Gregory W. Fulton ALS Center

Understanding Your Lumbar Puncture (Spinal Tap)

Barrow Neurological Institute

We appreciate your participation in ALS research! Your dedication is vital to advancing our understanding of ALS and developing new treatments. A lumbar puncture (LP), often called a "spinal tap," is an important procedure that helps us gather crucial information about your condition and the effectiveness of potential therapies.

Why is a lumbar puncture important for ALS research?

For patients with ALS, the lumbar puncture offers unique and invaluable insights that are difficult, if not impossible, to obtain through other methods:

Direct Information: CSF (spinal fluid) provides direct data on motor neurons, offering unique insights for research.

Tracking Disease: Helps identify markers for disease progression.

Drug Effectiveness: Verifies if study drugs reach motor neurons in clinical trials.

High Value Data: The information gained is invaluable for understanding and treating ALS.

What to expect during your lumbar puncture:

1. **Preparation:** Sit or lie on your side, arching your back to open vertebral spaces.
2. **Numbing:** Area cleaned, then local anesthetic injected to numb the site.
3. **Procedure:** A thin spinal needle is carefully inserted into the spinal canal (L3-L4 space), safely below the end of your spinal cord. No risk of paralysis.
4. **Fluid Collection:** 10-15 ml of fluid collected into sterile vials. Your body quickly replaces this.
5. **Duration and Recovery:** Procedure takes ~20-25 minutes. Lie flat for one hour afterward to minimize headache risk.

Side Effects and Risks

Common Side Effect: Post-LP headache (20-30% of patients). Worse when sitting/standing, better when lying down.

Mitigation: We use special "atraumatic" needles which greatly reduce this risk.

Management: Rest, hydration, over the counter pain relievers. Rare cases may require a "blood patch."

Rare Risks: Bleeding and infection are very uncommon due to sterile techniques.

Please discuss risks with your doctor.

Post-LP Considerations:

Rest: Take it easy for the rest of the day.

Hydration: Drink plenty of fluids.

Soreness: Mild soreness at site is normal; Tylenol can help.

When to call us: Contact us immediately for a severe, persistent headache; new numbness/weakness in legs; fever; or signs of infection at the site.

Qalsody/Tofersen (a medication for a specific genetic type of ALS) is administered via an intrathecal injection, a procedure very similar to an LP. This shows how established and safe accessing the CSF space is for both diagnosis and treatment.

Watch our lumbar puncture video for more information.