allergic reaction to any of the medications used. If you have a known allergy to any medications, especially x-ray contrast dye or local anesthetics, notify our staff before the procedure takes place.

You may experience any of the following side effects up to 4 hours after the procedure:

- Leg muscle weakness or numbness may occur due to the local anesthetic affecting the nerves that control your leg (this is a temporary affect and it is not paralysis). If you have any leg weakness or numbness, walk only with assistance in order to prevent falls and injury. Your leg strength will return slowly and completely.
- Dizziness may occur due to a decrease in your blood pressure. If this occurs, remain in a seated or lying position. Gradually sit up, and then stand after at least 10 minutes of sitting.
- Mild headaches may occur. Drink fluids and take pain medications if needed. If the headaches persist or become severe, call the office.
- Mild discomfort at the injection site can occur. This typically lasts for a few hours but can persist for a couple days. If this occurs, take anti-inflammatories or pain medications, apply ice to the area the day of the procedure. If it persists, apply moist heat in the day(s) following.

The side effects listed above can be normal. They are not dangerous and will resolve on their own. If, however, you experience any of the following, a complication may have occurred and you should either contact your doctor. If he is not readily available, then you should proceed to the closest urgent care center for evaluation:

- Severe or progressive pain at the injection site(s)
- Arm or leg weakness that progressively worsens or persists for longer than 8 hours
• Severe or progressive redness, swelling, or discharge from the injections site(s)
• Fevers, chills, nausea, or vomiting
• Bowel or bladder dysfunction (i.e. inability to urinate or pass stool or difficulty controlling either)

How long does it take for the procedure to work?

You should feel relief from your usual pain within the first hour. Again, this is only expected to last for several hours, at the most. Remember, you may be sore in the middle part of your back from the needles, and you must distinguish this from your usual pain.