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THE PSORIASIS PROGRAM

Conventional Medical Treatment



Table Of Contents

Psoriasis - Conventional Medicine Treatment	3
3 Points To Consider With Drugs versus Natural Medicine	4
Over Half Of Psoriasis patients Unhappy With Conventional Treatment	5
Conventional Psoriasis Treatments And Procedures	6
Schematic Of Psoriasis Treatment Ladder - <i>figure</i>	7
Topical Treatments For Mild Psoriasis	8
Emollients	8
Occlusive Dressings	8
Topical Preparations For Mild To Moderate Psoriasis	8
Coal Tar	8
Dithranol	8
Topical Corticosteroids	9
Vitamin D-Like Compounds	10
Calcineurin Inhibitors	11
Ultraviolet Treatment	11
PUVA	12
UVB	12
Systemic Treatments	13
Methotrexate	13
Monitor Your Blood Tests On A Spreadsheet - <i>tip</i>	14
Cyclosporine	15
Systemic Treatments - Oral Retinoids	16
Acetretin	16
Biologic Therapies	17
Other Systemic Drug Treatments For Psoriasis	17
Disease Modifying Medications For Psoriasis Arthritis	18
Liver Cleansing After Drug Treatment - <i>tip</i>	19
Can Pharmaceutical Drugs Be The Cause Of My Psoriasis?	20
Psoriasis Patients May Take Other Drugs	20
The Most Common Drugs Implicated In Causing Psoriasis	21
References	22

Psoriasis - Conventional Medicine Treatment

There are essentially three ways you can treat psoriasis, you can treat it with natural medicine, conventional Western medicine or a combination of both. The Psoriasis Program concerns itself primarily with natural ways of treatment. The purpose of this booklet is to explain how your conventional medical doctor will generally treat your psoriasis. Most psoriasis patients with moderate to severe psoriasis end up being treated by a skin specialist, a dermatologist.

Less than one hundred years ago all health complaints were treated with natural methods, which is today seen as an "alternative" to science based healthcare. What was once normal and even practiced by conventional doctors of the day is now frowned upon as fringe medicine.

Natural Versus Conventional Medical Treatment



Modern science and the expensive marketing of powerful and profitable pharmaceutical drugs have ensured that the modern approach is in favor of the drug-based approach. This trend has been slowly but surely reversing the past two decades, as many people with psoriasis are now demanding a more natural and side effect free approach towards their healthcare. While I firmly believe that the conventional science based approach to medicine has its place, conventional treatment relies on powerful chemical based medicines that only suppress symptoms. Natural treatments work more indirectly by strengthening the body's innate healing

responses and in finding the actual causes rather than just relying on treating the symptoms. Many patients come to us seeking assistance with their psoriasis because they have not only become disillusioned with a lack of permanent results, they have become concerned about the risks and potentially serious side effects of the drug-based approach and want to finally get to the root cause of their psoriasis.

Your psoriasis as well as your overall general health can be improved profoundly with the help of an experienced practitioner of natural medicine or medical doctor who has a good working knowledge of natural medicine. If you want to stay remain under the care of a conventional medical doctor, it is preferable that your doctor has had formal training in natural medicine, and doctors who have had this kind of training have become medical practitioners initially, and then furthered their studies to include nutritional medicine and maybe even herbal medicine and homeopathy.

You should be able to find an alternative doctor online in your country through a professional association. I have worked in medical clinics for fifteen years and come to know many alternative medicine doctors during that period of time. I can highly recommend any naturopath to spend a few years working alongside doctors to understand the medical system and to learn valuable skills they would otherwise never gain. In addition, it is also preferable that your natural health-care professional has a good understanding and respect for the conventional medical system and will know when to refer you on when necessary.

Today in the 21st century, many people are interested in the best of both worlds, i.e. the benefits that medical sciences as well as natural medicine have to offer combined.

Psoriasis patients have become a lot more informed through the Internet these days, and more gentle forms of treatment are generally preferred with the least amount of intervention before powerful drugs or invasive procedures are employed. In this sense it is good to work in conjunction with an experienced naturopath who has undertaken high-level health science based training, or a medical doctor who has undertaken post-graduate natural medicine training. The ultimate is for you to form a relationship with one or both of these health-care professionals so that you can get a more balanced viewpoint when it comes to the treatment of your psoriasis and associated health problems.

Whichever way your psoriasis is treated, it is important for your practitioner to individualize your treatment, because bio-individuality is one of the major factors in achieving a successful course of psoriasis treatment with long lasting benefits to you, the patient.

Although people may share similar signs and symptoms of psoriasis, some practitioners may try to give all patients with psoriasis virtually an identical form of treatment. I have learned that there is often no single way that even two persons can have exactly the same signs and symptom patterns and therefore be treated identically. Even identical twins have been found to have a different expression of the same illness. And this may create more problems for the medical practitioner than it can for the natural medicine practitioner, because the doctor will treat the disease and its symptoms as individual illnesses, whereas the naturopath will treat the person as an individual and his or her symptoms as a whole.

3 Points To Consider With Drugs Versus Natural Medicine

1. Firstly, in which cases are drugs inappropriate and natural medicine a superior choice in the treatment of your psoriasis. It all depends on how bad your psoriasis is, and on the quality of your life.
2. Secondly, when can natural medicines be effectively and safely integrated with drugs to provide you, the patient, with the best clinical outcome for your psoriasis.
3. And last, when should a drug prescription be prioritized over alternative treatments in terms of efficacy, ethical practice and the best clinical outcomes.

Most all classes of psoriasis drugs share similar side effects, so you will need to be aware of the likelihood of side effects if you decide that drug treatment is right for you if you have moderate or severe psoriasis. This especially important if you are considering long-term drug treatment.

Seek Out An Experienced Clinician

The good physician treats the disease; the great physician treats the patient who has the disease.
Sir William Osler

There are many variables to consider and this is where the experienced practitioner will succeed when the inexperienced practitioner may fail to help you. If you are looking for a natural medicine health-care professional, ask your practitioner if he or she has experience in treating many different cases of psoriasis. If he or she does not appear to be confident, then find somebody who is. Your practitioner should be able to

emphatically say, "Yes, of course I can help you, I have plenty of experience with psoriasis!" There are many reasons why patients seek out a more natural treatment for their psoriasis in the end, and I have found in most cases it is because the conventional treatments have to be applied continually, and at times for many years on end, and still there are symptoms that occur as soon when the treatment is reduced or discontinued. Seeking conventional treatment can be scary for some; because drug based treatments for psoriasis can potentially have many side effects, and there is no guarantee of any cure either, just symptom control.

