



METHOTREXATE

What is methotrexate?

- Methotrexate is in a class of medications called Disease Modifying Anti-Rheumatic Drugs, or DMARDs.
- DMARDs are a slow acting but effective treatment for rheumatoid arthritis and other form of inflammatory arthritis.
- Methotrexate is considered the current gold standard first line treatment for rheumatoid arthritis because of its effectiveness and side effect profile.
- It is also used in the treatment of other types of inflammatory arthritis, lupus, vasculitis, myositis and others.

What is the typical dose for methotrexate?

- Most rheumatologists will dose methotrexate between 15mg and 25mg.
- In some cases, the dose may be higher or lower based on the condition being treated and other factors related to the individual patient's disease or other medical conditions.
- It is only taken one day per week.
- Methotrexate can be administered in 2 forms:
 - 2.5mg tablets (6-10 tablets/week)
 - An injection underneath the skin (similar to an insulin shot)

How does methotrexate work?

- While there has been extensive research into this area, it remains unclear as to the exact mechanism of action. Methotrexate is an anti-folate drug, and it also has many different specific effects which modulate the body's immune system.
- Like all DMARDs, Methotrexate takes time to work. Most patients start to feel the positive effects of methotrexate at 4-8 weeks, with maximum benefit at 3-6 months. Side effects can occur earlier.

What is the difference between taking methotrexate tablets versus the injection?

- There is good evidence that injectable methotrexate is more reliably effective than tablets, particularly as the dose increases. The risk of some side effects may also be

less compared to the tablet form. Isn't methotrexate used to treat cancer? Has my doctor not told me I have cancer?

- While methotrexate is used in the treatment of cancer, its frequency and dosing is much higher. When used in the treatment of a rheumatic condition, methotrexate is considered to be a relatively low dose and would not be used that way to treat cancer.

If methotrexate is the gold standard treatment, why am I on more than just methotrexate?

- For rheumatoid arthritis and other types of inflammatory arthritis, there is some evidence that treatment is more effective when DMARDs are combined together. Even the newer biologics work better in combination.

What are the possible side effects of methotrexate?

Side Effect

Ways to Reduce Side Effects

More Common

Methotrexate can cause gastrointestinal upset, fatigue, or even flu-like symptoms in some people. If it occurs, it is usually the day or two after you have taken your methotrexate.

1. What day of the week do you take methotrexate?. Eg. Is Friday the best day for you so you don't feel unwell at work?
2. Take your methotrexate around supper time, so its effect may be gone by morning.
3. The injection route may be more tolerable than tablets.

Methotrexate can cause painful sores in the mouth.

1. The injection route may be more tolerable than tablets

Side Effect

Ways to Reduce Side Effects

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2. Folic Acid supplementation as prescribed by your rheumatologist reduces this risk.
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Rare

Methotrexate can decrease your blood counts and/or irritate your liver

1. Your rheumatologist will provide you will a requisition for **monthly bloodwork** to check your blood counts and liver. While rare, if there is a problem, your rheumatologist will usually see it in your bloodwork well before you notice any problems. Make sure you always get your bloodwork.
 2. **Minimize your alcohol intake**, as both alcohol and methotrexate can irritate your liver. For most people, 1-2 drinks/week is still safe.
 3. Make sure your doctor knows if you have a problem with your blood cells or liver.
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Effect on the kidneys

1. At the low doses used to treat inflammatory arthritis, methotrexate does not usually harm the kidneys.
 2. Rheumatologists may include a blood test to check your kidney function as methotrexate is excreted through the kidneys; if your kidneys are not working properly, your rheumatologist may need to decrease or stop methotrexate.
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Methotrexate can cause inflammation or even scarring in the lungs

1. This is fortunately rare, but very serious. Let your rheumatologist know right away if you have a cough that isn't going away or increasing difficulty with your breathing. If this happens, your rheumatologist will likely stop your methotrexate.
2. Keep in mind, some rheumatic conditions such as rheumatoid arthritis can also cause lung problems. In fact, this is probably more common and which methotrexate may help prevent.

Side Effect

Ways to Reduce Side Effects

Pregnancy miscarriages or malformations

1. **You should not become pregnant** if you are on methotrexate. It is recommended that both males and females should be off methotrexate for at least 3 months prior to conceiving. Contraception is strongly encouraged.
2. Mothers should not nurse if on methotrexate as it can enter the breast milk.

Medication Interactions

1. **Avoid Sulpha based drugs** (e.g. Bactrum, Septra) as they may increase methotrexate levels in your body to a toxic level.
2. Older data suggested NSAIDs (e.g. ibuprofen, naproxen) should be avoided with methotrexate. This is no longer true as many patients. In fact, it is very common to be taking methotrexate and an NSAID at the same time.

More infections

- Although poorly studied, there may be a small increased risk of developing infections, particularly if used in combination with steroids.

Risk of Cancer

- There is a small but increased cancer risk, particularly lymphoma, for patients taking methotrexate. It may – but not always – regress on its own if methotrexate is stopped. This risk is likely no greater than the increased risk of cancer in poorly controlled rheumatoid arthritis itself.

What should I do if I miss a dose?

- If you miss your dose, you can take it the next day safely. Then, resume your normal weekly routine. If it has been more than 1-2 days, wait until your next weekly scheduled dose. As long as this does not happen regularly, you will likely not feel any ill effects.

How can I safely stop methotrexate?

- It is safe to just stop methotrexate; you do not need to slowly reduce the dose. However, keep in mind, if you were gaining any benefit from methotrexate, it will usually take at least 6 weeks to lose it.

For more information about methotrexate, or for questions that are specific to your situation, always consult your physician.