

Myelogram

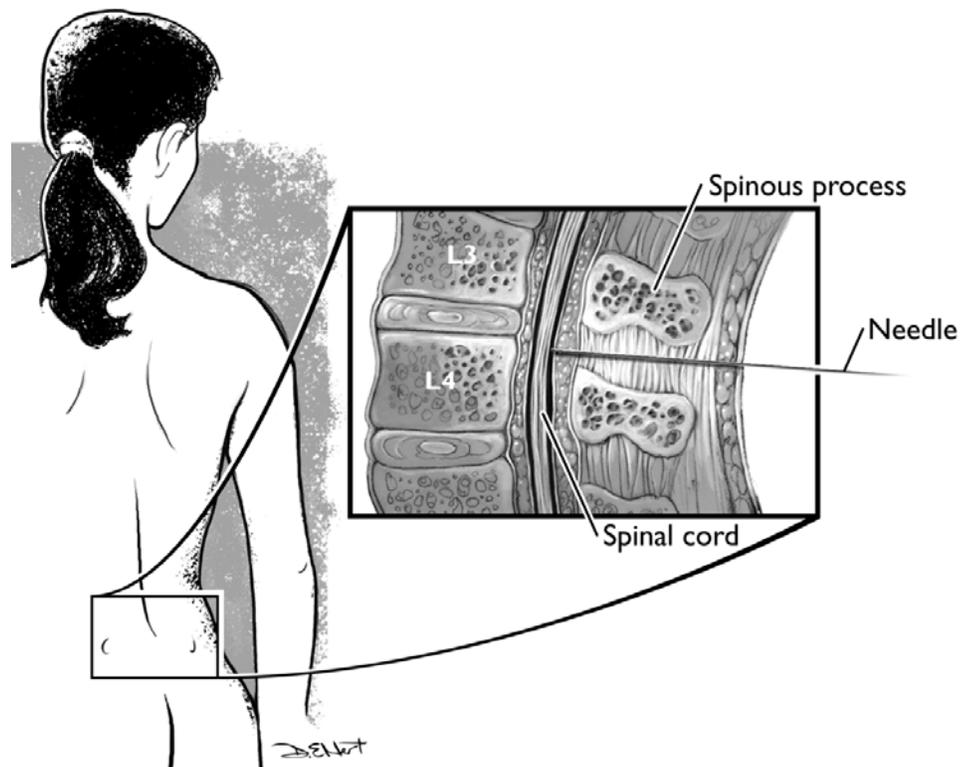
What to expect and how to prepare

This handout explains how to prepare for a myelogram, how it works, how it is done, what to expect during the exam, and how to get your results.

What is a myelogram?

A *myelogram* is an X-ray exam of the spinal cord and the space around it (the *subarachnoid space*). It provides detailed pictures of the spinal cord, spinal canal, and spinal nerve roots. The pictures show if there is damage in these tissues caused by disease or trauma.

A myelogram is often done when other tests – such as *computed tomography (CT)* scans or *magnetic resonance imaging (MRI)* – have not answered all our questions about your health issue. We may do a CT scan after your myelogram.



Cross-section of a spine with a needle inserted into the spinal canal.

How should I prepare for the exam?

- Before your exam, tell your primary care provider (PCP) if you:
 - Are taking any medicines that thin your blood (*anticoagulants*). These include Coumadin (warfarin), Plavix, Lovenox, and nonprescription pain medicines such as aspirin, ibuprofen (Advil, Motrin, and others) or naproxen (Aleve, Naprosyn, and others). You may need to stop these before the exam and restart them after the exam.
 - Are taking insulin or pills for diabetes. Check with your diabetes care provider about changing your dose during the time you are not allowed to eat. Please check your glucose level before you arrive for your exam.
 - Are taking muscle relaxants or medicines for depression, nausea, or ADHD. Talk with your PCP about not taking the medicine for 48 hours before and 24 hours after your exam.
 - Have any allergies to lidocaine (numbing medicine), betadine, iodinated contrast, latex or tape.
 - Are pregnant.
- Plan to have a responsible adult drive you home after your exam. For your safety, you may not drive until the day after your exam.