I never make any guarantees with my psoriasis patients; I only tell them that if they guarantee to do everything as right as they can and for as long as it takes, then this kind of resolve can only end in eventual success, outstanding health free from any recurrent psoriasis. A cure? No, but a massive improvement and significant relief of those recurring skin problems can and will almost certainly occur with commitment. And I have proven to be correct in many instances of chronic psoriasis, with most patients remaining free from psoriasis many years after they first came to my clinic.

Over Half Of Psoriasis Patients Unhappy With Conventional Treatment

Did you know that half of all psoriasis and psoriatic arthritis patients are currently dissatisfied with their conventional medical treatments? Here are the results of this 2013 study¹, published in the prestigious JAMA Dermatology journal:



"While various treatment modalities are available for psoriasis and psoriatic arthritis, widespread treatment dissatisfaction exists".

This most recent study discovered that many psoriasis and psoriatic arthritis patients living in America in particular, are unhappy with their current treatments, and *dissatisfaction with the results and unwanted side effects* being the two biggest reasons why a large number of psoriasis and psoriatic arthritis patients go untreated or abandon conventional treatment, according to this 2013 study that spanned research based on patients interviewed between 2003 and 2011. Based on data from 5,604 psoriasis patients collected by the National Psoriasis Foundation (NPF), more than 52 percent of patients with psoriasis said that they were not happy with their conventional treatments, and 46 percent of psoriatic arthritis patients also commenting that they too were not happy with their outcomes from treatments. This is most significant, because psoriasis is considered the most prevalent of all the autoimmune diseases affecting more the 7.5 million American patients alone.

Side Effects of Conventional Psoriasis Treatments

Around a third of psoriasis patients surveyed who have mild psoriasis said that they relied on topical (skin) treatments alone, because they had discovered that these kind of treatments had the fewest side effects, or that their psoriasis wasn't severe enough to take a drug regularly, or that their doctor wasn't interested in prescribing any further treatment.

One third of the 5,604 psoriasis patients surveyed regularly use light therapy (phototherapy). The most preferred form of light therapy for patients is UV-B therapy. The most frequently used oral systemic drug used up until 2011 in America was Methotrexate (sold under brand names Rheumatrex and Trexall).

Almost 23 percent of psoriasis patients reported using a drug called Acitretin (a retinoid or synthetic Vitamin A drug sold under the name of Soriatane).

Drugs called biological agents (like immune-suppressive drugs) have become a lot more popular for psoriasis patients since 2003, but other therapies are still favored. Several years ago, almost a quarter of those with moderate to severe psoriasis were using a drug called Entanercept (Embrel), but this has reduced in recent years to less than ten percent. The two main reasons so many have stopped taking these kinds of drugs is because they were not that effective, or created strong side-effects like increasing risk of infections. This comes as no surprise to me, if you give a drug aimed at immune suppression, then the consequences naturally are that you will become sick more often. You don't need to be a rocket scientist to work that one out! Whilst it is very important to ensure that patients with psoriasis and especially severe cases of psoriasis and psoriatic arthritis receive proper and effective treatment, it is also important that this treatment does not come at a cost of side effects so great that decrease the quality of life.

Conventional Psoriasis Treatments And Procedures

*"Please Present With Only One Symptom Today"
Actual sign seen in a medical clinic in Sydney, Australia.*

Conventional medicine tends to regard psoriasis as an incurable disease, because it hasn't got a clue what caused the condition. So, conventional treatments therefore are aimed at either suppressing the symptoms or easing them as much as possible. The biggest problem that many with psoriasis unfortunately face is that the actual medical treatment may be as bad if not worse than the actual condition.

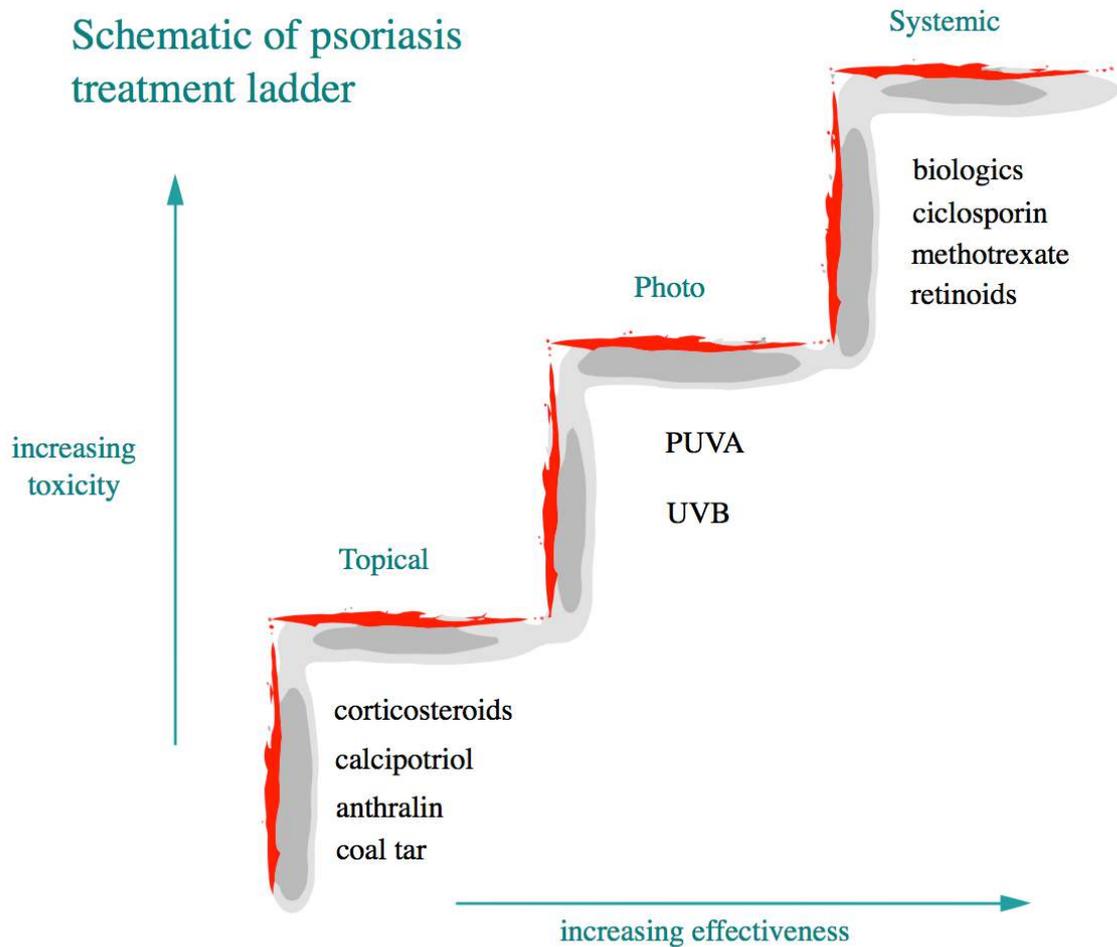
What will my doctor do? Most patients I have seen with mild psoriasis in fact have never spoken to their doctor about their skin condition. They have recognized it to be psoriasis and take matters into their own hands when it comes to treatments. Their skin lesions are generally small and mild in nature; they may not bother them too much and find that their skin problem can be easily kept in check with natural or conventional topical treatments.

