If you are also having chemotherapy into a vein (known as intravenous chemotherapy), you will be given this first. The intrathecal chemotherapy will only be given after the other chemotherapy has finished.

After the procedure has been completed, the needle is removed and a small dressing is placed over the injection site. The whole procedure normally takes around 20 minutes.

**After the treatment**

After the procedure, you’ll need to lie flat for one hour. Having a lumbar puncture is not usually painful, although some people may find it uncomfortable. Some people may have a headache for a few hours afterwards. Let the doctor or nurse know if you have a headache, as they can give you mild painkillers to help. You’ll be able to move from side to side but, if you have a headache, sitting up can make it worse.

You will normally have your blood pressure and pulse checked again during this time. Ask the doctor or nurse when it will be safe for you to sit up. Once you have rested and feel well, you can safely return to your normal activities. However, it’s best not to drive or operate machinery for 24 hours after a lumbar puncture.

**About this information**

This guide is provided for general information only and is not a substitute for professional medical advice. Every effort is taken to ensure that this information is accurate and consistent with current knowledge and practice at the time of publication.

**Contact details**

**Clinical Nurse Specialists (Key Worker):**
0121 371 4304
(Monday–Friday 08:00–17:00)

**Haematology Consultant Secretaries:**
0121 371 4383/4381
(Monday–Friday 08:00–17:00)

If you are feeling unwell at home, please contact the emergency Anti-Cancer Treatment number:
07789651543 (24hr service)
Introduction

This information leaflet explains what is involved before, during and after the intrathecal chemotherapy procedure. Your doctor will go through the procedure with you but this information will help you understand more about what is discussed.

Why do I need Intrathecal Chemotherapy?

With some cancers, such as leukaemia or lymphoma, cancer cells can pass into the fluid around your brain and spine, known as your cerebrospinal fluid (CSF). Chemotherapy given into a vein or by mouth can’t pass into the CSF. To treat this area, you may require intrathecal chemotherapy. This is when chemotherapy is given via a needle which is inserted into the lower part of your spine. Only certain chemotherapy drugs can be given in this way. The drugs that are most commonly given in this way are methotrexate or cytarabine.

What preparation is needed before the treatment?

If you are on any anticoagulation treatment (if unsure please ask your doctor or nurse) seek advice as to when to stop these before your intrathecal chemotherapy and when to restart afterwards.

You will have a blood test, and your blood pressure and pulse checked just before the treatment. As you will need to lie flat for some time after the procedure, you may find it helpful to go to the toilet beforehand.

If you are prescribed oral methotrexate treatment, this should be discussed with your clinical nurse specialist and stopped the week your intrathecal chemotherapy is booked.

If you don’t understand what you’ve been told, let the staff know straight away so they can explain again. Some medical treatments and procedures can be difficult to understand, so it’s not unusual to need repeated explanations.

How is the treatment performed?

Before your intrathecal chemotherapy you’ll be asked to either lie on one side with your knees pulled up towards your chest or sit up or bending forwards over a table and supported by pillows.

These positions allow your back to curve as much as possible so that the bones of the spine (vertebrae) are widely separated.

The area of skin over the lower part of your back is then cleaned with an antiseptic solution. After this, local anaesthetic is injected to numb the area. The doctor will wait for a few minutes for the anaesthetic to take effect. A hollow needle is then inserted between two of the spinal bones and into the spinal canal. You’ll need to stay as still as possible during this time. You may feel a sensation of pressure as the needle is put in. Samples of CSF will then be withdrawn and chemotherapy drugs may be injected.

Some patients may experience a shooting pain down your leg during the procedure. This is fairly common because a nerve has been touched by the needle. This will resolve quickly and is important that you try and stay still.

There are very strict guidelines for giving chemotherapy in this way. The doctor and nurses will perform a number of safety checks to ensure you are only given the medicines that have been prescribed for you, and this can take time. There may be extra nurses or doctors in the room to perform the safety checks. If you would like to, you can also check the drugs before they are given.