

METHOTREXATE

WHAT ARE THE AIMS OF THIS LEAFLET?

This leaflet has been written to help you understand more about methotrexate. It explains what it is, how it works, how it is used to treat skin conditions, and where more information can be found about it.

WHAT IS METHOTREXATE AND HOW DOES IT WORK?

Methotrexate is a type of medicine called an immunosuppressant. This means it suppresses the body's immune system and lowers your overall immunity. The immune system is important in fighting infections, but sometimes it overreacts, and immune system cells mistakenly attack the body's own healthy tissues. This will trigger long-term inflammation. Methotrexate reduces the inflammation caused by your condition by dampening down the activity of these cells in the immune system. It helps control the inflammation.

WHICH SKIN CONDITIONS ARE TREATED WITH METHOTREXATE?

Methotrexate is used to treat many inflammatory skin conditions, including [psoriasis](#), psoriatic arthritis, [eczema](#), [pemphigoid](#), pemphigus, [sarcoidosis](#), scleroderma and [dermatomyositis](#).

HOW LONG WILL I NEED TO TAKE METHOTREXATE BEFORE IT HAS AN EFFECT?

You may not notice any improvement until you have been taking methotrexate for at least 1-3 months. Dose adjustments may be needed during this time to help increase the improvement in your skin condition.

WHEN AND HOW SHOULD METHOTREXATE BE TAKEN?

Prior to starting methotrexate, you will have blood tests to check your blood count, kidney and liver function as well as to screen for viral infections such as HIV and viral hepatitis. Your immunity to chickenpox will also be checked. See section on vaccinations below.

Methotrexate can be taken as a tablet, liquid, or injection. It should be taken **once a week**, and this should be on the same day each week. This day will usually be agreed with your dermatologist and documented in your records and letters. **Methotrexate should never be taken daily.**

You must take methotrexate tablets with food and swallowed whole, not crushed or chewed. Always wash your hands after handling methotrexate tablets. If you are having methotrexate once a week by injection, this can either be subcutaneous (injected under the skin), or intramuscular (injected into a muscle, for example into the buttocks or thigh). If you are starting methotrexate injections, you will be trained by a healthcare professional who will demonstrate how to inject yourself so you can do this at home.

If you forget to take methotrexate on the normal day, you can take it within 48 hours. However, if it is more than two days late, methotrexate should not be taken that week. The next dose should be taken on the usual day the following week.

WHAT DOSE SHOULD BE TAKEN?

Dermatologists usually prescribe 2.5 mg strength tablets of methotrexate. These tablets **must not be confused** with the 10 mg tablets, which look similar but are obviously a much higher strength. Care should be taken to make

sure that the correct dose and strength has been prescribed and dispensed to you.

You must always check the dose and strength with your chemist or doctor before taking methotrexate. If you take too much methotrexate, please inform your doctor immediately as treatment may be required to reverse this.

The doctor will advise you of the appropriate weekly dose. Sometimes, a lower dose is prescribed at first and then gradually increased until methotrexate is effective at a safe dose. The dose will be adjusted according to your response to treatment and any side effects you experience. You may be changed from methotrexate tablets to injections; this will be to increase effectiveness and reduce side effects.

Should you develop signs of an infection whilst taking methotrexate (particularly if this requires antibiotics) you should stop the methotrexate until you are better. Any antibiotic course should be completed before restarting methotrexate.

WHAT ARE THE POSSIBLE SIDE EFFECTS?

Methotrexate can commonly cause nausea and tiredness. This affects about 1 in 4 people, but some people can avoid this by taking the methotrexate before bedtime. Rarely, temporary hair thinning and rashes may occur. Methotrexate can affect the white blood cell count so that fewer white blood cells are produced (bone marrow suppression), but if this occurs it will be picked up on your blood tests. You may be more prone to develop infections such as chest infections.

It is important to see a doctor and consider temporarily stopping your methotrexate if any of the following symptoms occur:

- a sore throat, fever or any other symptoms or signs of infection
- mouth ulcers (you may require an urgent blood test if these are severe)
- unexplained bruising or bleeding from the gums
- nausea, vomiting, abdominal pain or dark urine

- new breathlessness or a cough.

Folic acid is often recommended as a vitamin supplement when taking methotrexate as it may reduce the likelihood of side effects such as nausea and tiredness. This should be taken between one and six times per week as directed. **Folic acid should not be taken on the same day as methotrexate.**

Methotrexate can occasionally make your skin more sensitive to the sun and could cause severe reactions that look and feel like sunburn. If this occurs, please tell your dermatologist. To help prevent these reactions you should reduce exposure to sunlight (especially the intense sunlight between 11am and 3pm), wear protective clothing and use a sunscreen with a high protective factor.

Lung fibrosis is a very rare complication that could occur if methotrexate has been taken for a number of years, particularly in smokers or those with rheumatoid arthritis. If you develop shortness of breath whilst taking methotrexate, please tell your doctor.

Liver fibrosis is a rare complication for people taking methotrexate. It is not clear whether this is actually due to methotrexate, or a patient's underlying condition or a combination of both. Keeping alcohol intake to a minimum and your weight within the normal range will help reduce this risk.

HOW WILL METHOTREXATE TREATMENT BE MONITORED FOR SIDE EFFECTS?