For those however who have the more chronic or severe forms of psoriasis, your family doctor may prescribe topical therapies in conjunction with systemic treatments. When you are prescribed systemic therapies you will almost always be under the care of a hospital skin specialist or dermatologist because of the high risk of side effects.

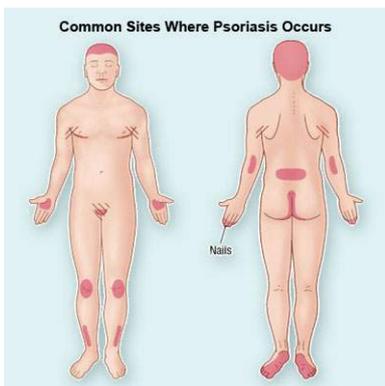
Your doctor will usually assess these two things if you come into her clinic complaining of psoriasis:

1. The severity. Your doctor will be asking you how severe your lesions are. She will also examine the extent of your condition, how much of your body is involved.
2. The quality of life. Your doctor will be asking you to what extent psoriasis is affecting the quality of your life, how bad it makes you feel.

Schematic of psoriasis treatment ladder



A Body Map May Be Used By Your Doctor



Skin specialists such as your dermatologist may use a "body map" to indicate how big those psoriatic patches are and where on your body.

- **Mild psoriasis** is considered to be less than 3 percent of your body's surface covered.
- **Moderate psoriasis** is considered to be between 3 – 10 percent
- **Severe psoriasis** is considered to cover more than 10 percent of your body's surface.

Topical Treatments For Mild Psoriasis

As I have just mentioned before, most psoriasis patients who have mild to moderate psoriasis tend to control the symptoms by using products like moisturizing creams, lotions and baths. These mild treatments are aimed primarily at reducing the scaling and are often mild treatments that act purely superficial, not generally affecting the surface underneath. Most doctors would agree on the following regime for the patient who has a rather mild case of psoriasis.

- **Emollients.** Emollients are generally moisturizing creams, and even if no medicated preparations are desired, the psoriasis should be kept soft with moisturizing creams to prevent it cracking and becoming sore. You can read a lot more about what to put on your skin in the booklet entitled Psoriasis, What To Do With Your Skin. Many patients will end up resorting to Vaseline, and Sorbolene Cream, but there are other natural and very effective skin treatments like emu oil. Emollients may also include keratolytic agents (Agents that soften, separate, and cause desquamation of the horny layer of skin) such as urea or salicylic acid.
- **Occlusive dressings.** Relatively small, localized patches of psoriasis may improve with occlusion i.e. waterproof adhesive dressings. This will allow the moisture to remain in the skin and prevent psoriatic lesions from developing.

Topical Preparations For Moderate To Severe Psoriasis

1. - Coal Tar

Coal tar and pine tar have been used for many years for psoriasis, it is an old therapy dating back to the 1920's. Tar preparations are generally most useful for scalp psoriasis and chronic plaque form of psoriasis. It works by way of reducing the itching and inflammation, helping to thin down the rough lesions that develop.

I'm personally not a big fan of this kind of treatment, in its most effective form it is a messy and smelly treatment, most patients I know who have tried it have discontinued it due to the smell. Refined coal tar is readily available in various cream, ointment, gel and stick bases. It isn't suitable for everyone because it can sting or even aggravate the psoriasis. It tends to be messy to use and many patients dislike the smell.

Some people combine it with Vaseline or other forms of petroleum jelly. Be careful NOT to apply coal tar preparations prior to going into the sun, as it may cause sunburn, because the ultraviolet light may cause contact photosensitivity dermatitis.

If you are going to consider this therapy, please read the booklet – Psoriasis, What To Do With Your Skin, I wrote about Coal Tar in its natural form, from the pine tree.

2. - Dithranol

Dithranol (also called anthralin) is derived from synthetic drug Chrysarobin. This drug has been around for almost as long as Coal Tar, since the early 1930's. It works by reducing the skin cell turnover and can be even more effective than Coal Tar. Unfortunately, it too has a major drawn back as it also tends to be a messy preparation that stains skin, bath and clothing a purplish brown color that does not wash out easily.

It can be very irritating when used on unaffected skin and is unsuitable for those with fair skin. Dithranol should not be used on sensitive skin, the face or in the body's folds or creases.

This product was originally designed to be left on overnight, and the affected parts that were treated were to be covered with bandages. Today we use it for less greater periods of time with equal effectiveness, and it is best used for very short periods of time only, i.e.; "short contact", for 10 to 60 minutes maximum.

3. - Topical Corticosteroids

Did you know that your body makes its own steroid hormones? The powerful steroid called cortisol is produced by your adrenal gland, and it helps to regulate an incredible amount of processes in your body, including your reaction to stress. Cortisol has a most profound effect on your white blood cells, it helps to activate and empower them.

Corticosteroids are a synthetic version of these naturally produced hormones, and are readily prescribed in creams, ointments and pills. There is no doubt, steroid creams do work and they are effective in many cases, they allow damaged skin to heal and can help to relieve symptoms. They are easy to use, are clean and don't smell like those other preparations we mentioned before.

Psoriasis patients often prefer to use topical steroids, as these are easy, clean, and have a soothing action. Steroidal drugs are useful for treating flexural forms of psoriasis, and have a rather limited action I find with plaque and scalp forms of psoriasis. They are also used frequently for psoriasis affecting the palms and soles. Topical steroid lotions may also be recommended by your doctor to be placed under affected nails for onycholysis (nail psoriasis).

For severe forms of plaque psoriasis, a dermatologist may even offer an intralesional steroid injection, a steroid injection used to reduce the thickened plaques of psoriasis.

You will find that weak topical steroids (often in combination with an antifungal drug) may improve flexural psoriasis but the plaque psoriasis and psoriasis that affects the palms and soles will require stronger topical steroids.

