



Patient & Family Guide  
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# Methotrexate Therapy for Inflammatory Bowel Disease (IBD)



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# Methotrexate Therapy for Inflammatory Bowel Disease (IBD)

Your healthcare provider feels that treatment with methotrexate (meth-oh-TREX-ate) might help your Crohn's disease and ulcerative colitis (inflammatory bowel disease, or IBD). This pamphlet will help you decide if this medication is the right treatment for your illness by describing what methotrexate is, how it works and some possible side effects.

This pamphlet is just a guide. If you have questions, please talk to your healthcare provider. We are here to help you.

## What is methotrexate?

Methotrexate was first developed to treat cancer. It is now used to treat a number of different problems in the body, including rheumatoid arthritis, liver disease, and IBD.

Methotrexate is an immunosuppressive drug, meaning it suppresses the cells in your body that fight infection and inflammation, known as the immune system. Immunosuppressants help treat IBD, which is when the immune

system is too active and causes inflammation and damage to the bowel. Methotrexate blocks an enzyme (dihydrofolate reductase) involved in the immune system. This means that the immune system in the body becomes less active in order to relieve symptoms and combat IBD. While methotrexate has good effects, it may have bad side effects. Most of the side effects are simply annoying, but some can be serious.

## **How well does methotrexate work? Will it work for me?**

Methotrexate seems to be pretty helpful for most patients. In a study published in the New England Journal of Medicine in 2000, 65% of patients who were treated with methotrexate had their disease go into remission after 40 weeks. About half of patients who stop taking methotrexate will experience symptoms of their disease again. However, their symptoms are usually not as bad.

## **What are the possible side effects of methotrexate?**

Like most medications, methotrexate can have some side effects. These side effects have been grouped into minor and serious categories.

### **Minor side effects**

These side effects are generally less serious, but they may be upsetting or uncomfortable. Usually, these side effects will stop as soon as you stop taking the medication. Minor side effects include:

- Dizziness
- Sore mouth
- Loss of appetite
- Nausea and vomiting
- Diarrhea
- Hair loss
- Itching of skin and/or rash
- Alteration of the menstrual cycle (change in your period) (females)
- Tenderness of the breasts (males)
- Lowered sperm count
- Sensitivity to light
- Flu-like symptoms (tired, achy muscles)

## **Serious side effects**

Methotrexate can have some serious side effects. If you experience these side effects, your doctor may lower the amount of medication you are taking, or tell you to stop taking the medication. Check with your healthcare provider if you have any of the following side effects:

- Weakness
- Fever
- Sore throat
- Joint pain
- Abnormal bleeding or bruising
- Stomach pain
- Bloody stools (poop), urine (pee), or vomit
- Swelling in your feet or lower legs
- Liver fibrosis (scarring)
- Pneumonitis (lung inflammation), dry cough, difficulty breathing

# Who shouldn't take methotrexate?

## People with certain other conditions

Use of methotrexate can be a real risk for those people who have certain other complicating diseases. Some of these are:

- › Chronic liver disease
- › Alcohol abuse
- › Diabetes
- › Obesity
- › Peptic ulcers
- › Anemia
- › Leukopenia (low white blood cell levels)
- › Thrombocytopenia (low blood platelet levels)
- › Ulcerative colitis (colon inflammation)
- › Recurrent infections
- › Ascites (extra fluid in the stomach area), or pleural effusion (extra fluid in the lung)
- › Chronic disease of the nervous system
- › Chronic lung disease or fibrosis
- › Chronic kidney disease

- › Chickenpox (in the recent past), herpes zoster virus (shingles)
- › Gout
- › Kidney stones

Talk about these complications with your healthcare provider if you have a history of any of these diseases.

### **People who may be or could get pregnant**

Methotrexate cannot be given to anyone who is pregnant or who may become pregnant. It is extremely harmful to the unborn baby to be exposed to the medication by the mother or the father, as it can cause birth defects or miscarriage. This means that you should not try to get pregnant or get your partner pregnant if you are taking this medication. Talk to your healthcare provider about birth control before you begin taking this medication.

Women should not breastfeed while on methotrexate. Methotrexate in breast milk can severely harm an infant. If you are currently breastfeeding a child or plan to breastfeed in the future, tell your healthcare provider.

