

Comprehensive Dermatology Group

PHOTODYNAMIC THERAPY (PDT) PRE-TREATMENT INFORMATION

What is Photodynamic Therapy?

Photodynamic Therapy (PDT) is a special treatment performed with a topical photosensitizing (light sensitizing) agent called Levulan (5-aminolevulinic acid or ALA) activated with a specific wavelength of light. This is also known as “ALA/PDT treatment”. These treatments remove pre-cancerous areas and spots called actinic keratoses. Sun damage, fine lines, and blotchy pigmentation are also improved because of the positive effect of ALA/PDT. ALA/PDT treatments also have the unique ability to reduce oil glands and minimize pore size which allows for effective treatment of stubborn acne vulgaris and acne rosacea.

How is ALA/PDT Performed?

Photodynamic Treatment is done as follows: The skin is prepared by removing surface debris with an acetone wipe. The Levulan is applied to your skin and left on for 30 minutes- 2 hours depending on the area being treated. Levulan is a clear solution and painless. During this time you will remain in the office and may read or listen to your IPOD. Levulan is then activated with a specific wavelength of light generated by a machine called a BLU-U which is a U-shaped array of special lights or laser like device. This takes approx. 10-20 minutes. The Levulan targets pre-cancerous cells and sebaceous (oil) glands. Following treatment you should avoid sunlight for 48 hours.

What are the Disadvantages?

Immediately following PDT the skin feels sunburned. Cool compresses are applied. The treated areas can appear red and slightly swollen and there may be some puffiness around sensitive areas such as lips and eyes. Some peeling occurs for 2 – 7 days. Darker patches called “liver spots” can become temporarily darker and then peel off leaving normal skin in usually 7 – 10 days. Repeat treatments may be necessary depending on the severity of your sun-damage. Rarely, there are may be permanent scares or discoloration.

How Much Improvement Can I Expect?

Patients with severely sun damaged skin manifested by mottled pigmentation and actinic keratoses (pre-cancers) show in most cases dramatic improvement in their skin texture and tone. Pre-cancers dramatically diminish in number and size. Depending on the severity of the sun-damage repeat treatments may be necessary.

What are the Advantages?

1. Easier. Treatment is usually complete within one week. Side Effects are minimal, healing is rapid and usually only require 1 – 2 treatments.
2. No Scarring reported with ALA/PDT with Blu-U light.
3. Improves the whole facial treatment area. ALA/PDT creates an even color, texture and tone over the entire treatment area rather than liquid nitrogen or electric cautery which treats only one spot.
4. PDT is an optimal treatment for Actinic Keratoses because:
 - It is well tolerated with minimal side effects or down time compared to conventional treatments for actinic keratoses (pre-cancers) such as extensive use of liquid nitrogen, electric cautery, or treatments with Effudex or Carac cream.
 - Non-invasive. No needles or surgery are required.
 - Excellent cosmetic outcome. ALA/PDT actually improves the texture and color of the skin particularly in cosmetic sensitive areas such as the face.