



# Methotrexate for chronic inflammatory conditions

Information for families

This leaflet should be read in conjunction with any patient information leaflet provided by the manufacturer.

Great Ormond Street Hospital  
for Children NHS Trust

**This fact sheet explains what methotrexate is, how it is given and some of the possible side effects. If you are concerned about any of these side effects, please speak to your doctor, nurse or pharmacist.**

### **What is methotrexate?**

Methotrexate is a drug that has been used in a number of different diseases including childhood cancers. It has been used to treat rheumatic diseases such as Juvenile Idiopathic Arthritis and skin diseases such as severe psoriasis for many years and it is now the number one choice to treat significant active arthritis that is not responding to simple therapies. The aim is to control the inflammation, put the disease into remission so limiting the damage to the joints. We also use it frequently in conditions like Juvenile Dermatomyositis, SLE and vasculitic conditions and other inflammation.

### **How is it given?**

Methotrexate comes in several forms, either as syrup, small tablets, or for use as an injection under

the skin (subcutaneous). It is given **only once a week**. It is important to take methotrexate on the same day each week; however if you forget your dose on your normal day, you can take it on one of the two following days.

If your child is unable to tolerate the tablets/syrup or if the arthritis fails to respond to the methotrexate by mouth, your child may be converted from tablets to injectable methotrexate, which is more effective in most cases. Some parents and older children may wish to learn to perform these injections themselves.

### **How long will Methotrexate take to work?**

Methotrexate does NOT work immediately. It may be three to twelve weeks before any benefit is noticed. This is a long-term drug.

## What are the most common side effects?

Most children on methotrexate have very few side effects. However some children do have side effects, which include the following:

Nausea or stomach upset – This is quite common and is usually managed by taking the dose at night-time, so that the upset stomach is not noticed while asleep. Taking the medicine on Friday nights means that school is not missed if there is some stomach upset the next day. We almost always prescribe a vitamin called folic acid, which can help to prevent or minimise this and other side effects. Sometimes missing a dose of anti-inflammatory drug, splitting the dose, using anti-sickness drugs and/or changing to the injectable form of methotrexate is helpful. Please speak to your doctor if nausea or vomiting is becoming a problem.

Other side effects include:

- Mouth ulcers – these are usually treated well with folic acid.
- Thinning of the hair – not usually a noticeable problem.

- Effects on the blood count – monitored carefully with regular blood tests.
- Inflammation of the liver – monitored carefully with regular blood tests.
- Skin rashes - uncommon. The dose is usually stopped until the rash clears and then re-introduced at a lower dose.
- Cough and breathing problems – incredibly rare in children and adolescents. Usually the medication is stopped and something else used instead.

## Does my child need any special checks while on methotrexate?

Your child must have regular blood tests every two to eight weeks. Most children do not have any problems but if they do occur, the methotrexate can be briefly stopped or the dose reduced, with the side effects then usually disappearing. Children treated with methotrexate will be given a card to record the results of these blood tests; this should always be brought to your clinic appointment.

### **Are there any long-term side effects?**

Long-term follow-up of use of this drug in children over a period of 15 years has shown it not to cause long-term damage to any organs if children are monitored as described here.

### **Can my child have vaccinations while on methotrexate?**

Your child should NOT have any live vaccinations such as MMR, oral polio, chicken pox or BCG while taking methotrexate. Inactivated or killed vaccines e.g. influenza/flu, meningitis C, pneumococcal, hepatitis, Hib, tetanus, diphtheria, whooping cough/pertussis, and the killed version of the polio immunisation are permitted if the patient is stable under treatment.

### **Can my child take other medications while on methotrexate?**

Care needs to be taken with some medications such as trimethoprim, co-trimoxazole, phenytoin, anti-inflammatories and anti-malarial drugs, so please check with your child's doctor or pharmacist about this; as long as your child's blood tests are being monitored, it should be fine to take these drugs.

### **Should we take any other precautions?**

If your child is on methotrexate and has not had chicken-pox but comes into contact with someone who has chicken pox or shingles (either face to face or longer than 15 minutes in the same room), you should report to your doctor immediately as your child may be at risk of developing a more severe form of the infection and may need special treatment. If your child gets chicken pox or shingles you should



Please ring the hospital on 020 7405 9200 and ask to speak to the ward from which you were discharged.

also report to your doctor immediately for antibiotics to be given. If you are unsure whether your child has had chicken pox prior to starting methotrexate, their immunity should be checked with a simple blood test at that time and the result entered on the parent-held monitoring card.

### What about the future?

If your son or daughter is on methotrexate as an older teenager, other considerations may become important:

- Alcohol should not be taken with methotrexate as it may increase the risk of liver side effects.
- Methotrexate may harm an unborn baby and if a young person becomes sexually active and still requires methotrexate for his or her arthritis, he or she must take contraceptive precautions.

### Important information you should know

- Keep all medicines in a safe place where children cannot reach or see them.
- You should handle these drugs with care. Avoid touching the methotrexate wherever possible.
- Methotrexate tablets should be stored at room temperature. However, the injections of methotrexate vary – please check with your pharmacist to see whether yours should be stored in a fridge or not.
- Methotrexate should never be given more than once a week.
- Methotrexate tablets are made in two different strengths – 2.5mg and 10mg. They are different shapes but a similar colour so always check you have been given the correct strength by your doctor or pharmacist. Do not take the tablets if you think you have the wrong strength. Check with your doctor or pharmacist first.
- Methotrexate is also available in liquid form. It is important to check with your doctor or pharmacist that you are giving the correct volume.
- Methotrexate should always be taken as directed by your doctor, nurse or pharmacist.
- If your child vomits straight after taking the dose, inform your local doctor or nurse, as your child may need to take another one.

## Important information you should know

- If you forget to give your child their dose on your normal day, you can take it on one of the two following days. Try to keep to your child's regular dose schedule, but never give double the dose.
- Sometimes it is necessary to halve tablets to get the correct dose. A tablet cutter may be used for this, which you can get from your community pharmacy. Keep the tablet cutter only for cutting methotrexate.
- If your child cannot swallow tablets you can ask the pharmacist for the liquid preparation. If your child still prefers tablets, you can make them into a mixture as follows:
  1. Tip the tablets into a clean container.
  2. Pour a little water on the tablets and allow to disperse. This may take a few minutes. Do not try to make the tablet disperse faster by stirring or shaking the container.
- 3. Give the dose to your child.
- 4. Wash the container in warm, soapy water and do not use for any other purpose.
- If you accidentally spill the tablets or mixture, wash the area thoroughly with plenty of water.
- If the mixture accidentally gets into your eyes, wash with plenty of running water for five to ten minutes.
- You should only administer Methotrexate injections if you have been taught to do so.
- If the doctor decides to stop treatment, return any remaining medicine to the pharmacist. Do not flush or throw them away.

**If you have any questions,  
please either speak to your local doctor, nurse or pharmacist.  
Otherwise please call us using the details on monitoring form.**

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Great Ormond Street Hospital for Children NHS Trust  
Great Ormond Street  
London WC1N 3JH

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