

## **ALA-PDT THERAPY FOR ACNE AND SUN DAMAGED SKIN**

**Levulan (aminolevulinic acid )Photodynamic Therapy (PDT)** for acne is a recent advance in acne therapy. Levulan Photodynamic acne therapy involves the application of Levulan (5-aminolevulinic acid), a photosensitizing agent, which is then activated with IPL or BBL (light therapy) in the office. This results in significant improvement in moderate to severe cystic acne.

Levulan acne treatment inactivates the bacteria that trigger acne, exfoliates the skin to unclog pores, and turns off the sebaceous glands in the skin. This is exciting because sebaceous glands and oil are the basic cause of acne so it has a long lasting effect even on severe acne.

Levulan acne therapy can even work in patients who have failed Accutane. Accutane also targets the sebaceous glands but Accutane may have fairly toxic side effects. Levulan is a very safe alternative to Accutane treatment, is topical, and this office DOES NOT PRESCRIBE ACCUTANE.

### **FAQ ABOUT ACNE AND ALA-PDT THERAPY**

#### **What is ALA-PDT?**

ALA-PDT or aminolevulinic acid therapy is fast becoming one of the standard treatments for photorejuvenation, acne vulgaris, actinic keratoese (AK's), rosacea and sebaceous gland hyperplasia. ALA-PDT has become a therapy that is routinely used to enhance laser and light treatments. Decreased oily skin and pore reduction is seen in most all patients, as well as, improvements in smoothness and texture. ALA-PDT is nationally becoming a very popular procedure, producing fine results.

#### **Can acne be prevented? How is it treated?**

Acne is a fact of life for many adolescents. Approximately 90% of all adolescents and 25% of all adults experience acne at some point in their lives. In adolescents, acne breakouts are related to the natural release of androgen hormones, which occur during puberty. In adult women, acne is often related to the month menstrual cycle. Contrary to popular belief, acne is not caused by eating chocolate, greasy foods or bad hygiene. In the U.S. alone, over one billion dollars is spent on acne medications and treatments each year. In many instances, the money spent yields less than satisfactory results, is cumbersome or causes side effects. Conventional treatments include over-the-counter cleansers and lotions, prescription antibiotics, retinoids and hormonal therapies. NOW there is a NEW treatment - IPL enhanced with ALA-PDT!

#### **What is a IPL or BBL treatment, enhanced with ALA? How does it work?**

When ALA enters the skin, it becomes metabolized. The skin cells turn it into a photosensitizer called porphyrin. The sebaceous glands are the most active part of the skin for creating porphyrins and the sebaceous glands are the root cause of acne. Up until now, the only proven therapy to markedly impact the sebaceous glands was Accutane or isotretinoin. Accutane has however, numerous and fairly toxic systemic side effects so *MARTIN DERMATOLOGY* does not prescribe Accutane. ALA, however, is a very

effective and viable topical treatment alternative. IPL is a light source that stimulates the ALA to reduce the size and activity of the sebaceous oil gland and increases the protoporphyrin destruction of the bacteria. ALA-PDT also causes collagen rejuvenation which decreases pore size! IPL light treatments alone are effective for treating mild to moderate acne but it's much more effective on moderate to severe acne or cystic acne when enhanced in combination with Levulan ALA.

### **What is the treatment like?**

The face is first washed with soap and water. Second the face is mildly scrubbed down with Acetone. ALA is then painted on the entire face and the patient sits for 30-60 minutes while ALA incubates. (longer incubation is used for subsequent visits). The ALA is then washed off and the patient is treated with the light source...IPL. A sunscreen is then applied and the patient is instructed "TO AVOID DIRECT EXPOSURE TO THE SUN FOR 48 HOURS!" (That means don't even go outside to get the mail!)

### **Does it hurt or sting to get this treatment done?**

YES, many patients report stinging and mild burning sensation while having the IPL light treatment. Swelling and temporary reddening may be experienced immediately following the light treatment. This discomfort and redness may be present for 1-2 weeks. It is variable from person to person but you must be willing to tolerate the redness and crusting side effect for as long as it occurs!

### **How many treatments are required?**

The ALA-PDT / IPL protocol is usually 3 treatments with 3 weeks between each treatment.

### **How effective is ALA-PDT IPL treatments?**

The treatments are proving to be very effective providing long lasting results. Results are especially impressive when compared with conventional treatments, such as topical creams and oral antibiotics. ALA-PDT / IPL treatments are providing similar results to Accutane without the systemic side effects. Most patients who receive the treatment said they would use it again, but it may be difficult to tolerate!

### **Will my skin be blemish-free at the end of the ALA-PDT / IPL treatments?**

Though the inflammation will be gone for a majority of patients, some may experience residual redness where the inflamed blemish was located. The redness will dissipate over time.

### **Are the results from ALA-PDT/IPL treatments for acne permanent?**

No, nothing is. ALA-PDT treatments usually help control acne breakouts for 4 to 16 months; after that, an occasional touch up may be necessary. Many patients are able to control their acne with topical medications after initial ALA treatments and usually do not require future ALA maintenance.

### **Are there any side effects?**

Photosensitivity is the primary and most important side effect! It is extremely important

to be out of the sun and even indoor bright light for 2 days after the procedure and to wear a wide-brimmed hat if they are going outside after the treatment. (That means leaving the office and the ride home as well). Most 95% of the clients have no problems with minimal and tolerable erythema and peeling. 4 to 5% experience 24 hours of discomfort. 1% have what could be characterized as extreme reactions with significant exfoliation and a week of downtime. This group of patients includes those who have significant sun damaged skin and those who do NOT comply with warnings about strict sun avoidance! Skin that feels dry and itchy for several days following treatment can benefit by using moisturizers. **Stinging can be decreased by using fans and icepaks.**

**If I wear sunscreen, would that be sufficient to avoid exposure to light?**

NO! After the treatment you must stay out of strong, direct light for 48 hours. You must stay indoors as much as possible. When outdoors, wear protective clothing and wide brimmed hats to avoid sunlight. You must avoid beaches, snow and bodies of water where strong light may be reflected.

**Who can benefit by the treatment?**

Most people can benefit from treatment. ALA-PDT has proven to be very effective on mild to moderate to severe inflammatory and cystic acne. Actinic keratoses, rosacea, sebaceous gland hyperplasia, sun damaged skin, hyperpigmentation, fine lines and wrinkles, and those who wish to decrease pore size can also benefit! We will not treat 'pregnant women' and people with photosensitivity. .

**Do patients need to prepare their skin before coming in for a ALA-PDT treatment?**

Yes. The affected area should be washed with aquanil or cetaphil cleanser, then rinsed with water and dried. Women should remove makeup before treatment sessions, and should only wear oil-free make-up between appointments.

**What type of skincare is needed between ALA-PDT treatments?**

Patients daily use of a non-irritating, anti-acne cleanser such as a benzoyl peroxide wash is recommended. Patients should avoid touching or picking blemishes at all times.

- **Are ALA-PDT treatments covered by insurance?**

Usually not for acne, since the insurance company considers it “cosmetic”. In any event, if you would like to see if it is covered, we will leave that up to you. Payment in full is made prior to the treatment. Some insurance companies will pay approximately \$200.00 towards the ALA prescription.