

Photodynamic Therapy for Acne and Rosacea

Photodynamic Therapy (PDT) consists of a topical application of Ameluz (aminolevulinic acid) and a light source, such as red-light, intense pulsed light (IPL) and/or pulse dye laser (PDL). Ameluz is a substance that occurs naturally in the body in small amounts. Ameluz is absorbed into actinic keratosis (pre-cancerous cells), sebaceous (oil) glands, melanin, and small blood vessels and when absorbed is converted into a photosensitizer known as protoporphyrin. Certain lasers and lights activate the protoporphyrins leading to selective destruction of the pre-cancerous cells and reduction in sebaceous glands, melanin, and small blood vessels.

Indications:

Acne

PDT has been well studied in the treatment of acne. Patients seeking PDT for acne may have partially responded to traditional medical therapy, have contraindications or experienced side effects to medical therapy, and/or are seeking an alternative to oral acne regimens, such as Accutane. By combining IPL, red light and Ameluz, many aspects of acne can be decreased including overactive sebaceous (oil) glands, acne-causing bacteria, inflammation, red scars, pale tan scars, and blocked pores/follicles. Patients will often notice an improvement for 6-12 months. Results vary amongst individuals. This service is not covered by insurance.

Rosacea

For some patients with moderate to severe rosacea, which either fails to respond or only partially responds to traditional medical therapy, PDT can be useful. Patients see an improvement in both their facial redness and papulopustular lesions when the combination of IPL and red light are used. Patients often will notice an improvement for 6-12 months and results vary amongst individuals. This laser service is not covered by insurance.

Photoaging

The influence of long-term sun exposure along with the normal aging process can lead to increased brown spots, broken blood vessels, redness, roughness, and fine lines. These skin changes are collectively called photoaging. By adding IPL to the PDT regimen, we can also improve many of the signs of photoaging. This laser service is not covered by insurance.

Pre-Treatment Instructions

1. If you have a history of oral Herpes Simplex (fever blisters/cold sores), please alert your healthcare provider, as the laser may trigger an outbreak. We may recommend that you take an oral antiviral agent such as Valtrex starting 1-2 days prior to your procedure to prevent an outbreak.

Treatment Day

- We recommend that you wear comfortable clothes to your appointments, or you can change into a
 disposable gown. If you tend to get chilled from air conditioning, bring a sweater or light jacket to wear while
 you are waiting for the anesthetic to take effect. A good book, iPad or Kindle is also recommended.
- 2. On the day of your procedure, you should arrive at the office with your face free of any creams, serums, sunscreen, or makeup. Pre-Op photos will be taken in our state-of-the-art photo room.
- 3. You will be asked to wash your face in the office with an exfoliating scrub.
- 4. Next, your healthcare provider will apply acetone to your skin which removes surface fats from your skin and thus allows the Ameluz medication to penetrate more efficiently. Your healthcare provider will select the amount of incubation time your Ameluz will remain on your skin; this is typically between 60-120 minutes, depending on the condition(s) and area(s) to be treated.
- 5. Following this incubation period, patients who are scheduled for an IPL (Intense Pulse Light) or PDL (Pulse Dye Laser) will undergo this portion of the treatment. If not scheduled for an IPL or PDL, the patient will sit under a red-light for approximately 30 minutes.
- 6. Sunscreen is then applied after the appropriate light treatment, and you will need to **AVOID SUNLIGHT** FOR THE NEXT 36 HOURS (ABOUT 1 AND A HALF DAYS).

Post-Treatment Instructions

- 1. You can wash off your sunscreen once home and then begin a gentle skin care regimen.
- 2. While you are recovering, we recommend a gentle skin cleanser and a gentle cream or lotion, such as the Avene Cicalfate.
- You should avoid topical skin care products with potential skin irritants (retinoids, lactic acid, glycolic acid, salicylic acid, benzoyl peroxide, or prescription acne medications) while the skin is still red, pink, and/or peeling.
- 4. AVOID SUNLIGHT FOR THE NEXT 36 HOURS (ABOUT 1 AND A HALF DAYS).

Possible Risks & Complications

Redness and mild tenderness may occur after the procedure, like a mild to moderate sunburn. Some patients may experience mild peeling, crusting, and swelling, lasting up to one week. We instruct patients to avoid sunlight and bright indoor light sources for 36 hours (about 1 and a half days) following treatment. At your house we recommend staying in rooms in which the windows have blinds or drapes and avoid skylights. It is okay to be in front of your computer, iPad, TV, phone, etc., and to be exposed to the electric lighting in your home.

Recommended Post-Procedure Products

- 1. EltaMD Foaming Facial Cleaner
- 2. Avene Cicalfate