On the Day of Your Exam

- Make sure a responsible adult can drive you home after your exam. If you take a bus or taxi home, you must have an adult ride with you.
- **Starting 2 hours before your exam:** Do **not** eat or drink anything. If you need to take medicines, take them with only a small sip of water.
- Bring a list of your medicines when you come for your exam.
- You may need to have blood work done on the day of your exam.

How does the exam work?

The subarachnoid space is an area around the spinal canal, spinal cord, and nerve roots. This space is filled with *cerebrospinal fluid*. This fluid cushions and protects the spinal cord.

For a myelogram, a substance called *iodinated contrast* is injected through a needle that is placed in your subarachnoid space. The

contrast outlines parts of the spine that cannot be seen on normal X-rays. X-rays are taken as the contrast flows into the space.

You will be lying on a table for your myelogram. This table can be tilted to make the contrast run up and down your spine and around the nerve roots in the spinal cord.

What can I expect?

- A myelogram may be done in the Radiology department.
- The exam will focus on the area of your back or neck where you are feeling symptoms. A type of X-ray called *fluoroscopy* will be used to project pictures of your spine onto a screen.
- We will ask you to change into a hospital gown, pants, and robe.
- We will ask you to lie face down on an X-ray table. We will place a pillow under your belly. This position opens the spaces between your vertebrae so that the radiologist can easily insert the needle. You will need to stay in this position for about 45 minutes.
- The radiologist will clean your skin and inject a *local anesthetic* (numbing medicine) where a needle will be inserted.
- The radiologist will inject the iodinated contrast and the X-ray table will be slowly tilted. We will ask you to lie as still as you can while the table is tilted. A footrest and straps or supports will keep you from sliding on the table.
- We will take X-rays while you are lying face down. The flow of contrast will show on the fluoroscopy.
- We may do a CT scan right after your myelogram, while the contrast is still in your spinal canal. This blend of imaging studies is known as a *CT myelogram*.
- A myelogram usually takes 30 to 60 minutes. The CT scan adds another 5 to 10 minutes to the total time.
- After the myelogram, you will go to a short-stay area in the hospital. Nurses there will monitor you for about 2 to 3 hours. After that, you may go home.

What will I feel during the exam?

- You will feel a brief sting when local anesthetic is injected.
- You will feel slight pressure as the spinal needle is inserted. You may feel tingling from time to time as the needle is placed.

- When the contrast is injected, you may feel some pressure. You may also have a headache or leg cramps. These will go away after the contrast moves through the spine.

What can I expect after the exam?

We will give you instructions at the end of the exam. Please follow them closely.

- **For 8 hours:**

- Rest quietly at home.
- Do **not** bend over.
- It is OK to sit in a chair for short periods and get up to use the bathroom.
- If you lie in bed, have the head of the bed raised at least 30 degrees.
- You may have a headache. You may take acetaminophen (Tylenol) for pain.

- **For 24 hours:** Drink at least 8 glasses (8 ounces each) of fluid such as juice, water, or a sports drink.

- **For 2 days:** Do **not** take a bath, sit in a hot tub, or go swimming. Soaking in water increases the risk of infection. It is OK to shower.

- For 3 days:

- Do **not** lift anything that weighs more than 10 pounds. (A gallon of milk weighs almost 9 pounds.)
- Avoid doing anything that makes you breathe harder or makes your heart beat faster.

- You may return to work the day after your exam, as long as you do not need to do any heavy lifting.

Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

- UWMC - Montlake Imaging Services: 206.598.6200
- Harborview Imaging Services: 206.744.3105
- UWMC - Northwest Imaging Services: 206.368.1744

Who interprets the results and how do I get them?

A radiologist trained to interpret myelograms will review your exam results and send a report to the provider who referred you for this exam. Your own provider will talk with you about the results of your exam. You may also read your results on your eCare Results page. If you need copies of your images on a disc, call 206.598.6206

You and your provider will decide the next step, such as treatment for a problem, as needed.