



Australian
Rheumatology
Association

PATIENT INFORMATION ON METHOTREXATE

(Brand names: Ledertrexate, Methoblastin)

This information sheet has been produced by the Australian Rheumatology Association to help you understand the medicine that has been prescribed for you. It includes important information about:

- How you should take your medicine;
- What are the possible side effects;
- What tests you must have to monitor your condition and to detect unwanted effects; and
- Other precautions you should take.

Please read it carefully and discuss with your doctor.

What is methotrexate?

Methotrexate (brand names Ledertrexate, Methoblastin) is a medicine used to treat rheumatoid arthritis as well as other rheumatic conditions such as juvenile arthritis, lupus, (also known as SLE), psoriatic arthritis and polymyositis (muscle inflammation).

Methotrexate is an immunosuppressive medicine, which means that it works by reducing the activity of the immune system. In rheumatoid arthritis, this action helps to reduce inflammation in the joints and thus reduce pain and swelling. It also limits damage to the joints and helps to prevent disability in the long term.

Because methotrexate reduces the damage to the joints, rather than just relieving the pain, it belongs to the group of medicines called **disease modifying antirheumatic drugs (DMARDs)**.

Methotrexate has been used to treat rheumatoid arthritis for more than twenty years.

It is also used at very high doses (1000mg-5000mg a day) to treat some cancers.

What benefit can you expect from your treatment?

Methotrexate is one of the most effective treatments for rheumatoid arthritis. Most, but not all, patients will benefit from this medicine. Some achieve remission, where the arthritis virtually disappears.

Methotrexate does not work straight away. Reduced pain, stiffness and swelling may be noticed after 4 weeks. The effects to delay or prevent joint damage will take several months.

Other medicines may be given to improve your symptoms while waiting for methotrexate to work.

How is methotrexate taken?

Methotrexate may be taken by mouth as a tablet or given by injection either into the muscle or under the skin.

Injections may be used instead of tablets if the medicine is not being absorbed well, or if you feel sick (nausea) or vomit when you take the tablets or your condition is not improving with tablets.

When should it be taken?

Methotrexate is taken just **once a week**, on the same day each week. If you are taking the tablets, it is a good idea to specify and diarise the day of the week that you will take your tablets to avoid making mistakes.

If you take the tablets at night on an empty stomach you will absorb them best. Taking the medicine in the evening or at meal time may also help to reduce nausea.

What is the dosage?

Tablets come in 2.5mg or 10mg strengths. Treatment usually starts with a very low dose, which is increased and adjusted depending on the response, up to about 20 to 25mg once a week.

The dose is usually taken all at once on a single day. It may be divided into separate doses taken during that day if necessary.

Are other medicines taken with methotrexate?

Folic acid or folinic acid are recommended while you are taking methotrexate as they reduce the risk of side effects. Your doctor will explain how much of the folic/folinic acid to take and when to take it.

Methotrexate is often taken in combination with other arthritis medicines, including:

- other DMARDs;
- biological DMARDs;
- steroid medicines such as prednisolone or cortisone injections into the joint;
- anti-inflammatory medicines (NSAIDs) such as naproxen (Naprosyn) or ibuprofen (Brufen/Nurofen); and/or
- simple pain killers such as paracetamol.

How long is the treatment continued?

The treatment is continued indefinitely as long as it is effective and as long as no serious side effects occur.

If methotrexate treatment is stopped for more than a few weeks there is a risk that your condition will get worse again. Continue with your treatment unless advised by your doctor or unless side effects develop.

If you have an illness, which makes you unwell enough to change plans for the day, e.g. gastroenteritis or fever, it is reasonable to miss the weekly dose until you have recovered.

Are there any side effects?

Below are side effects that you might experience with your treatment. Tell your doctor if you experience any side effects.

If you do experience side effects, a reduction in dose may minimise these so that you can continue to take the medicine. Your doctor will advise on any dose changes that are necessary.

