

Acne ALA-PDT Actinic Keratosis ALA-PDT Photorejuvenation

Simply stated, ALA-PDT removes sun damaged pre-cancerous skin cells while improving fine lines and blotchy pigment. This treatment also has the unique ability to minimize pores and reduce oil glands effectively treating stubborn acne vulgaris and acne rosacea while improving the appearance of some acne scars. PDT photorejuvenation is also known as Power PhotoFacial or Super PhotoFacial because the results are similar to three to five PhotoFacial treatments.

Benefits of Photodynamic Therapy

- PDT is a very effective treatment for actinic keratosis, which can eventually turn into skin cancer. Treatment of AKs is more challenging when they are diffuse over a large area. Topical chemotherapy may be used in such cases, but can result in months of unsightly crusting.
- Photorejuvenation has been effective in the treatment of rosacea. Adding Levulan to the treatment increases the efficacy and reduces the total number of treatments required.
- Most patients notice an improvement in skin texture, reduced pigmentation from sun damage, fewer fine lines and an overall more youthful appearance.
- Treatments using PDT for acne also yield excellent results by shrinking the sebaceous glands and destroying the bacteria that can cause acne.

Who is a good candidate for PDT?

Patients with diffuse actinic keratoses, moderate to severe rosacea, moderate to severe sun damage, textural irregularities, and/or acne are good candidates for PDT with Levulan.

Who is not a good candidate for PDT?

If you are pregnant, have been on isotretinoin within 3 months, or have an active cold sore you should not have this procedure. If you are taking aspirin or blood thinners, you may experience bruising that can take up to two weeks to resolve. If you are tanned or have recently been exposed to the sun in the area you are having treated, you may be more susceptible to potential side effects such as blisters or crusts and/or your treatment may need to be reduced in intensity or postponed until the tan fades. In addition, patients with pacemakers or internal defibrillators should not have this procedure.

How much improvement can I expect?

Patients with severe sun damaged skin manifested by actinic keratosis, texture, and tone changes including mottled pigmentation and skin laxity may see excellent results. You may also see improvement of large pores and pitted acne scars. Active acne can be dramatically reduced.

How many treatments are necessary?

Achieving maximum improvement is greatly dependent on the treatment plan you and Dr. Day select. With a more aggressive protocol just one or two treatments are usually required. If you select a less aggressive approach it may require two to five treatments. Treatments are spaced two to five weeks apart. Additional treatments may be done at periodic intervals in the future to maintain the rejuvenated appearance of the skin.

Disadvantages and risks of PDT

Every medical procedure involves certain disadvantages and risks and it is important that you understand the disadvantages and risks involved in PDT. Depending on the treatment protocol (how mild or aggressive the treatment is), you may be red and have some swelling and peeling for three to seven days. Darker pigment areas can become darker during this time, but peel off during the peeling process. The majority of patients do not experience complications. It is important that your decision to proceed with PDT is based upon consideration of the alternatives to treatments as well as the risks, benefits, and costs of the proposed plan. Your nurse or clinician will make sure that you fully understand the alternatives, benefits, risks, potential complications, and expected outcomes of this treatment.

Redness and Swelling

Depending on your desired outcome and length of Levulan incubation, the short-term immediate risks include redness that may last from a few days to several days. Swelling is common with more aggressive treatments and usually starts on day one and is over by day three. Once the treatment has been completed you will be sent home with special topical products to moisturize and enhance healing.

Peeling

Peeling and/or superficial crusting is an anticipated side effect of PDT treatment and generally occurs between days three to six post treatment. Most patients are excited about the peeling process because they begin to see the new skin.

Bruising

Bruising is uncommon, although the risk increases if you take aspirin products or are on blood thinners. Bruises are temporary and resolve in one to two weeks.

Discomfort

During a photorejuvenation treatment that utilizes a laser or IPL device, you may experience some discomfort during the procedure likened to the snapping of a rubber band. If the best light treatment choice for you is a visible light source, you may notice your face getting warmer the longer you are exposed to the light source. The sensation of heat has to do with the incubation time of the Levulan. A longer incubation period (how long the Levulan is on prior to light exposure) yields a more aggressive treatment and the resulting warm sensation while in the light source.

