

Lumbar Puncture

What Is A Lumbar Puncture?

Your child has a clear fluid that flows around the outside of the brain and spinal cord. This is called cerebral spinal fluid (CSF). CSF cushions and nourishes the brain and spinal cord. Your child may have signs or symptoms that make it important for your child's doctor to access your child's CSF. For example, your child's doctor may:

- take a sample of CSF to test for certain diseases, or
- measure the pressure of the CSF around the brain and spinal cord, or
- give medicine directly into the CSF.

This is done through a short procedure called a lumbar puncture. It is also called a spinal tap or a CSF examination.

What Happens During The Lumbar Puncture?

During a lumbar puncture, a doctor inserts a needle in your child's lower spine into the CSF. A lumbar puncture takes 30 minutes or less. It is done at the bedside or in a treatment room at BC Children's.

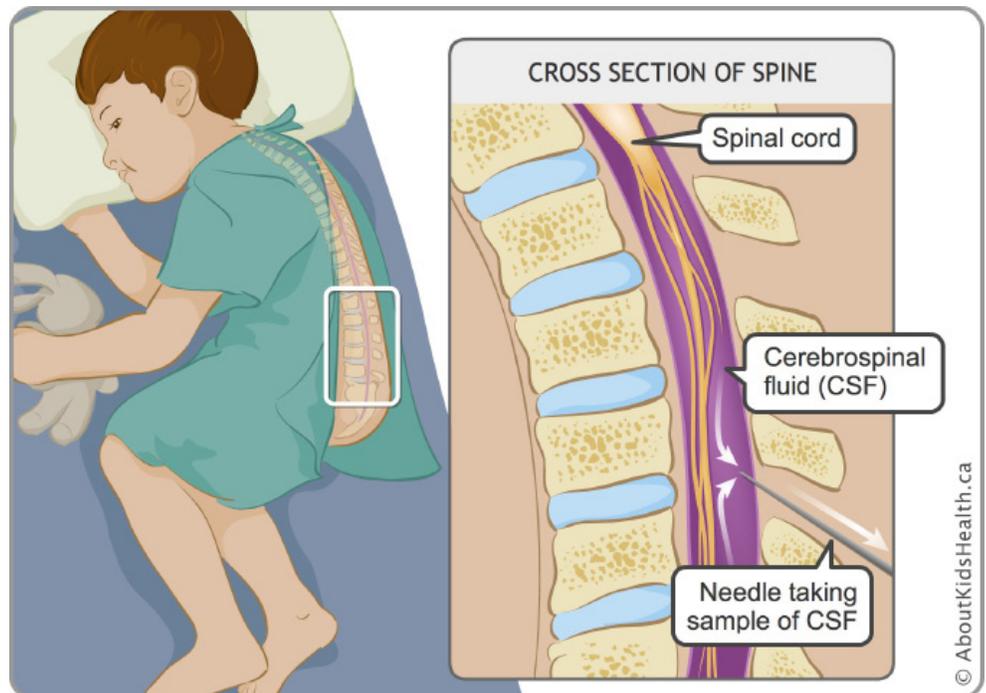


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Planning for the Lumbar Puncture

- ▶ Tell your child's doctor and nurse about any drug allergies or reactions your child has ever had.
- ▶ You may need to sign a Consent Form. Sign the Consent Form after you understand the purpose of the test and its risks and benefits for your child. Discuss these matters and any concerns with the doctor ahead of time.
- ▶ It is very important that your child holds still, in the proper position, during the lumbar puncture. With your help, the doctor will decide, ahead of time, if your child will be able to hold still in this way. Babies under 6 months and some older children can hold still quite well. Many children do need a medicine to help them relax during the lumbar puncture. This is called a sedative.

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- ▶ If your child will receive a sedative, carefully follow the fasting instructions that the nurse gives you. An empty stomach is an important part of your child's safety and decreases the risk that your child will gag or choke.



