

Great Ormond Street Hospital for Children NHS Foundation Trust: Information for Families

Intrathecal Methotrexate

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 intrathecal methotrexate in children and young people so may differ from the manufacturer's information.

This fact sheet describes intrathecal methotrexate, how it is given and some of the possible side effects. Some rare and long-term side effects are explained, as well as the more common ones. Each person reacts differently to drugs so your child will not necessarily suffer from every side effect mentioned. If you are concerned about any of these side effects, please ring one of the contact numbers on this factsheet and ask for your doctor, nurse or pharmacist.

What is intrathecal methotrexate?

It is a chemotherapy drug which is given to prevent leukaemia cells entering the cerebrospinal fluid (CSF) around the spine and brain. This drug is also used to treat leukaemia found in the CSF.

How is it 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. This is known as a lumbar puncture. When drugs are given in this way, they are said to be given intrathecally.

CSF. This is known as a lumbar pudrugs are given in this way, they given intrathecally.

What are the side effects?

This drug 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 stomaches/tummies 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. 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.

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



Useful numbers

 GOSH switchboard
 020 7405 9200

 Pharmacy department
 020 7829 8680

Pharmacy medicines

information 020 7829 8608



Compiled by the Pharmacy department in collaboration with the Child and Family Information Group Great Ormond Street Hospital for Children NHS Foundation Trust, Great Ormond Street, London WC1N 3JH www.gosh.nhs.uk