What is an imaging-guided joint injection or aspiration?
These are procedures in which we use imaging such as ultrasound or fluroscopy (X-rays) to guide a needle into your joint space so that an injection can be placed into that area or fluid in your joint can be removed. Your doctor will tell you which type of imaging is best for you.

Why is it done?
In general, there are three main reasons why physicians request imaging-guided joint injections or aspirations:

1. **Pain relief:** Your doctor may have requested this procedure as a treatment for pain. Using image guidance, we inject medicines into the joint for pain relief. Usually, we use a mixture of a long-acting anesthetic, which numbs the area, and a steroid, which reduces swelling.

2. **Arthrograms:** In this procedure, (MRI or CT/iodine containing) dye is injected into the joint before you have an MRI or CT scan. Arthrograms allow your doctor to get a better look at the parts of the joint that may be causing your problem.

3. **Aspiration:** In this procedure, a needle is placed into the joint and fluid is removed. This can be performed for pain relief to reduce joint pressure and/or to obtain fluid samples for testing.

How should I prepare for the exam?
Tell the doctor doing your arthrogram if you:

1. may be pregnant
2. are allergic to any medications, including previous doses of contrast agent or any anesthetics
3. have ever had a serious allergic reaction to anything
4. have bleeding problems or take blood-thinners (e.g., Aspirin, Coumadin or Plavix)
5. have a known infection around your joint

What will happen during the procedure?
For injections and aspirations, the procedures are very similar. These procedures will be performed by a radiologist.

- First, you will be asked to lie on the imaging table so that we have access to the joint. Your skin will be cleaned and a small sterile drape will be placed over the area.
- A small amount of local anesthetic will be injected under the skin to numb the area.
- A thin needle will be used to get into the joint. If you are having an aspiration, joint fluid will be removed.
- If you are having a pain injection or arthrogram, pain medication or contrast dye will be given.
- To ensure the needle is in the right place, a small amount of contrast dye may be injected.
- Most patients who have arthrograms will have an MRI or a CT scan right after the injection.

Will this hurt?
While most patients report little, if any, discomfort, it is possible that you could feel a slight pain as the needle is inserted into the joint space. Typically, there is no pain while the medication is being injected or fluid removed. It is possible that you could feel discomfort when the needle is removed.

How long will it take?
The injection or aspiration takes about 20 minutes. If you are having an MRI or CT arthrogram after the injection, that portion takes an additional 30 and 45 minutes.
How will I feel after the procedure?
After any joint pain injection or arthrogram, there is more fluid in the joint so it may feel a little tight. If you have contrast injected for a scan, it is mostly water and the body eliminates it quickly (in a few hours). For 24 hours, you will be asked to be careful not to strain the joint. That is, no heavy lifting, running, etc. If you have medication injected for pain, the local anesthetic can sometimes work right away, providing pain relief.

This may last for several hours, but will then wear off. The steroid medicine will provide relief for much longer—up to 3 months for most people—but it won’t start working for 2-3 days. You may continue to feel some pain until the steroid medicine begins to work. If you have discomfort, you may take whatever medication you normally use for pain. You may eat and drink as usual after the exam.

Are there any possible complications?
While there can be complications with any medical procedure, the risk of complications with this procedure is very low. Possible complications include infection, bleeding or an allergic reaction. Approximately 2-25% of patients can experience a “postinjection flare” where there is joint pain that lasts 2-5 days.

If you experience severe pain, redness or drainage at the injection site, please contact your doctor who ordered the procedure for more information.

When will I receive my results?
Results are usually ready within 48 hours. Please contact your doctor to get your results.