Photodynamic Therapy

WHAT IS PHOTODYNAMIC THERAPY?

Photodynamic therapy (PDT) is a special treatment performed with a topical photosensitizing agent called Levulan (5-aminolevulinic or ALA) activated with the correct wavelength of light. This is also known as “ALA/PDT treatment”. These treatments remove sun damaged pre-cancerous zones and spots called actinic keratoses. Sun damage, fine lines, and blotchy pigmentation are also improved because of the positive effect of Levulan and the light treatment. ALA/PDT treatment also has the unique ability to minimize pores and reduce oil glands, effectively treating stubborn acne vulgaris, acne rosacea, and improve the appearance of some acne scars.

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 improve dramatically.

HOW MANY TREATMENTS WILL IT TAKE TO SEE THE “BEST RESULTS”?

To achieve maximum improvement of pre-cancerous (actinic keratoses) sun damage, skin tone and texture, a series of 2-3 treatments 2-4 weeks apart is most effective. Some patients with just actinic keratoses are happy with one treatment. More treatments can be done at periodic intervals in the future to maintain the rejuvenated appearance of the skin.

WHAT ARE THE DISADVANTAGES?

Following PDT, the treated areas can appear red with some peeling for 2-7 days. Some patients have an exuberant response to PDT, and experience marked redness of their skin. Temporary swelling of the lips and around your eyes can occur for a few days. Darker pigmented patches called liver spots can become temporarily darker and then peel off leaving normal skin. (This usually occurs over seven to ten days.) Repeat treatments may be necessary as medicine is not an exact science.

WHAT ARE THE ADVANTAGES?

1. **Easier** for patients than repeated topical liquid nitrogen, Efudex (5-FU), Aldara because the side effects are minimal, rapid healing, and only 1-3 treatments.
2. The ALA/PDT treatment is less painful than liquid nitrogen, 5-FU and Aldara.
3. **Reduced scarring** and improved cosmetic outcome compared with cautery, surgery and Efudex, Liquid nitrogen can leave white spots on your skin.
4. Levulan **improves the whole facial area treated** creating one color, texture, and tone rather than just spot treating with liquid nitrogen, cautery and surgery.

In summary, PDT matches the “ideal treatment” for actinic damage:

- Well tolerated (painless to mild or moderate discomfort)
- Non-invasive (no needles or surgery required)
- Excellent cosmetic outcome (particularly in cosmetic sensitive areas on the face)