## What precautions are needed?

In order to minimize the risk of possible side effects, there are a number of steps you should take. If these precautions are taken, then methotrexate can be very helpful in treating your IBD with limited downsides. Some of these precautions include:

- **Limit alcohol consumption** while taking methotrexate. Drinking alcohol while taking this medication can cause damage to your liver and lead to cirrhosis (scarring of the liver).
- **Do not try to get pregnant or get your partner pregnant** while taking methotrexate. **Do not take methotrexate while pregnant.**
- **Avoid live vaccinations** while taking methotrexate. If you are due for vaccinations or plan to be vaccinated while on methotrexate, tell your healthcare provider. **This does not include flu shots; all patients should get a flu shot every year.**
- **Don't start any new medications.** Some medications, when used with methotrexate, can create problems. Before taking any other medication, ask your healthcare provider.
- **Tell your healthcare provider about any allergies or infections.**



- **Take folate supplements.** Taking extra folate helps reduce how severe and frequent the side effects are while taking methotrexate. It also helps protect the liver while taking this medication. Your healthcare provider will tell you how much folate to take.
- **Have regular blood testing** to monitor the effect of methotrexate on your body, and in the treatment of your disease.
- **Have a regular check-up at least twice a year.**

## Concerns

Methotrexate can cause problems, however, they are uncommon. There is more risk in not treating the disease than there is from taking the medication.

If you have any questions, please ask.  
We are here to help you.

**Methotrexate can be given orally, but many patients with IBD are prescribed methotrexate injections.**

## **Methotrexate Injection Instructions**

Injections are given **once a week**. There should be **at least 5 days** between injections.

### **Before injections**

- Have a clean, well-lit work area on a table or desk.
- Gather all your supplies:
  1. 1 vial of methotrexate (fluid should be a clear yellow color)
  2. Alcohol swabs
  3. A syringe
  4. Needle bucket for disposal of syringe

### **Preparing your injection**

- Wash your hands.
- Place the vial of methotrexate on a flat surface. Don't touch the rubber stopper.
- Wipe the rubber stopper with an alcohol swab.
- Pull back the plunger of the syringe to 1 cc, which fills it with air.

- Insert the needle of the syringe into the rubber stopper of the vial and push down the plunger to inject the air into the vial. This will make it easier to draw out the fluid.
- With the syringe still in the vial, turn the vial upside down.
- With the tip of the needle in the medicine, draw out 1 cc of fluid (for a 25 mg dose). You may need to pull the needle out of the vial a little bit to get the last of the fluid out.
- If there is some air in the syringe, you can push it back into the vial and continue to draw the fluid out.
- When you have 1 cc of fluid (for 25 mg dose), remove the needle from the vial and replace the cap on the needle before you lay it down.

### **Where to inject methotrexate**

- Select an area of the body that has a layer of fat between the skin and the muscle. This is the subcutaneous tissue.
1. Top of the thighs: put a hand on your groin - do not use this area - and put a hand on your knee - do not use this area. Use the space in between for the injection, and avoid any area where you can see a blood vessel.
  2. Abdomen: don't inject near the waistline. (Do not use this area if you are very thin.)

- Rotate the places where you do your injections, staying about 1½ inches away from the last injection site.

## **To give the injection**

- Clean about 2 inches around the spot you have chosen with an alcohol swab.
- Wait about a minute for the area to dry.
- Make a fold of skin between your thumb and index finger.
- Quickly insert the needle at a 45 or 90 degree angle to the folded skin. The needle should be completely covered by skin.
- Let go of the folded skin and move this hand to hold the syringe in place. With the other hand, gently pull back a little on the plunger to check for blood.
- If you do not see blood slowly push the plunger all the way to the bottom to inject your methotrexate. (If you do see blood, do not inject; withdraw the syringe and start again with a fresh vial of medication and a new syringe.)
- Put the alcohol swab on the site where the needle is in the skin and withdraw the syringe. Do not rub, just gently hold the area. If there is any bleeding, apply a Band-Aid®.

- Don't worry about a small air bubble that may be in the syringe. You are in no danger if a small amount of air enters the skin.
- Without replacing the cap on the syringe, put it in your needle bucket.
- When your needle bucket is full, you can return it to your pharmacy and get a new one.
- You may notice some slight bruising from time to time at the injection site. Don't worry about this, it is not serious.

If you get methotrexate on your skin, wash the area right away with warm soapy water to prevent irritation.

If you spill methotrexate on the work area, put on rubber gloves and wash the area with warm soapy water and a paper towel. Throw away the paper towel in the needle bucket, not in the regular trash.

If you get methotrexate in your eye, wash your eye with lots of water. If there is any redness or irritation, contact your healthcare provider or go to the nearest Emergency Department as soon as possible.



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The information in this pamphlet is to be updated every 3 years or as needed.