

Lumbar Puncture

What to expect and how to prepare

This handout for patients having a lumbar puncture explains what to expect and how to prepare.

What is a lumbar puncture?

A *lumbar puncture* is an exam of your lower back (*lumbar region*). This exam is also called a *spinal tap*.

During a lumbar puncture, a needle is inserted between 2 lumbar bones (vertebrae) and into your *cerebrospinal fluid* (CSF). CSF is the fluid that surrounds your brain and spinal cord and protects them from injury.

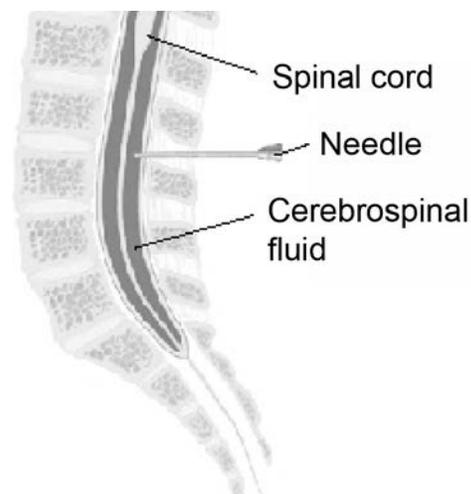
A lumbar puncture may be done to:

- Collect a sample of CSF for testing. The CSF can be checked for color, blood cells, bacteria, malignant cells, glucose, protein, and more.
- Measure the pressure of your CSF.
- Inject chemotherapy drugs or other medicines.
- Inject *contrast* into the CSF. Contrast helps the CSF show up more clearly in imaging studies. This type of imaging is called *myelogram* or *cisternography*.

How do I prepare for the exam?

Before your exam, tell your healthcare provider if you are:

- Allergic to any medicines, such as *local anesthetic* (numbing medicine), iodine, or contrast.
- Taking any medicines that thin your blood (*anticoagulants*). These include Coumadin (warfarin), Plavix, Lovenox, and some nonprescription pain medicines such as aspirin, ibuprofen (Advil, Motrin, and others) or naproxen (Aleve, Naprosyn, and others).



During a lumbar puncture, a needle is inserted into the cerebrospinal fluid in your lower spine.

- If you take muscle relaxants, medicines for nausea, or any psychiatric medicines, talk with the provider who prescribed your medicine about not taking it for 48 hours before and 24 hours after your exam.
- After your lumbar puncture, you may have a headache. For your safety, we **strongly advise** that a responsible adult drive you home or ride with you in a bus or taxi.

On the Day of Your Exam

At Home

- Eat a light meal early in the day, at least 2 hours before your exam.
- Starting 2 hours before your exam:
 - Do **not** eat anything.
 - You may have clear fluids such as water, tea (without milk), juice, Jell-O, and popsicles.
- If you need to take medicines, take them with water.
- Bring a list of your medicines with you when you come for your exam.
- If you are having blood work done on the day of your exam, remember to leave home early so you can have your blood drawn before your exam.

At the Hospital

- We will ask you to change into a hospital gown before your lumbar puncture.
- Then, you will lie on your stomach on an exam table. You will have a pillow under your middle. This position widens the spaces between your vertebrae and makes it easier for your doctor to insert the needle.
- The nurse will wash your back with antiseptic soap or iodine. You will be covered with a *sterile* (germ-free) sheet.
- A local anesthetic will be injected into your lower back to numb the area.
- Once the area is numb, your doctor will slowly insert a thin, hollow needle between 2 vertebrae, through the spinal membrane (*dura*), and into the CSF in your spinal canal. A type of X-ray called *fluoroscopy* is used to help guide the needle to the correct place.
- Once the needle is in place, the table may be tilted to help the technician do the collection or injection. The table has a foot board and a seat belt to keep you from moving when it tilts.
- Next steps depend on the purpose of your lumbar puncture:

- **If CSF is being collected:** A small amount of fluid is taken and placed in small vials. This is usually 4 small samples.
- **If CSF pressure is being measured:** A small amount of fluid is collected in special tubing.
- **If a drug or chemotherapy substance is being injected:** The injection will occur at this time.
- The needle will then be removed, your back will be wiped clean, and the puncture site will be covered with a bandage.
- The procedure usually lasts about 45 minutes.

What will I feel during the exam?

- You will feel a brief sting when the local anesthetic is injected.
- You will feel light pressure in your back as the spinal needle is inserted.
- You may feel tingling from time to time as the needle is placed.
- If a drug or chemotherapy is injected, you may feel some pressure.

What can I expect after the exam?

- For your safety, we **strongly advise** that a responsible adult drive you home. If you take a bus or taxi, a responsible adult should ride with you.
- Follow the self-care instructions the radiologist gave you.
- **For 8 hours** after you get home:
 - Rest quietly.
 - Lie flat on your back or sit in a chair. You may get up to use the restroom.
 - Do **not** bend over.
- If you have a headache after the exam, you may take nonprescription pain medicine such as acetaminophen (Tylenol) for pain.
- **For 24 hours:** Drink extra fluids such as juices, water, or a sports drink.
- **For 2 days:** Do **not** take a bath, sit in a hot tub, or go swimming. Soaking your body 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 a little more than 8 pounds.)
 - Avoid doing anything that makes you breathe harder or makes your heartbeat faster.

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

Who interprets the results and how do I get them?

A radiologist trained to interpret lumbar punctures will review your exam and send a report to your provider who referred you for this exam. Your own provider will give you your test results.

Most times, your provider receives the lab results within a few days, but it could take longer. Ask your provider when you can expect to receive the results of your tests. Your provider will combine the results from your lumbar puncture with any lab test results to help give you a diagnosis.

You may also read your results on your eCare Results page. If you need copies of your images on disc, call 206.598.6206.

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

Questions?

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

- UWMC Imaging
Services: 206.598.6200