

RUTGERS Cancer Institute of New Jersey RUTGERS HEALTH



Intrathecal Chemotherapy

What is Intrathecal Chemotherapy?

Intrathecal (IT) chemotherapy is used to treat or prevent cancer cells from entering the cerebrospinal fluid (CSF). CSF is found in the area surrounding the spine and brain called the cerebrospinal space. CSF is a colorless fluid produced in the brain, which helps to keep the brain and spinal cord safe from injury.

Chemotherapy given through an intravenous (IV) in the arm or by mouth is usually not able to enter into the CSF, and therefore, can't reach cancer cells. Giving chemotherapy directly into the CSF allows the medicine to treat or prevent cancer cells.

How is Chemotherapy Delivered into the CSF?

Chemotherapy is delivered into the CSF by a lumbar puncture [(LP) also called spinal tap] procedure. In this sterile procedure, a needle is placed into the cerebrospinal space between two bones (vertebrae) in your spine. The needle is used to remove CSF and give chemotherapy directly into your CSF.

Lumbar Puncture (LP) Procedure:

- You will be positioned so your spine is stretched out to create space between the bones in the vertebrae. Opening this space makes the cerebrospinal space more accessible.
- Once you are in a comfortable position your provider will feel your back to determine the best place to insert the LP needle. It is important to remain still during this time unless you are instructed to move.



Picture source: nursingcrib.com

- It may be an uncomfortable procedure, but you should not feel pain. A numbing medicine will be used where the needle is inserted. The numbing medicine may burn and you may feel a pinch at the site where it is being given.
- Once the procedure is complete, the needle is removed and a dressing is placed over the area. You will then be instructed to lie flat for 1-2 hours.
- You may get a headache due to the CSF being removed. If you have headache after the procedure, notify your healthcare team. Lying flat after the procedure can prevent a headache.

When Should You Call Your Healthcare Team?

If you experience any of the following side effects, call your healthcare team at 732-235-2465:

- Fever of 100.5 °F or greater
- Uncontrolled nausea and/or vomiting, unrelieved by medication or lasting longer than 24 hours
- Uncontrolled bleeding from the needle insertion site
- Blurry vision
- Confusion
- Tenderness
- Redness
- Drainage at site
- Neck stiffness or pain
- Headache
- Dizziness

If you are in need of immediate assistance, please call 732-235-2465 and select the option that best meets your needs.