

## *PDT*

For more advanced photoaging, Photodynamic Therapy (PDT) offers a more aggressive treatment. Photodynamic therapy utilizes a chemical which preferentially penetrates damaged skin, and pores. The chemical is then activated by certain lasers or light sources to destroy the abnormal cells. With PDT, precancerous lesions, pigmentation abnormalities, fine lines and wrinkles are all minimized. In our office we add the V-Beam laser to the blue light to further activate the aminolevulanic acid, or Levulan. By using the V-Beam, we are able to reduce redness, rosacea and increased vessels. The downside is several days of redness, swelling, peeling and the need for aggressive sun avoidance. However the effects are so much more dramatic than the standard rejuvenation, it is well worth the increased downtime.

*Acne* - Patients who were treated with PDT also showed improvement in acne and a decrease in P acnes. Clinical improvements were seen up to six months after a single treatment of topical ALA on facial acne with exposure to a light source four hours later. Acne may require two sessions done at 6 weeks intervals to see initial improvement. Initial flaring of acne during the first 2 months is normal, call the dermatologist is severe for possible antibiotic prescription or a SilkPeel. Several month acne remission has been reported with PhotoDynamic Therapy treatment.

*Actinic Keratosis* - PDT is used commonly to treat actinic keratosis (AK) which are common lesions found most typically in lightly pigmented individuals, and since a large number of cancerous cells begin as AK, detection and treatment is critical.

Visible skin damage can be distinguished by wrinkling, coarse skin texture, pigmentation alterations, and telangiectases. Photorejuvenation therapy with Levulan has been found to help improve and reduce each of the different characteristics of damaged skin, including: decreasing thickening and crusting of the skin, minimizing pore size, improving the texture of the skin, and subtle improvement in wrinkles. "Sun freckles", melasma, brown spots often require more than one laser treatment. If a more significant brown spot treatment is needed the dermatologist may recommend a "brown spot" laser rejuvenation one to two months after your PDT.

## *Risks and Complications*

Side effects that can occur from rejuvenation treatment include: severe stinging or burning, scaling, crusting, itching, light or dark spots on the skin, wearing away of the skin, puss filled pimples – acne flare, mild swelling for three to five days, and skin ulcers. These side effects are temporary and should be gone within eight weeks after the treatment.

As PDT is only FDA approved for actinic keratoses or precancers, its use for acne and photodamage is considered off-label.