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# Laser Treatments: a Ray of Hope for Psoriasis Sufferers

According to the American Academy of Dermatology, approximately 7.5 million Americans suffer with psoriasis. Although it can affect people of all ages, it is more common among adults. Laser treatment is one of the newer forms of psoriasis therapy. And according to research, it can clear up the skin by an average 90 percent.

Psoriasis is considered a serious medical condition because in those who have the condition, there appears to be an increased incidence of obesity, type 2 diabetes, metabolic syndrome, depression, lymphoma, and heart disease. It also places substantial psychological and emotional burden on people, both in having to deal with the condition, and in the cosmetically displeasing appearance of the skin.

But there are ways to live with psoriasis and its unique challenges. If you're affected, there is a range of effective treatment available and in particular, laser treatment may be something you'd be interested to try.

## What Is Psoriasis?

Psoriasis is a chronic inflammatory condition of the skin that causes hyper production of skin cells. It can also affect the joints in some people, making them sore and swollen. This type of psoriasis is called psoriatic arthritis, which affects around 40 percent of psoriasis sufferers. Psoriasis can also affect the fingernails, toenails, and inside of the mouth, though these symptoms are rarer.

The exact cause of psoriasis is unknown, but since the condition can be triggered by diet, stress, medications, skin injury, infection and other factors, researchers know the immune system is largely involved. Therefore, psoriasis is generally believed to be a genetic condition with autoimmune-related origins.

According to the Psoriasis Foundation, scientists suggest 10 percent of people inherit the genes that can eventually lead to the development of psoriasis. But only 2 to 3 percent of people actually develop the condition.

The most common symptoms of psoriasis are dry, raised, red patches of skin covered with silvery scales. These are called plaques. These plaques can appear anywhere on the body, but the most common places are the knees, elbows, and scalp.

Psoriasis plaques can vary in size and severity. For some, these plaques are just small spots. For others they are large, scaling plaques that can even seep and bleed, which can be very uncomfortable and even painful. Approximately 80 percent of those affected by psoriasis have mild to moderate symptoms, while 20 percent experience moderate to severe symptoms, where plaques affect more than 5 percent of their body.

If you suspect you have psoriasis, a board-certified dermatologist is the best person to consult to evaluate your skin and help you determine which treatment options are best suited for you.

## How Is Psoriasis Treated?

There are a range of different treatment options, including:

- Moisturizers
- Exposure to natural sunlight
- Coal tar preparations
- Salicylic acid
- Tazarotene
- Anthralin
- Dithranol
- Corticosteroid creams or ointments
- Vitamin D preparations
- Oral medications (tablets or pills)
- Injected medications
- Ultraviolet light therapy
- Laser therapy

While ultraviolet light therapy has been used for quite some time, "the XTRAC excimer laser is our newest treatment weapon to fight mild to severe cases of plaque psoriasis," says dermatologist **Dr. Todd Minars of Hollywood, Florida.** "This treatment can also be used to effectively treat vitiligo and small patches of eczema."

# **Psoriasis Laser Treatment Explained**

The XTRAC laser is a device approved by the Food and Drug Administration (FDA) for treating chronic, localized psoriasis plaques.

"Excimer lasers like the XTRAC deliver ultraviolet light by emitting a very precise, concentrated band of ultraviolet light B (UVB) to localized areas of psoriasis plaques on the body, plaques that are roughly the size of your palm, or smaller," informs **Dr. Minars.** 

The excimer lasers allow different strengths of UVB administration, dependent on where the psoriasis is located on the body. Choosing a selected dose wavelength, the dermatologist administering the treatment will hold a laser hand piece near the skin to target the sites with UVB light.

According to **Dr. Minars**, psoriasis laser treatment is not at all painful. A session averages between 5 to 15 minutes, depending on how many areas need treatment.

Generally, patients will require an average of 10 to 20 treatment sessions, 2 to 3 times per week. The average treatment time required to clear plaques is around 3 to 4 months.

# Excimer Laser vs. Ultraviolet Light Therapy

There are several reasons laser treatment may be preferable for psoriasis, in some people.

Because the laser applies stronger doses of light and has the ability to reach deeper into affected skin, laser treatment requires fewer sessions to <u>traditional phototherapy</u>. It's also good for targeting those hard to treat areas such as the elbows, knees, palms of the hands, soles of the feet, and scalp.

Even though psoriasis can affect the entire body, whole body use of ultraviolet light therapy is often reserved for more severe cases. Because the treatment is not focused solely on the affected skin cells, it may cause negative effects to healthy skin cells, such as skin cancer. Due to the nature of psoriasis plaques, they have a higher resistance to the UVB therapy, whereas non affected skin may be subject to damage from excessive UVB exposure.

This is one of the main reasons devices such as the excimer laser were developed. "Because the laser's focus is so exact, we can avoid unnecessarily exposing the surrounding healthy skin to UVB rays," says **Dr. Minars**. Laser treatment also exposes the patient to less ultraviolet light overall, which reduces the risk of skin damage and skin cancer.

However, laser treatment is best suited to patients with mild to moderate psoriasis. "For more severe outbreaks of plaque psoriasis covering large areas of the body, we would use standard ultraviolet light phototherapy or biologic drugs as our first line of treatment," informs **Dr. Minars**. "It would be more time efficient due to the small spot size of the XTRAC. If plaques remain after a series of treatments, we would then use the XTRAC to clear them up."

## Are Laser Treatment for Psoriasis Effective?

Since the excimer device is FDA approved, there are several clinical studies that prove its efficacy.

In a study published in the Journal of Dermatological Treatment, participants with psoriasis who had less than 10 percent body surface area covered in plaques were given XTRAC excimer laser treatment on all psoriasis sites across their body for a period of 12 weeks.

For the duration of the study the participants were required to stop using topical treatments such as corticosteroids, vitamin D analogues, or coal tar preparations. There were two groups, one receiving standard-dose treatment with a starting UVB dose of 70 percent, the second group receiving medium-dose treatment with a starting UVB dose of 200 percent.

The results showed there was no difference between the standard-dose or medium-dose treatments.

- 37.5 percent of participants had completely cleared psoriasis plaques
- 43.8 percent of participants had 75 percent clearance of plaques

A study published in the <u>British Journal of Dermatology</u> showed that 85.3 percent of people had a 90 percent or higher improvement after 13 sessions of laser treatment.

And yet another study published in the Journal of the American Academy of Dermatology showed that 50 percent of patients showed a 90 percent improvement in less than 10 treatments. They were having laser treatment twice weekly.

## How Much Does It Cost?

Psoriasis laser treatment is covered by most health insurance companies so before starting your treatment, your dermatologist will usually check your coverage. Otherwise it can get rather expensive, as the average cost per session is \$150.

Since several sessions are required, the total cost can amount to \$1,500 or more.

## Are There Any Side Effects?

Dr. Minars informs that the side effects can include a sunburn or even a blister.

Another side effect may be hyperpigmentation, which is usually temporary but can sometimes take weeks or even months to fade.

Patients should also expect that the knees and elbows will be more difficult to clear and may require more sessions compared to other areas of the body. And the need to have further treatment in future is to be expected, as relapse from treatment is common, ranging from one month to one year.

Psoriasis laser treatment is only available through dermatologist offices so speak to your dermatologist, they are the best person to advise about the right treatment options for your individual skin condition.

https://www.zwivel.com/blog/laser-treatments-for-psoriasis/