

Arthrography Patient Education Sheet

What is Arthrography? Arthrography is medical imaging to evaluate conditions of joints. There are several imaging methods that can be used to do this.

- **Fluoroscopy:** this involves the injection of a contrast material into the joint, and then using fluoroscopy (live x-ray) the radiologist examines the joint.
- MRI: this also involves the injection of a contrast material into the joint, just like in conventional arthrography, except MRI is used to examine the joint.
- CT: this also involves the injection of contrast material into the joint, just like with conventional and MR arthrography; however CT is used to examine the joint.

Arthrography or Arthrogram images help physicians evaluate alterations in structure and function of a joint and help to determine the possible need for treatment, including arthroscopy, open surgery or joint replacement. The procedure is most often used to identify abnormalities within the shoulder, wrist, hip, knee, or ankle. The procedure is also used to help diagnose persistent, unexplained joint pain or discomfort.

How is the procedure performed? The patient is positioned on the examination table and x-rays are taken of the joint to be compared later with the arthrograms. If recent x-rays are available, the physician may choose to use these for reference. Next, the skin around the joint is cleansed with antiseptic and a local anesthetic is injected. The area where the needle is to be inserted will be sterilized and covered with a surgical drape. A needle is then inserted into the joint. The radiologist, a physician specifically trained to supervise and interpret radiology examinations, will use a syringe to drain the joint fluid, which may be sent to a laboratory for analysis. Aspiration is typically performed when an infection is suspected. The contrast material and sometimes air are injected into the joint space and the needle is removed. Air will not be used if the patient is undergoing MR arthrography. The patient will be asked to move the affected joint to distribute the contrast material throughout the space. A conventional arthrography exam is usually completed within 30 minutes. Exams involving MRI may take more than one hour.

Patient Preparation for an Arthrogram:

If you are scheduled to have MR or CT arthrography and have claustrophobia (fear of enclosed spaces) or anxiety, you may want to ask your physician about being sedated prior to the scheduled examination.

Previous exams: If you have had recent x-rays, CT scans, or MRI scans of the joint performed at an outside facility, please bring those films to your appointment. This may save an unnecessary repeat of x-rays, and help clarify the reason for your present visit. If films are not available, please bring a copy of the report.

Allergies: If you have had an allergic reaction (i.e. hives, itchiness, difficulty breathing, and any treatment which required hospitalization) to the injected dye for a previous radiology exam (CT scan, angiogram, etc.) notify the physician suggesting your arthrogram. (s)he may prescribe oral steroids for you to take the night before your arthrography. This medication will reduce the risk of a repeat allergic reaction. If you fail to notify your doctor prior to arriving, the test may have to be postponed to allow for the appropriate amount of time for the steroids to take effect.

Medications: You should inform your physician of any medications you are taking and if you have any kidney problems or allergies, especially to iodinated contrast materials. Also inform your doctor about recent illnesses or other medical conditions.

Eating: Food and fluid intake do not need to be restricted, unless a sedative will be given.

Driving: Patients are able to drive immediately after this procedure, unless a sedative will be given.