

## Intrathecal methotrexate: information for families

This information sheet explains what intrathecal methotrexate is, how it is given and some of the possible side effects. Each person reacts differently to medicines, so your child will not necessarily suffer from every side effect mentioned. If you have any questions or concerns, please speak to your doctor, nurse or pharmacist.

Please read this in conjunction with any patient information leaflet provided by the manufacturer. However, please note that this information sheet explains about the use of methotrexate in children and young people so may differ from the manufacturer's information.

#### What is methotrexate?

Methotrexate is a chemotherapy drug that is used to treat certain types of cancer and leukaemia. When given intrathecally, it prevents leukaemia cells entering the cerebrospinal fluid (CSF) around the spine and brain. It is also used to treat leukaemia found in the CSF.

# How is intrathecal methotrexate given?

Intrathecal methotrexate is given through a needle which is inserted in one of the spaces between the bones in the lower back into the CSF, usually under general anaesthesia. This is known as a lumbar puncture. When drugs are given in this way, they are said to be given intrathecally.

### **Important**

If your child is having intrathecal methotrexate and oral methotrexate – they should not receive oral methotrexate in the same week as intrathecal methotrexate.

#### What are the side effects?

This medicine causes very few side effects. When given intrathecally, most of the discomfort is as a result of the method of giving the drug.

Intrathecal methotrexate can occasionally cause headaches, dizziness, tiredness, blurred vision or loss of balance for a few hours. It may help to lie down afterwards. It is recommended children lay on their tummy for at least one hour after an intrathecal procedure as this may help distribution of the methotrexate through the CSF. The place where the needle is inserted may become sore or slightly bruised. Any plaster placed over the lumbar puncture site must be removed within 24 hours.

Up to 15 per cent of children receiving intrathecal methotrexate develop neurological changes including fits, change in level of consciousness, abnormal movements or confusion. These complications usually get better spontaneously and do not recur with further doses which may be safely given.



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Unfortunately intrathecal chemotherapy is an essential part of treatment of ALL, and it is not at present possible to remove the risk.

Very rarely severe neurological changes persist, a condition called leucoencephalopathy. This is most likely in children who have had clear evidence of leukaemia in the spinal fluid, and where it has been necessary to treat with radiotherapy as well as methotrexate.

#### Interactions with other medicines

Some medicines can react with methotrexate, altering how well it works. Always check with your doctor or pharmacist before giving your child any other medicine, including medicines on prescription from your family doctor (GP), medicines bought from a pharmacy (chemist) or any herbal or complementary medicines.

#### **Useful numbers**

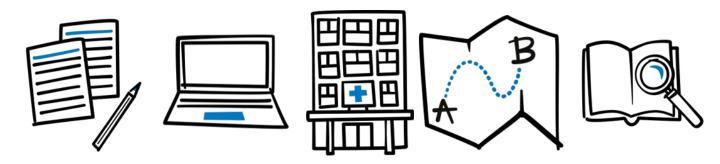
- GOSH switchboard 020 7405 9200
- Pharmacy medicines information 020 7829 8608 (Monday to Friday from 9am to 5pm)

#### **Disclaimer**

Please read this information sheet from GOSH alongside the patient information leaflet (PIL) provided by the manufacturer. If you do not have a copy of the manufacturer's patient information leaflet please talk to your pharmacist. A few products do not have a marketing authorisation (licence) as a medicine and therefore there is no PIL.

For children in particular, there may be conflicts of information between the manufacturer's patient information leaflet (PIL) and guidance provided by GOSH and other healthcare providers. For example, some manufacturers may recommend, in the patient information leaflet, that a medicine is not given to children aged under 12 years. In most cases, this is because the manufacturer will recruit adults to clinical trials in the first instance and therefore the initial marketing authorisation (licence) only covers adults and older children.

For new medicines, the manufacturer then has to recruit children and newborns into trials (unless the medicine is not going to be used in children and newborns) and subsequently amend the PIL with the approved information. Older medicines may have been used effectively for many years in children without problems but the manufacturer has not been required to collect data and amend the licence. This does not mean that it is unsafe for children and young people to be prescribed such a medicine 'off-licence/off-label'. However, if you are concerned about any conflicts of information, please discuss with your doctor, nurse or pharmacist.



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