Stronger topical steroids need to be used with care, extreme care in fact. You will find that the most powerful of all topical steroid preparations are without a doubt the most effective, but these drugs also tend to have the highest risk of side effects.

They should be used with a great deal of caution, particularly on large areas of skin and preferably for limited periods because:

- They can trigger other forms of psoriasis if stopped suddenly.
- They can result in long-term aggravation of psoriasis.
- They may thin the skin, causing broken capillaries and stretch marks.
- They are an incredible amount of side effects if used excessively.

You can reduce your risk of side effects if you apply them for no more than two weeks continuously out of every eight weeks, or use them for two consecutive days in each seven-day (weekly) cycle. Side effects are much more likely in the elderly and children, both who are particularly at risk from steroid overuse because their skin is thinner and more absorbent. Some experts feel that children should not receive steroids for asthma, eczema, psoriasis or other immune-mediated conditions because it may interfere with their growth and development.

The big problem with topical corticosteroids is this, they don't cure your psoriasis, they suppress the symptoms, and this symptom suppression comes at a cost. As soon as you stop taking these steroid drugs, the symptoms come back with vengeance, and in some cases the psoriasis may even come back as another kind or a more severe form of psoriasis.

There is a danger of using corticosteroids continuously for long periods of time. Because steroids reduce inflammation by blocking aspects of your immune system, they are also known to interfere with the body's ability to heal itself, thus slowing down the skin's innate healing response. This increases reliance on steroids and leaves the body wide open to infections. Corticosteroids are also drugs that consume Vitamin D, potassium and zinc, important nutrients the body requires to power up the immune system. Corticosteroids trick your body's adrenal glands into producing less cortisol that help us cope with stress. And because we now know that stress is one of the leading psoriasis triggers, corticosteroid use is particularly damaging to the body.

Corticosteroid drugs have been linked with stomach ulcers, wasting of the muscles, thinning of the skin and many additional skin disorders, water retention, rapid and unwieldy weight-gain, bone disintegration (osteoporosis), a marked increase risk of viral, bacterial and fungal infections, loss or irregularity of menstrual periods, headaches, diabetes, growth retardation, manic depressive and other neurological, mental and psychological disturbances. Are you still interested in these kinds of drugs long term?

Because of these known side effects, steroids are generally only prescribed short term, but psoriasis users know from experience that when the steroids are stopped, that symptoms return, many will continue to use these corticosteroid applications for years, and indeed, and most always written repeat prescriptions for them. My recommendation is to never begin using topical corticosteroids in the first place, avoid them and use natural solutions on your skin instead; you can read all about them in my booklet entitled Psoriasis, What To Do With Your Skin.

4. - Vitamin D-like Compounds

The most common form of a Vitamin D like compound used is Calcipotriol. The other name it is known as is Daivonex[®]. This nonsteroidal antipsoriatic cream or ointment is considered one of the safest topical solutions for those with more mild to moderate forms of plaque psoriasis, and is not generally recommended for the more severe and extensive forms. These drugs appear to work by slowing up the development of keratinocytes, the cells that make up the horny layer of epidermis.

Just like topical corticosteroids, calcipotriol does not smell, stain, and is very easy to use. But unlike steroids, long-term use does not seem to have such devastating consequences. Side effects do include local skin irritation and at times an exacerbation of psoriasis. The drug guide I researched stated not to use it on the face, skin folds to use it on the skin and then cover it. Extensively used treatments can increase serum (blood) calcium levels, it is recommended not to use it therefore for any longer than one year without a long break. Irritation is more likely to occur upon first using it (especially the ointment, which is more potent than cream or solution) but this usually lessens with continued use.

If irritation does occur, reducing the frequency of application to every second day or less for a period of time usually allows continued use. Discontinue if you feel that the irritation is severe or does not go away after you have stopped it for some time. Don't use this ointment on your face; I had one patient complain of a facial rash for many months after she discontinued its use. No more than 100g should be used each week. I always question why doctors like to recommend "derivatives" or synthetic analogues of Vitamins, when they could be monitoring Vitamin D level in your blood. By doing so they can ensure Vitamin stays in the optimal range, so why should you therefore have to take artificial forms of Vitamin D? It's just plain crazy.

Calcineurin inhibitors

These kinds of ointments and creams work by suppressing Interleukin 2 (IL-2) produced by your body's T-Cells, white blood cells. They are also known as TIMs (topical immune-modulators), and powerfully suppress an inflammatory pathway designed by your immune system to counter inflammation in the body. These medications come with very powerful effects on reducing your immune system's functioning, even more so than topical corticosteroids, and naturally, this comes at a huge price - massive side effects.

Tacrolimus ointment and pimecrolimus cream are both examples of calcineurin inhibitors and both are not registered for use in psoriasis in New Zealand, although this may be different in your country, they have been registered to use for atopic dermatitis and eczema. They are sometimes used by dermatologists for psoriasis in thin-skinned areas such as face, skin folds and genital areas. For your information, I found this statement on Medscape.com about this class of drugs:

"Patients using calcineurin inhibitors can potentially experience many adverse effects. In general, the number and severity of adverse effects are related to the overall exposure, measured by length of therapy and blood drug concentration. Patients taking cyclosporine may develop high blood pressure, tremor, kidney toxicity, high cholesterol levels, gum disease, and hirsutism (hair growth on face). Patients receiving tacrolimus may develop high blood-pressure, tremor, many and varied digestive disturbances, kidney toxicity, headaches, liver toxicity, abnormal blood sugar control (diabetes), skin itching, white blood cell toxicity, high potassium levels, and hypomagnesemia. Tacrolimus causes a greater number of and more severe adverse events than does cyclosporine. Dosage reduction may decrease toxicities; however, additional pharmaceutical drugs are often required to counteract the adverse effects of calcineurin inhibitor therapy. The kidney toxicity seen with cyclosporine and tacrolimus is particularly problematic in kidney transplant recipients and may negate a kidney transplant. Calcineurin inhibitor doses are often tapered postoperatively because of such toxicities."

After reading this, what sane person would even contemplate taking such toxic and vile drug preparations that in fact cause a bigger problem than psoriasis itself?

Ultraviolet treatment

You can read a lot more about sunlight exposure and the benefits of light when it comes to psoriasis in my book *Psoriasis, What To Do With Your Skin*. Have you read it yet? When it comes to medicine, light therapy is split into two different types: UVA and UVB. UVA represents the tanning rays of the sun, and is only effective with psoriasis when used in conjunction with psoralen (a drug that causes photosensitivity), whereas UVB is that part of the light spectrum that produces the biological effects of actually being in the sun, the skin turns red and burns.