Tell your child about lumbar puncture in terms he or she will understand. Preparing your child honestly, rather than avoiding the issue, helps your child learn to trust you and health care professionals. You will play a very important role in helping your child cope with the lumbar puncture. You can find tips for preparing your child for a procedure like the lumbar puncture at: www.bcchildrens.ca/ReadyforSurgery

Preparing for the Lumbar Puncture

- ▶ About an hour before the lumbar puncture, the nurse may rub a cream over the skin where the lumbar puncture needle will go in. The cream numbs the area so there is less pain.
- ▶ Encourage your child to urinate (pee) in the hour before the lumbar puncture.
- ▶ The nurse will take your child to the treatment room or set up for the lumbar puncture at your child's bedside.
- ▶ For your child's safety, your child's doctor or nurse will limit the number of people in the room. This is to make sure that the room is as germ-free as possible. Some children will need their parent present. If you feel that your child will not manage without you, please talk with the doctor.

During the Lumbar Puncture

- ▶ Your child's doctor and nurse will help your child to lie curled up on his side with knees tucked up against the chest (fetal position). This stretches the lower spine and helps the doctor find the correct position for the needle. Older children can sit and then lean over and clutch their knees. The doctor will choose the best position for your child.
- ▶ A nurse will help your child stay in the position.

- ▶ Your child's doctor will:

- cleanse the skin on the lower back with an antiseptic to kill bacteria on the skin;
- give your child a small needle to freeze the area where the lumbar puncture will go if your child is having a local anesthetic.
- insert the lumbar puncture needle between the vertebrae into the spinal canal.

Once the tip of the lumbar puncture needle is in the right spot, your child's doctor will:

- take a sample of CSF, or
- measure the pressure of the CSF or
- give your child the medicine he or she needs through the lumbar puncture needle.

- ▶ The doctor then removes the spinal needle and covers the area with a small tape. If your child has had a sedative, the nurse will watch his or her breathing, blood pressure and pulse carefully until your child is fully awake.

The CSF samples are sent to the lab for testing. The doctor will discuss the results with you once they are available. Most tests are available in 24 to 48 hours. Some tests take months so the preliminary results will be discussed.

What happens after the lumbar puncture?

- ▶ Your child will lie flat in bed for 1 hour after the lumbar puncture. This decreases the chances of your child having a headache or leg pains in the first day or two after the lumbar puncture. During this time, the nurse will check often to make sure fluid is not leaking from the place the lumbar puncture needle was put in.
- ▶ Your child's nurse will also make sure that your child has normal movement and no tingling or numb feelings in her legs or feet. These may be a sign of nerve damage. If you or your child notices anything out of the ordinary, tell the nurse right away.

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- ▶ If your child needs to use the toilet, call the nurse. It may be better for your child to stay in bed and use a bedpan or bottle for the first hour or so.
- ▶ Your child's doctor and nurse will let you know when your child is ready to go home. Depending on your child, this may be on the same day as the lumbar puncture. Your child's doctor and nurse will wait until your child is fully awake, comfortable and no longer needs careful watching.
- ▶ Before you leave BC Children's, the nurse will go over the amount of pain medication you can give your child at home.

Contact your doctor at once if:

- ▶ Your child has clear fluid coming from the place where the lumbar puncture needle was put in.
- ▶ Your child has redness or swelling (or it looks infected) in the place where the lumbar puncture was put in.
- ▶ Your child has numbness or tingling in the legs or any issues related to being unable to pee or unable to control pee.
- ▶ Your child has a fever within 24 hrs of the lumbar puncture.

How do I care for my child at home?

- ▶ Have your child rest quietly for at least 24 hours after the lumbar puncture.
- ▶ Encourage your child to drink lots after the lumbar puncture. This helps reduce any headache or leg pain your child may feel.
- ▶ Your child may have a headache or pain or 'pressure' in their legs in the first day or two after the lumbar puncture. Offer your child the correct amount of acetaminophen (or other pain medicine) if needed.
- ▶ Remove the piece of tape where the lumbar puncture needle was placed after 24 hours.
- ▶ Your child can shower or bathe once the tape is off.

At BC Children's Hospital, you are an important member of your child's health care team. Please ask questions so you understand and can be part of decisions about your child's care and treatment.



If you have any questions, please call:
604-875-2345 local 7678