The doctor will arrange for you to have regular blood tests during the methotrexate treatment. You **must not** take methotrexate unless you are having regular blood checks. Please ensure you are always aware of when your next blood test is due. Ask your doctor if you are unsure of when this is.

CAN VACCINATIONS BE GIVEN WHILST ON METHOTREXATE?

- The current guidelines state that live vaccines can be given to people taking methotrexate up to 25mg per week. It used to be thought that the 'live' vaccines such as MMR (measles, mumps, rubella), polio and shingles should not be given to



people taking methotrexate 25 mg (or less) every week. This advice has been changed and you may be able to have these, but they may be less effective. Your suitability for these vaccines will be decided by your doctor on an individual basis. Advice from infectious disease or travel medicine specialists regarding the yellow fever vaccine may be sought, as safety data are limited.

- If you have never had chickenpox, your doctor may recommend vaccination against this before starting methotrexate. If this was not possible and you come into contact with a person with chickenpox or shingles, then you should go to your doctor straight away as you may need special preventative treatment.
- Vaccinations against common infections such as the flu, pneumococcal infection or COVID are safe to have whilst taking methotrexate and are recommended. If you have not been offered these, please speak to your doctor. If you have not been offered these, please speak to your doctor.

DOES METHOTREXATE AFFECT FERTILITY, PREGNANCY AND BREAST FEEDING?

Fertility and contraception

If you are on methotrexate you should talk to your healthcare professional before planning to start a family. If you can get pregnant, you should take effective contraceptive precautions whilst taking methotrexate and for at least 3-6 months after stopping methotrexate. There is limited evidence on the effect of methotrexate on male fertility. If you are considering becoming a father, your prescribing healthcare professional will discuss the risks and benefits before starting treatment.

Pregnancy

Methotrexate can cause harm to an unborn child and should not be taken during pregnancy. If you are planning, or if you become pregnant while taking methotrexate, this must be discussed with a healthcare

professional as soon as possible, and methotrexate must be stopped.

Breastfeeding

This is not recommended whilst taking methotrexate. If you wish to breastfeed, please speak to your prescribing healthcare professional.

ARE THERE ANY LIFESTYLE CHANGES I CAN MAKE WHILST TAKING METHOTREXATE?

Alcohol interacts with methotrexate and together these can increase some of the side effects and potentially damage the liver. It is advisable to keep alcohol consumption to a minimum and well below the national guidelines for safe consumption levels.

National guidelines can be found at: www.nhs.uk/Livewell/alcohol/Pages/alcohol-units.aspx

Obesity (BMI>30) can increase the risk of liver problems whilst taking methotrexate. We advise healthy eating and regular exercise to maintain a healthy weight.

Smoking can worsen many skin diseases that methotrexate is used to treat and increase your risk of complications. It is advised you stop smoking. Please speak with your GP for further advice.

The BAD Biologic Interventions Register (BADBIR)

You may be asked to take part in a national register if you are prescribed a biologic medication. This register will collect valuable information on side effects and benefits of the drug. It will also inform doctors on how best to use biologic drugs. No information will be passed to the register without your informed consent.

CAN OTHER MEDICINES BE TAKEN AT THE SAME TIME AS METHOTREXATE?

Some drugs interact with methotrexate, and this can be dangerous. Always tell any doctor,



nurse or pharmacist treating you that you are taking methotrexate.

Special care is needed with non-steroidal anti-inflammatory drugs, such as aspirin or ibuprofen. Anti-inflammatory drugs should only be taken if the doctor prescribes them. Paracetamol preparations are generally safe to take. Do not take 'over-the-counter' herbal or vitamin preparations without first discussing this with the doctor, nurse or pharmacist.

Antibiotics containing trimethoprim (including co-trimoxazole) must always be avoided if you have had any methotrexate within the last 4 weeks.

WHERE CAN MORE INFORMATION BE FOUND ABOUT METHOTREXATE?

Speak to the doctor, nurse or pharmacist for more information. Please note that this information leaflet does not list all the side effects of methotrexate. For further details, please look at the drug information sheet in your methotrexate prescription pack.

It is important to report suspected side effects of medicines. The Medicines and Healthcare products Regulatory Agency (MHRA) manages the Yellow Card scheme. This scheme collects information and safety concerns about medicines and medical devices. Anyone can report these side effects or concerns by using:

- the Yellow Card website mhra.gov.uk/yellowcard or
- the Yellow Card app

Web links to other relevant sources:

DermNetNZ:
dermnetnz.org/topics/methotrexate

Patient Info:
patient.info/medicine/methotrexate-maxtrex-metoject-2

Jargon Buster:
www.skinhealthinfo.org.uk/support-resources/jargon-buster/

Please note that the BAD provides web links to additional resources to help people access a range of information about their treatment or skin condition. The views expressed in these external resources may not be shared by the BAD or its members. The BAD has no control of and does not endorse the content of external links.

This leaflet aims to provide accurate information about the subject and is a consensus of the views held by representatives of the British Association of Dermatologists: individual patient circumstances may differ, which might alter both the advice and course of therapy given to you by your doctor.

This leaflet has been assessed for readability by the British Association of Dermatologists' Patient Information Lay Review Panel

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