- A. - Ultraviolet A, **P**soalens plus **U**ltra **V**iolet **A** radiation, known as PUVA.
- B. - Ultraviolet B, broadband UVB or narrowband UVB phototherapy.

PUVA

A long time ago, the Egyptians figured out a cure for chronic skin diseases like dermatitis and psoriasis, they let the sun god Ra do the work. They would eat a certain kind of herb that grew near the river Nile and then lie in the sun. What they had worked out was that the plant made the skin more sensitive to the light, allowing the sun to effectively treat and eradicate the skin lesions.

We used to use PUVA once to achieve similar results to what the Egyptians did many thousands of years ago PUVA is long wave UV radiation and is also known as photo chemotherapy. Patients would swallow a tablet of psoralen (furocoumarin, a skin sensitizing agent) and then lie under a specially designed UVA-emitting light. Treatments for severe cases of psoriasis in by-gone days usually included twice-weekly hospital sessions over a four to eight week period. Light doses were carefully monitored to exclude sunburn, and patients wore special glasses to protect their eyes when they were under the UV lights, as well as for the following day.

Today we rarely apply this kind of oral psoralen therapy. Topical PUVA therapy applied nowadays is generally limited to severe psoriatic plaques affecting the palms and soles. The affected areas are soaked in a solution of the photosensitizing agent before exposing the patient to ultraviolet light.

Skin specialists like this kind of treatment for the most severe cases of plaque and guttate psoriasis. The problem unfortunately is that there is a fine line between the right amount and too much exposure – leading to an increased risk of skin cancers. Your risk of developing cataracts is also increased. There is no doubt that this treatment works, in fact it is more than 90 percent effective in clearing up the skin in four to six weeks, but some patients end up experiencing side effects including nausea, headaches, insomnia, lethargy and stomach pains. That's why these types of UV treatments today are not used much anymore for the more severe forms of psoriasis, in favor of drug-based treatments.

UVB

This application of what essentially amounts to artificial sunlight is particularly popular in Europe and Scandinavia. UVB radiation is used around the world by dermatology units. It has been found to be most effective for plaque and guttate forms of psoriasis. Usually a patient will be recommended this kind of treatment if they have large skin surfaces that need treatment, or their psoriasis is resistant to effective treatment with topical agents.

UVB has been proven to be more effective than topical corticosteroids, has similar effects like dithranol and coal tar but is much more pleasant to use, and the side-effects are a lot milder than PUVA or drugs like methotrexate.

Most patients tend to become clear of their lesions after about six to eight weeks of treatment, involving 5 treatments per week. The treatments only last anywhere from 90 seconds up to 15 minutes, and most dermatology units are open extended hours, so that patients can even drop in for a quick treatment before, during or after their work, causing minimal disruption to their routine. How long is the treatment effective for you ask? On average, patients remain clear for at least eight weeks (some even longer), and experience only mild recurrence of symptoms for a further two to three months, making UVB treatment a worthwhile time investment.

Most patients I know who use this form of light therapy use it during the winter months, and during the summer they enjoy the outdoors, especially the sun and surf. Spending time at the beach and going swimming in salt water regularly is one of the best things you can do if you have psoriasis. Regardless of whether you use UVA, UVB therapy or enjoy being in the sun, bear in mind that phototherapy ages your skin and may eventually cause skin cancer, so it should not be continued indefinitely.

Systemic Treatments

Oral medications are usually reserved for those who have severe forms of psoriasis (more than 20 percent of the body covered). Powerful drugs are prescribed for those who complain to their doctor about a significantly reduced quality of life, for example when serious psoriasis of the palms or soles of the feet prevents a person from living a normal life.

They are also given to those with psoriatic arthritis, and these make up about 10 to 15 percent of patients who have been diagnosed as having psoriasis. These are powerful synthetic agents that reduce the dramatically accelerated cellular reproduction of the skin found in psoriasis. These drugs are prescribed either as pills, or as a subcutaneous injection into the muscle, and they are commonly used in combination with either the topical therapies or UV treatment, especially when a psoriasis patient does not respond to a single type of treatment.

The most common forms of systemic treatments for psoriasis are methotrexate, cyclosporine and retinoids. While these drugs can provide considerable benefits in clearing chronic psoriasis, this action comes at a huge cost of producing both acute as well as chronic side effects. I have had many psoriasis patients over the years see me who wanted to come off these medications due to the side effects. The side effects occurred either shortly after starting therapy (acute side effects) or appeared only after prolonged usage (chronic side effects).

Some patients believe that if they stay on a drug for several years and then developed side effects, that these are not linked to the drug, but are in fact "another disease" that needs treating with yet another drug. And so the pharmaceutical merry-go-round continues. When you take any of these powerful drugs, you need regular check-ups with your doctor, including blood tests, blood pressure, etc.

1. Methotrexate

Methotrexate is a drug initially developed to treat different kinds of cancer (chemotherapy) and is prescribed by your doctor to treat moderate or severe types of psoriasis, it has proven to be effective in psoriatic arthritis, erythrodermic, pustular, as well as severe plaque psoriasis. It is a very potent drug and can be very toxic indeed, particularly if take for too long. The dosage is generally once per week for three months.

Methotrexate works by reducing the rapid turnover of cells, and you will recall that the underlying process in psoriasis is the production of rapidly growing skin cells producing thick, scaling lesions. The problem is that methotrexate does not just discriminate and target the skin cells; it also suppresses the production and division of many different kinds of cells in the body, including healing cells along with targeted cells. Anybody who takes a cytotoxic drug must abstain from alcohol and most certainly avoid conception while taking it.

This drug is the enemy of folic acid, a type of B Vitamin responsible for keeping rapidly dividing and growing cells healthy. It is also a powerful impediment to the enzymes necessary for DNA synthesis.

Methotrexate also has an anti-inflammatory effect on white blood cells (T-cells), which are important in the development of psoriatic lesions. By suppressing the immune system, you suppress an important underlying mechanism that develops psoriatic lesions. The only problem is you leave yourself wide open for countless different kinds of infections and immune dysfunctions. In my opinion, the cost of this kind of therapy is just too great long-term, the disadvantages outweigh the benefits.

If you are going to take methotrexate, be sure to take it for the shortest possible time and only under the supervision of your doctor. And more importantly, before you even contemplate taking methotrexate, consider that while these cytotoxic ("cell toxic") drugs are no doubt very effective, their potential side effects are chronic damage to the blood-forming organs such as the liver and the kidneys, and because the proper functioning of these vital organs is critical to beautiful skin, first determine if your liver and kidneys can actually cope on this drug for any length of time.

