

Information for adults having chemotherapy into their spinal fluid (Intrathecal chemotherapy)

Information for patients
Cancer Services

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What is intrathecal chemotherapy?

Intrathecal chemotherapy is the injection of chemotherapy into the cerebrospinal fluid (CSF). CSF is the fluid which surrounds the brain and spinal cord to protect and cushion it. The chemotherapy is given via a needle which is inserted into the lower part of your spine.

Why do I need intrathecal chemotherapy?

In some cancers, such as some types of leukaemia or lymphoma, cancer cells can pass into the CSF. Chemotherapy given by mouth or intravenous (into a vein) injection cannot easily get into the CSF. Intrathecal chemotherapy may be given if a cancer has spread to the CSF or if there is a risk it could. Only certain chemotherapy drugs can be given in this way. The chemotherapy drugs given in this way are:

- methotrexate
- cytarabine
- steroids

What will happen before the procedure?

If you are on any anticoagulation (blood-thinning) treatment please let us know so that we can tell you when to stop this before your intrathecal chemotherapy and when to restart afterwards. You will need a blood test each time you have intrathecal chemotherapy: we will let you know when the blood test needs to be taken. If the number of platelets (the cells in the blood responsible for blood clotting) are low you may need to have a transfusion of platelets before the procedure.

As you will need to lie flat for sometime after the procedure you may find it helpful to go to the toilet before the procedure starts.

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What will happen before the procedure? (continued)

If you are prescribed oral (by mouth) methotrexate treatment this will be discussed with your nurse or doctor and the methotrexate stopped the week before your intrathecal chemotherapy is booked.

If you are also having chemotherapy into a vein (also known as intravenous) on the same day you will be given the intravenous treatment first.

How is intrathecal chemotherapy given?

There are two ways to give intrathecal chemotherapy: This leaflet is about the most common way, which is via lumbar puncture.

A lumbar puncture involves inserting a needle between two of the bones in your spine. The doctor and nurse will give you information about the procedure and the drugs before asking you to sign a written consent form.

The procedure will take place in the treatment room next to Osborne Day Ward, Level 2, Osborne Building, Leicester Royal Infirmary. Doctors and nurses who have had specialist training will carry out the procedure. The doctor and nurse will do some important checks:

- Correct drug
- Correct dose
- Correct patient
- Correct route of administration (which is intrathecal)

We will encourage you or, if you wish, a friend or relative to be involved in the checking procedure. You must be wearing a hospital patient identification wristband.

When the checks are complete the doctor will administer/inject the drug into your CSF. Giving treatment by lumbar puncture will take about 15 to 30 minutes and it is important that you stay still. Let the nurse or doctor know at any point if you are uncomfortable or in any pain.

How is the procedure carried out?

We will help you into one of the following positions for the procedure:

- sitting with your back towards the doctor, your arms folded and supported over a pillow with your head resting on your arms, or
- lying on your side with your knees drawn up to your tummy.

Once you are in position:

- The doctor will clean the skin on your lower back with antiseptic and then you will be given an injection.
- When the local anaesthetic has numbed the area the doctor will insert a needle into your lower back between two of the bones in your spine and into the spinal fluid.
- The doctor will then remove a small amount of CSF and then slowly inject the chemotherapy drug. The CSF samples will be sent to the laboratory to check for any signs of cancer.
- The needle will be removed and a small dressing used to cover the injection site. This can be removed after 24 hours. You will need to rest after the procedure and lie flat on your back for between one and two hours to reduce the risk of you getting a headache.

How often will I have intrathecal chemotherapy?

Usually intrathecal chemotherapy treatments are given once or twice a week: your doctor will advise you how many treatments you need and how often.

Are there any side effects or risks?

The most common side effect is a headache within the first 24 hours. If you develop a headache it may help to lie flat, take some painkillers and drink plenty of fluids. You may also have back pain where the needle was inserted and/or shooting pains in your legs but these should settle in 24 hours. If you have persistent headache or pain in the back or legs that has not settled in 24 hours please contact the emergency helpline number (see below).

Contact numbers

Emergency Helpline (24 hours, 7 days a week): 0808 178 2212

Osborne Day Ward for general enquiries: 0116 2585263

اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔
على هذه المعلومات بلغة أخرى، الرجاء الاتصال على رقم الهاتف الذي يظهر في الأسفل
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