



Jeff Donovan MD PhD FRCPC

Dermatologist, specializing in hair loss

750 West Broadway Suite 905 - Vancouver BC V5Z 1H8

Phone: 604.283.9299 Fax: 604.648.9003

Email: vancouveroffice@donovanmedical.com Web: www.donovanmedical.com

INFORMATION ON METHOTREXATE

What is Methotrexate?

- Methotrexate is a pill which is used to “quiet down” the immune system.

What is the dose of Methotrexate?

- The medication is used at a dose of 15-25 mg **ONCE** per week.
- For children the dose may be as low as 2.5 mg to 5 mg once weekly
- It is NOT used every day. The use of this medication by mistake could be harmful and even fatal.
- Another vitamin known as folic acid (5 mg) is used on the other days of the week (on the day that methotrexate is not used)

Who should NOT use Methotrexate?

Methotrexate should not be used in the following situations:

1. Patients who are pregnant or breast feeding
2. Patients who are trying to conceive a baby (women need to wait 1 month and men 3 months after stopping the methotrexate)
3. Patients with liver diseases
4. Patients with kidney diseases
5. Patients who diabetes, obesity, alcoholism
6. Patients with active infections in their body (including tuberculosis)
7. Patients who have immune diseases and a weakened immune system
8. Patients who have blood disorders
9. Patients who are taking the following medications
 - i. Salicylates sulfonamides sulfonylureas
 - ii. Phenothiazine phenytoin barbiturates
 - iii. Chloramphenicol tetracyclines probenecid
 - iv. Dipyramidole
 - v. Septra, sulfa drugs, dapsons
 - vi. Retinoids and alcohol

What are the possible side effects of Methotrexate?

- 1) **Lowered blood counts.** Methotrexate can lower your blood counts and this will be closely followed in the first few weeks you start this medication. It is very important that you use methotrexate only ONCE per week and use folic acid on the other days.
- 2) **Toxicity to the liver.** Methotrexate can be toxic to the liver. For this reason, patients should not consume alcohol if they are prescribed methotrexate. You will be asked to do blood tests to see if there is any evidence that your liver is being affected by methotrexate. However, all patients need to be aware that even with normal blood tests, it's possible that the liver is still irritated. Very rarely Methotrexate can cause scarring in the liver called *cirrhosis*. After 1-2 years of using this medication, it may be necessary to do a liver biopsy to see if there is scarring in the liver.
- 3) **Lung toxicity.** Methotrexate can be toxic to the lung. This is not common, but patients should mention any shortness of breath or bothersome coughing to their doctor.
- 4) **Sores in the mouth.** Patients are asked to contact their doctor if sores develop
- 5) **Nausea, weight loss, diarrhea**
- 6) **Headaches, tiredness, dizziness**
- 7) **Cancers of the blood.** This is rare, but methotrexate has been associated with cancers of the blood called lymphomas
- 8) **Teratogenic.** Methotrexate can harm a developing baby. It's important that women not conceive while either a male or female partner is using methotrexate.
- 9) **Sun sensitivity.** Methotrexate may make patients more sensitive in the sun. They should be careful to limit sun and use a good sunscreen (SPF 30-60) while out in the sun.

What tests will be needed before taking Methotrexate?

You will need a panel of tests before starting methotrexate. These are the tests your doctor will order:

- 1) Basic blood counts : CBC + differential
- 2) Liver tests: LFTs (ALT, AST, ALP, bilirubin, albumin), HbSAg, HbSAb, HCV, HAV
- 3) Kidney tests: Creatinine, BUN, urinalysis
- 4) Pregnancy test if female: + BHCG
+/- HIV

What tests will be needed after starting the Methotrexate?

To ensure that methotrexate is safe for you, you will have frequent blood tests in the first 2 months. It is very important that you do these tests. If your schedule is too busy to allow you to do these blood tests on a regular basis, Dr. Donovan will not prescribe methotrexate.

Tests needed after starting the Methotrexate:

1. CBC with platelets & LFTs, creatinine: blood work is done at day 4-7. Then weekly for 4 weeks, every two weeks for 1 month and then monthly for 3 months and then every 3 months. You will need more frequent monitoring if you develop an illness or if other medications are prescribed or other over the counter products are used.
2. Be sure to tell any doctor or health care professional you see that you take methotrexate

REMEMBER: The decision to use methotrexate for your alopecia requires careful consideration. Each patient must weigh the risks and benefits of the medication with the way their hair loss impacts their life. Many patients taking methotrexate do very well and have minimal side effects. Some patients experience regrowth of hair, but it is important to remember that some patients do not experience regrowth of hair, and other treatments need to be considered.

