Great Ormond Street Hospital for Children
NHS Foundation Trust

Intravenous methotrexate: information for families

This information sheet explains what intravenous 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.

How is intravenous methotrexate given?

Intravenous methotrexate is given as an infusion into a vein (intra-venously or IV) through a cannula, central venous catheter or implantable port.

What are the side effects?

Mouth sores and ulcers

You will be given advice about appropriate mouth care and a copy of the mouthcare leaflet. If your child complains of having a sore mouth, please tell your doctor or nurse.

Loss of appetite

It is possible that your child's appetite may decrease while having treatment. If you are concerned about your child's diet please ask to speak to one of the dietitians.

Sensitivity of skin to sunlight

While your child is having methotrexate, their skin may burn more easily than usual. You should avoid your child being exposed to sunlight and other forms of ultraviolet light. If your child does go out in the sun, always use a good sunblock of SPF 25 or higher and ensure they wear a sunhat.

The following side effects occur when higher doses of the drug are given.

Nausea and vomiting

Anti-sickness drugs can be given to reduce or prevent these symptoms. Please tell your doctor or nurse if your child's sickness is not controlled or persists.

Altered kidney function

Methotrexate may change how well your child's kidneys work over a period of time. Your child may have a blood and urine test or a GFR (Glomerular

Filtration Rate) before treatment is started and then at stages during and after treatment to monitor kidney function.

Temporary effect on liver function

Methotrexate can sometimes cause changes to your child's liver function. This should return to normal when the treatment is finished. Blood tests may be taken to monitor your child's liver function (LFTs).

Bone marrow suppression

There will be a temporary reduction in how well your child's bone marrow works. This means they may become anaemic, bruise or bleed more easily than usual, and have a higher risk of infection. Your child's blood count will be checked regularly to see how the bone marrow is working. Please tell your doctor if your child seems unusually tired, has bruising or bleeding, or any signs of infection, especially a high temperature.

Diarrhoea

Please tell your doctor or nurse if your child has diarrhoea which is not controlled or persists. It is important that your child drinks lots of fluids.

Dizziness

Your child may complain of feeling dizzy while receiving high dose methotrexate. This is temporary. Please tell your doctor if your child experiences any dizziness.

High dose methotrexate

If your child is prescribed a course of "high dose" Methotrexate, drug called folinic acid is given to minimise the side effects and help clear the methotrexate from the body. Your child may be given this 24 to 36 hours after the start of treatment with intravenous methotrexate. Please ask your doctor, nurse or pharmacist to explain this to you in more detail.

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.

If your child is receiving 'high-dose methotrexate', some of your child's medications may need to be stopped or changed a few days prior to therapy. Your doctor, nurse or pharmacist will explain and advise when this is applicable.

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.