## What is a lumbar puncture?

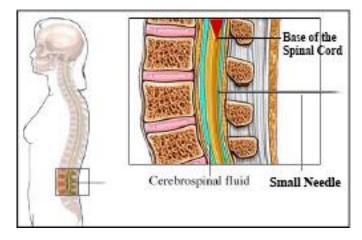
Lumbar puncture (LP), also called a spinal tap, is the procedure doctors use to obtain a sample of cerebrospinal fluid (the fluid that surrounds the brain and spinal cord) for testing. When performed by an experienced doctor, LP is safe and involves minimal discomfort. There is no risk of paralysis.

As a research participant you will lie on your side with your knees drawn up toward your chin OR you will sit on the edge of a table, in a hunched forward position. The back is scrubbed with a cleansing solution. A local anesthetic medicine is then injected into the skin where the tap will be placed. When the skin is numb, a needle is inserted into the back at the small level of the hip bones, where the spinal cord ends. The needle is pushed forward gently between (not through) the bones of the spine until the spinal fluid is found. For testing, approximately 3 tablespoons of fluid are removed and put into sterile tubes.

## Are there risks involved?

You may experience minor pain, bruising or swelling of the skin where the needle is inserted — much as you might when giving blood. A post-LP headache can also occur. Less than 10% of those receiving an LP report a headache. Such headaches are usually mild and last 0-2 days. More severe headaches can occur in rare instances and these usually respond to treatment within a few hours.

A very rare occurrence is infection from the tap itself; the risk for such infection is less than that of a regular blood draw. Persons who faint when giving blood may have a similar flushing/fainting experience in response to LP. All precautions are taken to anticipate potential problems and minimize these risks.



LP involves inserting a small needle between the vertebrae below the base of spinal cord. A small amount of fluid is collected. There is no risk for paralysis.

## Why is lumbar puncture important for Alzheimer's research?

Cerebrospinal fluid (CSF) supplies nutrients to the cells of the brain and spinal cord. CSF contains many of the proteins and other chemicals important for brain health. It may also contain chemical particles indicating a disease process, such as Alzheimer's disease. By testing CSF, researchers hope to identify chemicals that may suggest an increased risk of disease or may be useful in the development of diagnostic tests.

## After the procedure

You will rest for about 30 minutes after which you can drive home. Drink plenty of fluids, except alcohol, during the next 12 hours, and take it easy for the next 24 hours. Avoid strenuous physical activity for about 48 hours.

If you have any questions or concerns, feel free to call us at 858-822-4800