

METHOTREXATE

HANDOUT FOR PATIENTS – INFORMED CONSENT

Methotrexate has been used in the treatment of psoriasis for over 30 years. It is effective, improving psoriasis in the majority of cases. The cost of the drug in relation to its efficacy makes methotrexate an excellent choice for the treatment of severe psoriasis. There is no treatment for psoriasis that is consistently effective in all cases. Many treatments are, however, available. The major treatments are shown in Table I. Their effectiveness varies, as do their adverse effects.

Methotrexate is prescribed in cases of psoriasis that respond poorly to local treatments such as creams, for psoriasis that creates a social or functional handicap and for psoriasis affecting much of the body's surface. For patients with psoriasis affecting both the skin and joints, methotrexate may help both diseases.

Methotrexate is also used to treat rheumatoid arthritis, in doses similar to those used to control psoriasis.

When choosing methotrexate to control psoriasis, it is also necessary to consider the risks associated with this drug. The risks are in relation to the dose. The higher the weekly dose of methotrexate, the greater the risk. The risk of problems with methotrexate is also directly related to the total amount of methotrexate taken over the patient's lifetime. Subjects who consume alcohol, are obese or elderly have a greater risk of complications.

Methotrexate is not to be taken by women who wish to become pregnant. It is also not to be used by men who want to father a child. It is also not to be used by patients with the following health problems: recent hepatitis or cirrhosis of the liver, immunodeficiency syndromes and certain blood anomalies.

To reduce the dose of methotrexate that you will need, your physician may often prescribe for you treatment combinations in addition to the methotrexate (creams, ointments, ultraviolet therapy, etc.).

Methotrexate is prescribed in **weekly** doses (i.e., once a week). The dose may be split over 24 hours (for example: Monday morning, Monday evening and Tuesday morning). The total dose per week generally ranges from 1 tablet (2.5 mg) to 10 tablets (25 mg). In some instances, the dosage may be higher, in cases of severe or stubborn psoriasis. The drug may also be given by injection if nausea is a problem.

If an overdose is taken by mistake, the drug may have serious and even fatal toxic effects.

It takes generally 3 to 8 weeks for methotrexate to improve your psoriasis. Its effect depends on the dose, which your physician will change according to your response. The aim is always to obtain the best response with the lowest possible dose, resorting to other treatments as needed.

The major risk of methotrexate is liver disease. That is why it is necessary to ensure that there is no significant liver disease before this drug is prescribed. The liver may be damaged as a result of alcohol (beer, wine, spirits), viral hepatitis, medications or even genetic disorders. A blood assessment, and

sometimes a liver biopsy, will be ordered before prescribing methotrexate. The liver must be normal at the outset. If it is not, additional precautions will be taken. If the liver is too damaged, methotrexate will not be used.

Blood tests will be necessary before starting treatment and during treatment. While taking methotrexate, you should get your blood work done about 5-6 days after the dose. Blood works will be required regularly to monitor the blood count, liver function and kidney function. If the kidneys are not functioning properly, there is an increased risk of side effects from the drug.

The recommendations vary, but most dermatologists agree that a liver biopsy should be done during treatment and repeated according to the cumulative dose. The timing of these biopsies is determined based on the total amount of methotrexate you have taken. Liver damage can set in slowly, and go undetected by blood tests. We strongly suggest you record in a notebook the doses of methotrexate you take each week and keep a running total. Your pharmacist can calculate the total dose you have already used and bring you up to date if you have not recently kept your own record.

A liver biopsy is a procedure done as an outpatient at a hospital but usually requires no hospitalization. The procedure is done by a radiologist or gastroenterologist. Before taking the biopsy, blood tests are done to make sure you have no blood-clotting problem.

Some oral medications can increase the toxicity of methotrexate, including aspirin and other anti-inflammatories. You should make a note of all the medications you take and tell your dermatologist. Your dermatologist should be informed of any changes in your medication. Dehydration can also increase the toxicity of methotrexate.

Tables II and III list most of the adverse effects reported with methotrexate. Most patients experience only a few of these side effects or none at all. These reactions vary according to the weekly dose, their incidence being higher if large doses prove necessary. Follow-up is essential for the safe use of methotrexate.

I have read this text and discussed it with my dermatologist.

I agree to comply with the necessary requirements for taking methotrexate and have been informed about the risks of the drug.

NAME: _____

Signature: _____

Date: _____

Dermatologist's signature: _____

Date: _____

Table I: Main treatments available for the treatment of psoriasis

Topical agents	
(creams, ointments, gels)	Corticosteroids
	Calcipotriol (Dovonex)
	Tazarotene (Tazorac)
	Tars
	Salicylic acid
	Anthralin
	Moisturizers
Phototherapy	
	UVB phototherapy
	PUVA phototherapy
Systemic agents	
(taken orally)	Acitretin (Soriatane)
	Methotrexate
	Cyclosporin (Neoral)
	Biologic agents e.g. alefacept
	Others (seldom prescribed)

Note: All treatments have adverse effects as well as beneficial effects.
Treatment combinations or sequential treatments may reduce the risks.

Table II: Serious adverse effects of methotrexate

Pneumonitis (Dry cough)	Rare but unpredictable
Blood anomalies	Depending on the weekly dose
Fibrosis / cirrhosis of the liver	This is directly related to the dose taken, the subject's lifestyle (alcohol, etc.) and age

Table III: Incidence of adverse effects

Adverse effects:	Incidence:
Nausea	More than 10% of subjects
Mouth ulcers Gastrointestinal discomfort, diarrhea Transitory rash Headaches Vomiting	3 to 10% of subjects
Hair loss Loss of appetite Dizziness Infection	1 to 3% of subjects
Chest pain Cough Nosebleed Sun sensitivity	Less than 1% of cases

Note: Oral folic acid may decrease some of the adverse effects
Administration of Methotrexate by injection may decrease some of the adverse effects

If you are on Methotrexate, you should consult a doctor if you have

A persistent fever

Unusual bleeding problem

Unexplained diarrhea

Inhabitual sores in mouth and on lips

Stomach pain

Persisting nausea and vomiting without any reason

Black, tarry stools

Blood in urine or stools

Convulsions (seizures)

Unexplainable cough or hoarseness

Shortness of breath

Unusual tiredness or weakness