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If you or your support person do not clearly understand the procedure, please ask for clarification



ARTHROGRAM

What is it?

An arthrogram is a procedure that uses a contrast agent (also referred to as *dye*) and imaging (x-ray, MRI, or CT scan) to get detailed images of joints like the shoulder, knee, hip, or wrist. The contrast agent is injected into the joint to better visualize issues such as cartilage damage, ligament tears, or abnormalities. After the injection, detailed images are taken to help your doctor or health provider diagnose and plan treatment. The procedure typically takes 15–30 minutes.

Why do I need it?

Arthrograms are performed to better visualize the cause of the symptoms you are experiencing in your joint. Reasons to have an arthrogram include¹

- Joint pain or swelling
- Abnormal joint movement
- Find problems with joint capsule, ligaments, or cartilage (such as labral tear)
- Find fluid-filled cysts



HOW IS THE PROCEDURE PERFORMED?

Before

For specific questions regarding the clinical need for this procedure, please contact your ordering provider.

Patient Preparation:

You should wear loose-fitting clothing that is easy to change out of. **You will need to arrange for someone to drive you home after the procedure.** One support person (spouse, friend, caregiver, family member) may accompany you on the day of your appointment, but not into the procedure room.

Please bring a list of the medications you are currently taking and a list of any drug/medication allergies you may have.

You can eat and drink normally before the procedure. You may take your usual medications prior to the procedure. See next page if you take blood thinners.

Please phone the Diagnostic Imaging booking line at **705-325-2201 ext. 3505** for cancellations or rebooking if you are unable to attend your appointment.



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Bloodwork³

Bloodwork is **usually not needed** for this procedure.

However, it is required if you:

- Take Warfarin (Coumadin®)
- Have **prolonged bleeding**, risk of **thrombocytopenia** or **known thrombocytopenia**

If the above applies to you then your doctor will order:

- INR (must be ≤ 2.5 , ≤ 2.0 for ports or tunneled catheters)
- PTT
- CBC (platelets must be $\geq 20 \times 10^9/L$ or greater)

The bloodwork results must be current within **4 weeks of the procedure**.

If you take Warfarin (Coumadin), you'll need a new INR drawn **the day before** your procedure.

Important: Missing bloodwork may delay or reschedule your appointment.

Blood Thinners / Anticoagulants / Antiplatelets Medications³

Stop the listed medications as per the below schedule before your procedure unless instructed otherwise. If unsure, then consult your doctor or healthcare provider about which medications to pause, for how long, when to restart them, and any concerns you may have.

Medication	Withholding	When to Stop	Restart After
Coumadin® (Warfarin) ^{*/**}	Based on INR	Based on INR	NA or same day re-initiation for bridged patients
Cangrelor (Kengreal)	Yes	Defer procedure until off medication; if procedure is emergent, withhold 1 h before procedure	multidisciplinary decision making
Abciximab (ReoPro)	Yes	Withhold 24 h before procedure	multidisciplinary decision making
eptifibatide (Integrilin) tirofiban (Aggrastat)	Yes	4–8 h before procedure	multidisciplinary decision making
* consider bridging with heparin (need admission) for high thrombosis risk cases			
** consider using reversal agent if emergent or STAT			

Important Notes

- Patients on Warfarin (Coumadin®) need an INR test the **day before** the procedure.
- Those with **prosthetic valves**, **prior clots**, or **stroke-related atrial fibrillation** may need bridging therapy to prevent thrombosis.
- **Do not** stop blood thinners if you have **coronary or brain stents**—consult your doctor first.
- If anticoagulation is stopped, your doctor must provide instructions.
- Applies only to elective procedures, not emergencies.



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Coming To The Hospital

You must first sign-in with **Centralized Patient Scheduling & Registration (CPSR)**, which is located immediately to your left when you enter the hospital from the main entrance (off Dunlop Street, across from the gift shop). You will receive a patient wristband and be directed to the **Diagnostic Imaging department**.

Please bring to the hospital your OHIP card and a list of current medications you are taking.

During

Arthrograms are done in the Interventional Radiology Department of Diagnostic Imaging. You will then be directed to modality of imaging your doctor has requested (ex: MRI, CT scan, or X-Ray).

The duration of your arthrogram appointment time will vary from 15 minutes – 30 minutes.

1. You will be asked to change into a gown.
2. You'll be positioned on a fluoroscopic table and the skin over the joint will be aseptically cleaned.
3. The radiologist will use some local freezing (Lidocaine) to numb the area.
4. Fluoroscopy (live x-rays) is then used to guide the needle into the joint space.
5. You'll likely feel some pressure when the needle is inserted. Let your doctor know if you have discomfort.
6. The needle placement will be confirmed with a contrast agent that shows up on x-rays. If you are having an MRI after, then a different type of contrast medium (gadolinium) will be injected into the joint. This may make your joint "feel full".