Your doctor should be asking you if you have any problems with your liver or kidneys before even thinking about this drug. Do you drink alcohol regularly and are considering methotrexate? You are really silly if you are seriously contemplating drinking even casually while on this drug. The reason I'm saying this is because the long-term consequence of methotrexate is cirrhosis of the liver. It appears that patients who are at the highest risk of liver cirrhosis are:

- Those who are obese
- Those who drink alcohol while taking methotrexate
- Diabetic patients
- Long-term methotrexate user

Good Tip: Monitor Your Blood Tests On A Spreadsheet

By having very regular blood tests undertaken when on a cytotoxic drug, (weekly the first month, monthly the first three months, then three-monthly); you may want to plot your liver and kidney function test results on a spreadsheet (Excel spreadsheet) along with the dosages of the drug/s you are taking. That way you will be able to track your level of liver enzymes and kidney function, and thereby establish if there is any underlying drug-based cause of any unwanted side effects.

I can't recommend this approach highly enough. Take your own psoriasis health-care into your own hands. Your doctor has good intentions but is unable to make the time to do this for you. Don't forget to print out the spreadsheet (landscape view is best) so your doctor will be able to see how things are tracking over a prolonged period of time. Clever approach.

Regular blood work is critical if you take cytotoxic drugs, it allows your doctor to adjust the dosages accordingly (or to discontinue altogether) and will help in the early detection of any signs of injury or illness to your blood cells, liver and kidneys.

Drugs that interact and should not be taken with methotrexate include Penicillin and Trimethoprim, NSAIDS, (Aspirin, Ibuprofen, Paracetamol, etc.), Barbiturates, Triamterene (diuretic), Pyimethamine (anti-protozoan drug),

Methotrexate Side Effects

- Common side effects include loss of appetite, nausea, anemia and fatigue.
- Short-term side effects include mouth blistering, sun sensitivity, vomiting, symptoms of an infection (sore throat, fever, cough), headaches, easy bruising, and diarrhea.
- Long-term side effects include cirrhosis of the liver, lung toxicity, kidney toxicity, damage to your bone marrow (leukemia).

2. Cyclosporine

Cyclosporine is usually prescribed in other treatments like topical therapies (creams and ointments), UV light (phototherapy) and other oral systemic treatments like methotrexate and retinoids fail. This drug works by inhibiting the activation of T-lymphocytes, white blood cells that are responsible for making the body hypersensitive and found in large amounts in the skin of those with psoriasis.

Just like methotrexate, this drug has strong side effects, but in this case it is the kidneys and blood pressure that are adversely affected.

Drugs that interact with cyclosporine include NSAIDS (aspirin, paracetamol, ibuprofen, etc.), trimethoprim, immunosuppressive drugs (tacrolimus, melphalan), oral contraceptives, warfarin, St. John's Wort, grapefruit and grapefruit juice.

Reasons not to take cyclosporine include:

- Poor or decreased kidney function
- High blood pressure
- Take any drugs that interact with cyclosporine (doctor should know)
- If you have any active infection
- If you have HIV or AIDS
- If you are pregnant or are nursing
- If you can't have regular blood tests for any reason

Common side effects of cyclosporine include abnormal kidney functioning, high blood pressure, tremors, headaches, numbness/tingling, excessive hair growth, enlargement of gums in mouth, nausea, abdominal pains, diarrhea, muscle pains, vomiting, joint pains, increased cholesterol levels, higher risk of cancer.

Of particular concern is the higher risk of lymphoma and skin cancers, especially in those who have taken UV (phototherapy) prior to cyclosporine.

Systemic Treatments – Oral Retinoids

Acitretin

Retinoids are synthetic (man made) drugs derived from Vitamin A. There are two kinds of retinoids, isotretinoin and acitretin. Isotretinoin contains an ingredient related to Vitamin A, and is used primarily to treat acne. I've found a link with isotretinoin and ulcerative colitis, amongst other side effects.

Acitretin helps to slow the rapid growth of skin cells, thereby reducing the redness, thickness and scaling found in the skin of those who have psoriasis.

Acitretin is not unlike isotretinoin, but is prescribed by dermatologists primarily for psoriasis; it results in slow improvements over a period of several months and is targeted treatment for moderate to severe psoriasis that has failed to respond to topical treatments and phototherapy. Some patients may notice a temporary worsening of their condition before any improvements are noticed. Sometimes this drug will be used in combination with topical corticosteroids or calcipotriol.

This drug is well known to cause birth defects if given to pregnant women, so don't be surprised if you are a female and your doctor requests a pregnancy test first. Pregnancy must be strictly avoided whilst on acitretin and for at least 2 years afterwards because it may cause birth deformities. Your doctor will also want complete blood tests performed, including kidney and liver function tests as well as a fasting blood lipid test to determine your cholesterol and triglyceride levels before prescribing this drug.

There are many precautions around taking this drug, especially if you are a female, and the risk of side effects is significantly increased if you drink any alcohol, or take any minocycline, doxycycline, or tetracycline (antibiotics), methotrexate, cyclosporine, or dietary supplements like St. John's Wort or real Vitamin A. Check with your doctor, because this not the complete list. The drug guide I was studying also mentioned not to have any cosmetic procedures performed on you skin while taking acitretin, because retinoids can increase your chance of scarring or skin inflammation.

Sun safety tips if you do take acitretin.

- Wear protective clothing; especially long sleeves and a wide-brimmed hat.
- Use a broad-spectrum sunscreen with a high SPF rating.
- Look for the shade; don't spend too much time in the sun!
- Avoid peak exposure, the sun is strongest between 10 A.M. and 3.00 P.M.

Reasons you would not want to take acitretin

- You are pregnant or planning a pregnancy
- Nursing women
- Not wanting to use birth control
- Experiencing any liver or kidney health issues
- Experiencing moderate or high cholesterol/triglyceride elevation
- Experiencing leucopenia (low white blood cells)

Side effects of acitretin include chapped or dry lips, peeling palms and soles, thinning hair or hair loss, muscle pains, nose bleeds, dry mouth, dry or irritated eyes, pain

behind the eyes or blurred vision, headaches, vomiting. Stop the drug at once and contact your doctor if you experience any of these.

Other Systemic Drug Treatments For Psoriasis

There are many other systemic drug treatments available, here are but a few.

Hydroxyurea

Hydroxyurea (hydroxycarbamide) is a cytotoxic medicine more often used in the management of certain types of cancer.

Mycophenolate mofetil

Mycophenolate is an immune suppressive agent occasionally used for the management of severe psoriasis.

Tioguanine

Tioguanine (thioguanine) is rarely used for the management of severe psoriasis.

