



Musculoskeletal Imaging and Intervention Section Procedures Sacroiliac Joint Injection

Prior to the procedure, review the patient's history, imaging, allergies and medications.

Materials

- 10cc syringe (2)
- 1 cc syringe
- 1% lidocaine buffered for local anesthesia
- Kenalog-40 (1 mL) (= triamcinolone)
- 0.5% Ropivacaine (1 mL)
- 22G 3.5-inch needle
- Chlorhexidine swabs
- Sterile drape

Technique

1. After obtaining consent, perform a timeout.
2. Position the patient prone on the table.
3. Palpate the patient's Iliac crests to estimate the location of the sacroiliac joints. Tape a dilator longitudinally on the skin overlying target sacroiliac joint for measurement purposes after scanning.

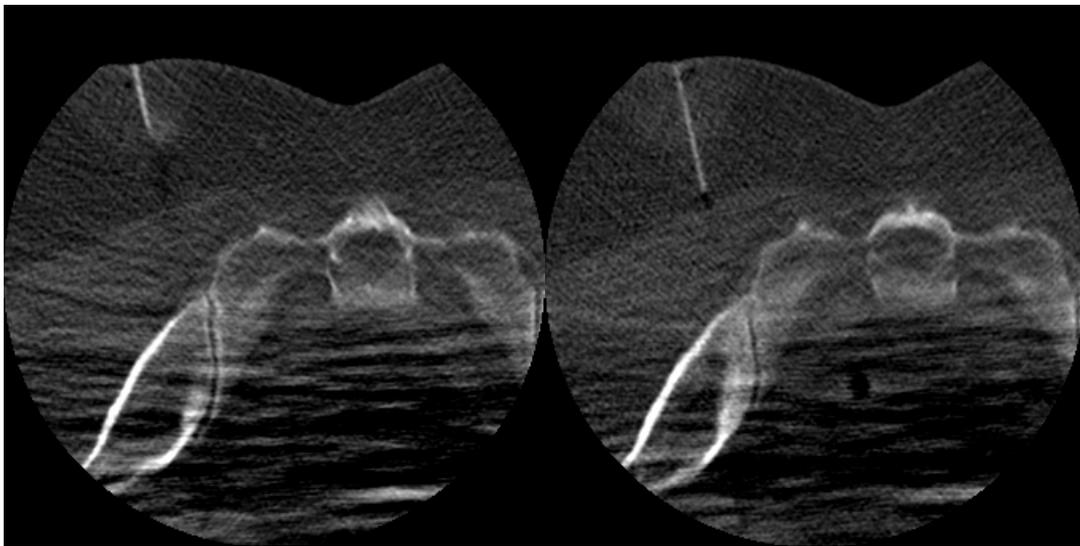


4. Perform limited noncontrast scan of the sacroiliac joints. If the technologist asks, you want 2.5-mm reconstructions.

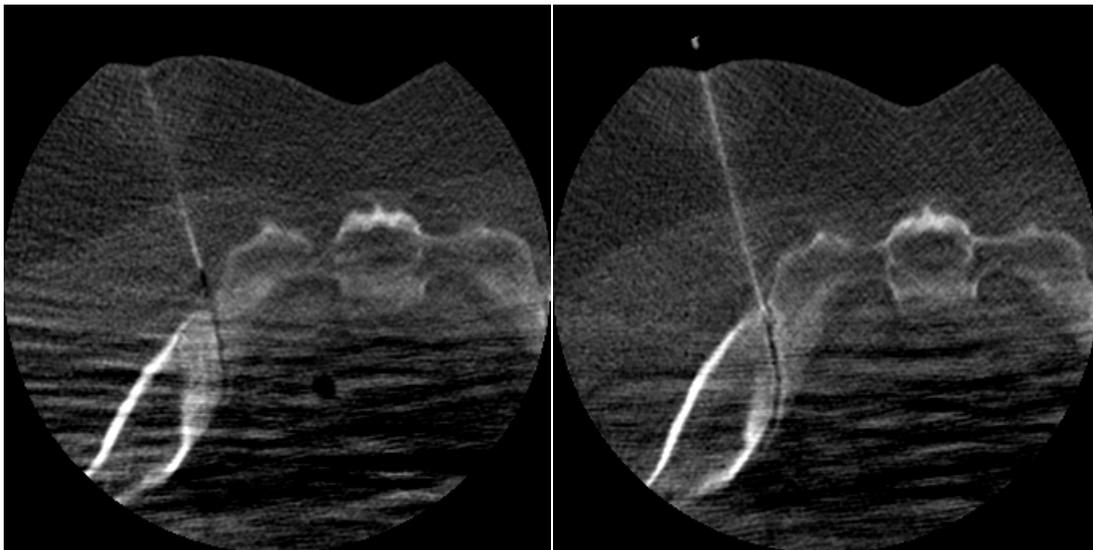


Distance = 8.1 cm

5. Assess the images for the proper location. The target should be ~1 cm above the bottom of the SI joint, but adjust as needed based on accessibility of the joint. Measure the distance from the dilator to the optimal skin entry site; note that this is not always a direct vertical approach but is based on the orientation of the joint. (In the above example, the dilator was at the correct location already). Also note whether or not the 3.5" needle will be long enough.
6. Move the patient so that the selected level is at the laser and mark the skin.
7. Sterilize and drape the overlying skin. Draw up medications (see above—lido with bicarb in one syringe, Kenalog and Ropi in the other).
8. Numb the superficial and deep soft tissues with buffered 1% lidocaine in the expected trajectory of the needle.



9. Utilizing CT fluoroscopy to track progress intermittently, advance the 22 Gauge 3.5-inch needle into the joint.



10. Inject 2 mL equal parts Kenalog-40 and 0.5% Ropivacaine. The mixture should be transferred to the 1-cc syringe for injection (provides more pressure for tight joints).
11. Remove needle and cleanse skin.

Tips:

- Contrast is not needed because the CT confirms the correct location
- If you find that you are unable to “walk” the needle into the joint and need to make a substantial correction, you usually need to pull back out of muscle for that to work.
- If the joint is tight and medication won’t flow easily, rotate the needle
- Withdrawing the needle a small amount is acceptable; in fact, the joint capsule is superficial to the joint margins so one does not have to be fully embedded to be within the joint.

Write-up credit: Katie Longo, MD