Notes / Questions *(write down any notes or questions you may have for your doctor, healthcare practitioner, or the care team in Diagnostic Imaging on the day of your appointment. You can also use this space to write down a list of your current medications):*



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WHAT TO EXPECT AFTER



Recovery & Going Home

You must stay in the Diagnostic Imaging Department for 15 minutes after your arthrogram. In rare cases, the local anesthetic may temporarily numb a large area of your arm or leg, requiring you to stay for 1–2 hours until sensation returns. If this doesn't happen, you can leave after 15 minutes.

You may go home once your imaging (x-ray, MRI, or CT scan) is complete, and the time spent on imaging counts toward the 15-minute wait.

Mild to moderate soreness in the joint is common for 24–48 hours after the injection, after which it should return to how it felt before the procedure².

For these reasons **you will need someone to drive you home after the procedure**. Don't drive for the next 24 hours or while you're taking strong pain medicine. If you were given medication to help you relax or manage pain during the procedure, then you cannot drive for the next 24 hours.



Diet & Activity

- Avoid strenuous activities for several days, especially if the activity puts stress on the area where you had the arthrogram.
- Resume a normal diet and light activities.



Wound Care²

- If you experience pain or mild swelling at the injection site, then apply ice to the injection site. Place an ice pack or a bag of frozen peas wrapped in a towel over the painful part. Never put ice right on the skin. Do not leave the ice on more than 10 to 15 minutes at a time.
- Keep the area of the injection clean and dry. A Band-aid is placed over the injection site and may be removed after 6 hours.
- If bleeding occurs from the injection site then apply pressure with your fingers over the existing Band-aid. A new Band-aid may be required.



Bathing

- You may resume normal bathing once you have removed the Band-aid and if the site is not bleeding.



Medication¹

- **If your doctor or healthcare provider advised you to stop any medications for this procedure then consult with them first about the safety of when you can start your medications again;**
- Otherwise, resume your normal medication schedule.
- If you **normally** take acetylsalicylic acid (Aspirin™) or another blood thinner medication, ask your doctor or healthcare provider when to start taking it again. Make sure that you understand exactly what they want you to do;
- Otherwise, **do not** take (Aspirin™) or anti-inflammatory medicines (such as ibuprofen) for one **week** after the procedure.



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WHEN TO SEEK HELP^{1,2}



Call 911:

If you believe you require emergency care – **call 911**. Reasons to call 911 include:

- You have passed out (lose consciousness), or become very dizzy, weak, or less alert
- You have severe trouble breathing
- You have a fast or uneven pulse
- You experience sudden chest pain and shortness of breath; and/or
- Significant bleeding from the procedure site (i.e. bright red blood that won't stop)¹



Call your doctor, healthcare provider, or Health Connect Ontario immediately if you experience^{1,2}:

- Increased pain, swelling, warmth, or redness at the procedure site
- Redness or warmth around the procedure site or pus or blood draining from the procedure site
- A fever (more than 100°F / 38°C)
- Chills, with or without fever
- Bright red blood has soaked through the bandage / dressing over the procedure site.
- You have new or worse pain at the procedure site.
- Bruising or swelling at the procedure site that is getting bigger.
- An upset stomach and you can't keep fluids down (you're throwing them up).
- Any other concerns.

Health Connect Ontario may be reached 24-hours a day, including weekends, by:

- Calling 8-1-1
- Calling 1-866-797-0007 (TTY – teletypewriter service)
- Visiting <https://healthconnectontario.health.gov.on.ca/> and selecting “Chat with us”

BRING THIS INFORMATION PACKAGE WITH YOU SHOULD YOU URGENTLY NEED TO SEE YOUR DOCTOR OR GO TO THE EMERGENCY DEPARTMENT OF YOUR NEAREST HOSPITAL.

Use this material for your information only. It does not replace advice from your doctor or other health care professionals. Do not use this information for diagnosis or treatment. Consult with your health care provider about a specific medical condition.

References:

1. Steroid Injections. NHS. Accessed February 21, 2023. <https://www.nhs.uk/conditions/steroid-injections/>
2. Joint Injections: Care Instructions. Accessed February 21, 2023. MyHealth.Alberta.ca Network. <https://myhealth.alberta.ca/health/AfterCareInformation/pages/conditions.aspx?HwId=ad1775>
3. Patel et al. Society of Interventional Radiology Consensus Guidelines for the Periprocedural Management of Thrombotic and Bleeding Risk in Patients Undergoing Percutaneous Image-Guided Interventions—Part II: Recommendations. JVIR 2019; 30:1168–1184.

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