Fumaric acid esters

Fumaric acid esters are under investigation for the treatment of psoriasis, but are not yet available in many countries.

Sulfasalazine

Psoriasis sometimes responds well to oral sulfasalazine, but it is not effective for the majority of treated patients. This drug is more commonly used in patients with ulcerative colitis.

Biologic Therapies

A new class of drugs is rapidly advancing and may one day overtake the more toxic systemic forms of psoriasis drugs. These drugs are more targeted and focus on the intervening in the key steps that actually lead to the development of psoriatic lesions.

Biotechnology companies have been developing novel new "designer" biologic drugs that specific abnormalities of a psoriasis patient's immune dysfunction.

Some of these drugs include Etanercept, Infliximab, Adalimumab, and Ustekinumab. Because these drugs are relatively new, their long-term side effects are still unknown, something you should always keep in mind, regardless of what your doctor or dermatologist may tell you. These drugs are still too new to understand their long-term impact on your immune system, and consequently your health. There are several ways that this class of psoriasis drugs differs from the traditional systemic drugs:

- They are often made from naturally occurring substances. Conventional drugs are made by combining one or more chemicals, and made into a tablet or capsule. Biologic therapies are often injected drugs that are made from enzymes, proteins, antibodies or nucleic acids (e.g., DNA). Insulin is a hormone administered to a patient with Type 1 Diabetes, and is a form of biologic therapy.
- Biologic therapies for psoriasis are highly targeted and specifically designed (hence the term designer drug) to work against psoriasis.

The systemic drugs currently used were originally designed for different purposes, e.g., methotrexate was designed for cancer (chemotherapy) and cyclosporine was originally designed as an anti-rejection drug to be used with transplants.

Psoriatic biological therapies are made using recombinant technology to counter highly specific key steps in the imbalance occurring in the immune system (the auto-immune response) of the psoriatic, rather than acting far less specifically on the immune system. This targeted action should result in hopefully less side effects, but it remains to be seen.

- Biological therapies are not given by mouth, because they are made from delicate proteins, enzymes or DNA, they would be quickly destroyed in the stomach. Unlike systemic therapies, biologic therapies are delivered by way of an injection into the muscle or under the skin, or intravenously.
- Biological drugs are very expensive to make, they are cleverly designed using the latest technology. They have been extensively tested and undergone years of clinical trials, all at a great expense to the companies who have invested in them. For this reason, they are rarely used except in very special circumstances currently. Their price and availability will improve over time no doubt, as even newer and more advanced forms of drugs will be created.

Disease Modifying Medications for Psoriatic Arthritis

Patients who experience progressive joint destruction in spite of NSAIDs are deemed to be by their rheumatologist or medical specialist to be candidates for more aggressive disease-modifying medications. Disease-modifying medications are regarded by your doctor as being important to prevent progressive joint destruction and deformity. Here is a list of the most likely drugs that may well be prescribed if you have psoriatic arthritis.

- **Chemotherapy agents.** Methotrexate is the drug of choice with pain in autoimmune arthritis. I see patients with auto-immune joint problems who have conditions such as lupus, scleroderma, rheumatoid arthritis, psoriatic arthritis and ankylosing spondylitis take methotrexate and steroidal drugs and may "top-up" these drugs with pain relief NSAIDs (Non-Steroidal Anti-Inflammatory Drugs) such as diclofenac, ibuprofen, paracetamol/codeine tablets. These medications include methotrexate, are used orally or can be given by injection on a weekly basis for psoriatic arthritis. Methotrexate is a very strong drug and causes many undesirable effects when given long-term. Methotrexate can cause bone-marrow suppression as well as liver damage with long-term use, and regular monitoring of full blood testing, including liver function should be performed 3 or 6 monthly during therapy with methotrexate.
- **Antimalarial medication** such as hydroxychloroquine (Plaquenil) is also used for persistent psoriatic arthritis. The known side effects include injury to the retina of the eye, and regular 3 or 6 monthly ophthalmologist examinations are suggested while using Plaquenil.
- **Injectable gold** (Solganal) and oral gold have potential side effects including bone-marrow suppression which can lead to anemia and low white blood counts and cause adverse kidney effects, including the loss of protein or blood in the urine. Gold injections have of late become obsolete since methotrexate has become more popular.
- **Sulfasalazine** is an oral sulfa-related medicine that has also been helpful in some patients with persistent psoriatic arthritis. Traditionally, Azulfidine has been an important agent in the treatment of ulcerative and Crohn's colitis. It should be taken with food, as it too can cause gastrointestinal upset.
- **TNF-blockers.** These are biologic agents or designer drugs, and I've already mentioned these previously because they are also used for severe psoriasis that

does not respond to systemic drugs like methotrexate or cyclosporine. Medications that block the chemical known as tumor necrosis factor (TNF) are another treatment option for severe cases. The TNF-blockers etanercept (Enbrel), infliximab (Remicade), and adalimumab (Humira) can be very effective for severe psoriatic arthritis and they can significantly improve or eradicate both the psoriasis and the arthritis as well as stop progressive joint damage.

- **Corticosteroids** are potent anti-inflammatory agents; there are mild forms and much stronger forms of steroids at your doctor's disposal. Corticosteroids can be given by mouth (such as prednisone) or injected (cortisone) directly into the joints to reduce inflammation. They can have side effects, especially with long-term use. These include thinning of the skin, easy bruising, infections, diabetes, osteoporosis and, rarely, bone death (necrosis) of the hips and knees.

- **Good Tip: Liver Cleansing After Drug Treatment**

Here are a few good tips for clearing any stubborn drug residues from your liver after you have received a pharmaceutical drug from your doctor. I routinely see many patients who have never felt quite well since taking a drug. How do you know if your liver is suffering?

- Here are the telltale signs that your liver needs a tune-up:
 - - Fogginess in the head, feeling spaced out.
 - - Recurring headaches or a dull feeling in the head.
 - - Feeling sick all over, queasiness, and nausea or not right in the digestion.
 - - Poor or a listless appetite, could feel like being hung-over.
 - - Poor tolerance to alcohol, fatty foods, chips or spicy foods.
 - - Fatigued, tired, lack of stamina, prefer to stay in bed.
 - - Hard to get up in the morning, unmotivated, anxiety and easily angered.
 - - Drugs don't work anymore in spite of high dosages.
- Try this approach: follow a liver friendly diet, eat freshly grated beetroot and carrot combined, fresh garlic, partially steamed broccoli, cauliflower, Brussels sprouts, radish, Chinese vegetables such as Bok choy, artichoke hearts, capers, olives, fresh lettuce. Drink roasted dandelion root coffee. Take a mixture like Swedish Bitters three times daily before meals and in particular take aged Kyolic Garlic as a dietary supplement at least three times daily. Be sure to drink NO alcohol for at least a month or two during liver treatment.