Most common possible side effects:

- The most common side effects are *nausea*, *vomiting* and *diarrhoea*. These can be reduced if methotrexate is taken with food or in the evening. Antinausea tablets can be used if needed.
- *Mouth ulcers* can occur, but the use of folic acid supplements makes this less likely.
- *Skin dryness, a variety of skin rashes* and *increased sensitivity to the sun* may also occur. You should wear sunscreen and a hat when out in the sun.
- Some people report mild *tiredness*, *headache* and *mental clouding*. Some also experience a temporary increase in muscle and joint pain after taking the weekly dose.

Less common or rare possible side effects:

There are some rare but potentially serious side effects with methotrexate.

- **Blood counts:** Methotrexate can rarely cause a drop in the number of white blood cells, which are needed to fight infection. It can also cause a drop in the number of platelets, which help to stop bleeding. Regular blood tests aim to pick these problems up early if they occur. However, if you develop a sore mouth, mouth ulcers, easy bruising, nosebleeds, bleeding gums, breathlessness, infection or fever tell your doctor straight away.
- **Liver:** Methotrexate can inflame the liver causing a type of hepatitis. Regular blood tests aim to pick this up early if it occurs.

The dose of methotrexate may need to be reduced or stopped if problems occur. Liver problems may be increased when methotrexate is combined with the medicines azathioprine (Imuran, Azahexal) or leflunomide (Arava), or with heavy alcohol use (see *alcohol* overleaf).

- **Lungs:** Methotrexate may cause inflammation of the lungs. This may develop quickly. If you have a sudden onset of breathing difficulties seek medical attention as soon as possible. The problem may also develop slowly with symptoms such as a dry cough.
- **Hair thinning:** This may occur rarely. It is not permanent and hair will grow back when the medicine is stopped.
- **Cancer:** see below.

Long term possible side effects:

Methotrexate may be taken for long periods e.g. more than twenty years, to manage rheumatoid arthritis. In addition to **possible effects** mentioned above, the following are rare but possible long term side effects, or long term issues that may concern patients:

- **Liver:** Very rare cases of increased fibrous tissue in the liver have been reported after long term treatment. Regular monitoring can minimise the risk of this occurring.
- **Cancer:** People who have rheumatoid arthritis have an increased risk of lymphoma (a lymph node cancer). It is not clear whether methotrexate increases this risk further, but any additional risk is likely to be very small. Methotrexate may in fact reduce the risk of these cancers by controlling the rheumatoid arthritis, but this is also unproven.
- **Fertility:** Methotrexate **does not** affect a person's ability to have children in the long term. See also *Precautions* overleaf.

More information about possible side effects

Information that comes with your methotrexate medicine will also outline in detail potential serious side effects that may occur with methotrexate. Many of those side effects relate to the use of **high dose** methotrexate for the treatment of cancer.

These may not be applicable to the much lower doses that are prescribed for the treatment of rheumatoid arthritis. Talk to your doctor if you have concerns about any possible side effects.

What precautions are necessary?

Blood tests:

- Since the liver and blood cells may be affected by methotrexate, you **must** have regular blood tests during your treatment. This is very important, as you may not get symptoms with some of these problems.
- As well as monitoring for side effects, blood tests help to monitor your condition to determine if the treatment is effective.
- You will need to have full blood counts and liver function tests every 2 to 4 weeks for the first few months of treatment and then every 1 to 3 months after that.
- If there are no problems seen after 3 months of treatment at a specific dose of methotrexate, the blood tests may be done less frequently.
- Your general practitioner will be informed about the monitoring schedule. It is important to see your general practitioner if you have been asked to do so as they have an important role to play in monitoring your condition.

Avoid infections:

- Because your immune system may be depressed, there is an increased risk of developing some infections, especially herpes zoster (chicken pox and shingles). You should try to avoid contact with people who have these infections. If you have an infection or persistent fever, tell your doctor straight away.

Other medicines:

- Methotrexate can interact with other medicines. You should tell your doctor (including your GP, rheumatologist and others) about all medicines you are taking or plan to take. This includes over the counter or herbal/naturopathic medicines. You should also mention your treatment when you see other health professionals.