Skin wounds, infection, and scarring

Uncommonly, a skin wound such as superficial blisters and scabs can occur, which heal within two to fourteen days. Use of antibiotic ointment on a regular basis usually results in uneventful healing. There is a less than 1% possibility of a skin wound leaving behind a permanent scar. It is also rare for an infection to occur since the skin is usually not broken.

Hypo and Hyper pigmentation

Another risk is a possibility of hypo (too little) or hyper (too much) pigmentation that is very uncommon. This can correct naturally over a few weeks or is usually treatable with prescription creams, chemical peels, or further laser treatments. There is a less than 1% possibility that this could be permanent. There is an increased risk of this with tanned or naturally dark skin. You may need extra treatments than those required of others if your skin is dark in order to be more conservative (gentler with initial and subsequent treatments) with your treatment due to this increased risk. It is also important that you let any tanning lotions fade and do not seek artificial tanning treatments for three to four weeks prior to the procedure.

Multiple and maintenance treatments

Sometimes more than one treatment may be needed to achieve desired results. Occasionally, all actinic keratoses may not fully respond to laser treatment with ALA and additional treatments may be necessary. Subsequent AKs may develop over time and future treatments may be needed. Acne and rosacea are chronic conditions and maintenance treatments may be necessary to remain in remission. Many patients like the rejuvenated appearance and continued improvement they achieve over a series of treatments.

Patient Dissatisfaction

You may be disappointed in the outcome as not everybody achieves every bit of improvement they desire. Although the vast majority of patients are happy with their results, medicine is not an exact science and results are variable. We cannot provide you with any guarantee of your final results.

Post Treatment Care

You should use the skin care regimen that your consultant has provided for you. It is important to avoid sun exposure for the first two days following your treatment and then try to avoid prolonged sun exposure. You may not go in a tanning booth at any time before or during PDT treatments. Doing so will greatly increase your risk of a side effect. If there is any blistering or breakage of the skin after the procedure, you should use an antibiotic ointment at least two times per day to keep the area moist. Please call the office immediately if these are not minimal, localized, or superficial. Please review your home care instruction sheet that details what you should expect on a daily basis.

Financial Responsibility

While photodynamic therapy is a medical treatment, it is also a cosmetic treatment for acne, rosacea, and skin rejuvenation. You will therefore be responsible for payment at the time of service.

Photodynamic Laser Treatments for Acne

There are many types of acne. The most common is called acne vulgaris.

Controlling Acne

If you have acne that is not responding to medications, or if you are unable to tolerate oral or topical medications for acne photodynamic therapy with Levulan ALA may be right for you. Combined with a light source, Levulan ALA kills the p.acnes bacteria in your skin, decreases sebum (oil) production and provides long term improvement of acne.

About the Procedure

The procedure is called Photodynamic Therapy (PDT). Whether treating acne or sun damage, the process is very similar. The treatment utilizes a drug, called Levulan ALA, and a light source that can kill the p.acnes bacteria in your skin. Levulan has been used in the skin for decades to treat severe sun damage and skin cancers in adults.

The product, called Kerastick, is applied topically (directly on the skin) and allowed to incubate painlessly for approximately 1 hour. A light or laser source is then used to "photo-activate" the Levulan ALA and thus directly affect the hair follicle and sebaceous glands.

Prior to the procedure, your skin will be prepped, ensuring skin is clean and

free of all makeup, moisturizers and sunscreens. During the procedure, the Blu-U light source is used. It is important to note that there are no ultraviolet rays in this light source.

The treatment itself takes approximately 10 minutes. You may feel mild stinging or burning when the skin is exposed to the light or laser source. Afterwards there is no, or minimal pain. You should expect mild to moderate redness and scaling that can persist from 0-5 days, like a mild sunburn.

Patients usually require at least 3 treatments spaced at 3 week intervals to see significant improvement (80% or greater) for months at a time. Depending on the severity of the condition, the number and strength of the required treatments will vary. After achieving long term reduction in acne lesions, infrequent treatments can be done to maintain long term efficacy. Unfortunately, as of now medical insurances do not cover this form of acne treatment.