- **Still feeling unwell after a drug treatment?**

- Then be sure to follow the 3-stage detoxification program I have outlined in the booklet entitled - Psoriasis, Internal Cleansing And Detox.

Can Pharmaceutical Drugs Be The Cause Of My Psoriasis?

The tragedy I have found is that a patient can sometimes experience many of the typical signs and symptoms of psoriasis, like itchy, dry, or cracked skin. There may even be patches of plaque forming that look just like psoriasis. This "mystery illness" may even lead the patient down the road of taking an over the counter drug; they may visit a doctor or chemist and buy a cream, ointment or a tablet on the advice of the pharmacist in the belief that they have developed a new illness, one that affects their skin and looks and behaves a lot like psoriasis. What this patient may be unaware of is that he or she may well have in fact a drug-induced (iatrogenic) case of psoriasis. Yes, it actually happens, you can develop psoriasis from taking a pharmaceutical drug.

In some situations it can be tricky for psoriasis patients to take pharmaceutical drugs for other unrelated conditions, such as high blood pressure. It is most unfortunate that some people who actually have pre existing psoriasis may face a Catch-22 situation, when a drug they take for another condition may cause their red, scaly or itchy rashes to get far worse, or may even bring on a case of psoriasis for the very first time.

Certain drugs, particularly those for bipolar disorder, high blood pressure, and hepatitis, can provoke psoriasis for reasons doctors don't yet "fully understand", according to a leading medical website I just viewed. Well it's pretty obvious to me what is occurring, the drug is causing a degree of liver and/or kidney toxicity, something Dr. John Pagano (*Healing Psoriasis*) discovered many years ago. Whenever a patient cleans up his or her diet and lifestyle, and undertakes a good detoxification program, their psoriasis almost disappears. What doctors believe is that certain medications trigger or worsen psoriasis outbreaks in those who are genetically predisposed.

Here is a quote from The Journal of Clinical and Aesthetic Dermatology ²

"Psoriasis is a commonly encountered dermatosis with a variety of internal and external paradoxical factors contributing to the clinical course of the disease.

There are several drugs described in the literature that have been associated with the initiation, exacerbation, and aggravation of psoriasis. Understanding the pathophysiology can provide clues to treatment and management of drug-induced and drug-aggravated psoriasis, which may be indistinguishable from idiopathic psoriasis. The clinical manifestations of drug-associated psoriasis can range from plaque-type psoriasis to severe erythroderma, thus warranting astute and sustained clinical observation".

Psoriasis Patients May Take Other Drugs

Do you have psoriasis and another medical condition as well? Analysis of individuals with chronic psoriasis has revealed some interesting statistics². Over one quarter of those with psoriasis have been diagnosed with high blood pressure (28.2%), diabetes (10.5%) and high cholesterol levels (12.5%). Bearing this in mind, many patients with psoriasis can be on multi-drug regimens; therefore a careful analysis of the various medications that can interact with each other as well as exacerbate psoriasis is very prudent.

Pharmaceutical drugs have several different ways in which they can affect a person's susceptibility of developing psoriasis, including:

- Stimulate the development of psoriasis in susceptible or in non-susceptible individuals.
- Exacerbate pre-existing psoriatic skin lesions.
- Induce lesions or lesions different to those experienced by psoriasis patients.
- Developing drug-resistant psoriatic lesions.

Sometimes a psoriasis patient may develop nail or scalp psoriasis after commencing a drug, or other psoriatic symptoms she may not have previously experienced. The drugs that appear to have the strongest casual relationship with psoriasis are the following:

- NSAIDs (Non-Steroidal Anti-Inflammatory Drugs) such as aspirin, paracetamol, ibuprofen, etc.
- Beta-blockers (blood-pressure)
- Lithium (bipolar depression)
- Tetracyclines (antibiotics)
- Hydroxychloroquine (synthetic antimalarial drugs)

The Most Common Drugs Implicated In Causing Psoriasis:

- **NSAIDs.** (Non-Steroidal Anti-Inflammatory Drugs) such as aspirin, paracetamol, ibuprofen, etc. I have seen many patients over the years that have come into my clinic complaining of psoriasis, who have previously not had psoriasis – until they started taking a NSAID drug regularly. Maybe this is you? Can you relate to having psoriasis since taking a common drug like Tylenol or Advil? Stop this drug and look for an alternative.
- **Beta-Blockers.** These are drugs commonly prescribed for high blood pressure and have been extensively studied, and have been found to exacerbate psoriasis patients in a quarter to a third of patients who take them. If you are unsure if your anti-hypertensive drugs are Beta-blockers, go to Google and do an online search. Psoriatic lesions or eruptions will appear in those susceptible from 1 to 18 months after the initiation of Beta-blocker therapy, and they have even been implicated in those who have never had psoriasis before. Many different kinds of skin rashes have been implicated with this class of drug so check it out carefully. Beta-blocker provoked psoriasis improves upon discontinuation of medication, but usually does not completely resolve.
- **Lithium.** Lithium is a drug used to control psychiatric illnesses like bipolar, also commonly termed manic depression. Lithium can provoke or aggravate psoriasis in almost half of psoriasis patients who take it. An interesting study conducted in 2003 revealed that when patients were given omega-3 at the same time, this reaction was diminished.
- **Antibiotics.** Drugs such as tetracycline, minocycline and amoxicillin and various other antibiotic drugs are known to cause skin reactions, ranging from mild to most severe, even anaphylactic skin reactions. Some antibiotics are known to cause photosensitization, which may result in predisposed patients with psoriasis to experience exacerbation through the

“Koebner phenomenon” secondary to sun exposure. In one study, investigators reported that 4 percent of patients experienced exacerbation of psoriasis as a consequence of antibiotic use. It has also been suggested that tetracyclines should be avoided in patients with clinical evidence of psoriasis, as well as in healthy individuals with a genetic predisposition for psoriasis.

- **Anti Malarial Drugs.** These drugs are used not only to treat malaria, but are also commonly prescribed in autoimmune conditions such as psoriasis, lupus and rheumatoid arthritis. Many have been known to cause acute flare-ups in those with psoriasis in as little as a few weeks after commencement of the drug.

Good advice is to use as little of the medicine as you can get away with preferably, or ask your doctor if you can try an alternative drug. There is little point remaining on any drug that causes strong or uncomfortable side effects. Be sure to consult with your doctor or specialist before you reduce or consider discontinuation of any drug, it is the right and responsible thing to do.

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