

## Photodynamic Therapy (PDT) for Actinic Keratoses (AKs)

PDT is a highly successful FDA-approved treatment for destruction of pre-cancerous lesions (AKs). The treatment is comprised of two principal steps:

1. Applying a liquid medication, 5-aminolevulinic acid (ALA), to the treatment area followed by a 1-2 hour “incubation” period during which you will wait in the office. This allows the ALA to accumulate inside the pre-cancerous cells, causing them to become sensitive to visible blue light.
2. Exposure to the blue light treatment for ~ 17 minutes, resulting in destruction of many AKs but normal skin is not damaged.

One PDT treatment cycle consists of **2 blue light treatments separated by 4-8 weeks**. To get the maximum benefit and efficacy of PDT, both treatments must be completed. Repeat treatments may or may not be necessary depending on the severity of sun damage.

### Why do we recommend PDT?

PDT is an optimal treatment for AKs because it is a non-invasive method to treat an entire anatomic area at once (field treatment) instead of targeting individual AKs with liquid nitrogen. PDT has a much shorter treatment duration and recovery period compared to topical therapies for AKs. It may also result in improved cosmetic appearance of the skin and fewer sun spots. Generally, PDT is well-tolerated and involves minimal downtime from work - on average you can usually expect a period of 1 week or less before skin appears normal/near normal.

### Instructions Prior to PDT Treatment:

- Thoroughly wash hair and the area being treated the night before your appointment and **shave** the area that is being treated if your provider has advised you to do this (hand and forearms, face, etc.). Please arrive with no make-up if your face is being treated.
- Please bring a **wide-brimmed hat and sunglasses** to your appointment to wear after treatment if your face or scalp are being treated. Be advised that you must go directly home after therapy and stay indoors.
- If you are receiving treatment on your arms, chest, or legs, please wear clothing that **covers the area being treated** (a long-sleeved shirt, turtleneck, scarf, long pants).
- It is important to complete errands prior to treatment and make sure you have purchased post-treatment supplies prior to therapy.
- The entire treatment process takes approximately 2-3 hours, please plan meals accordingly and bring reading material, laptop/iPad and headphones with you. Free Wi-Fi is available.
- To minimize swelling or discomfort that may arise during or after treatment you may take 600mg Ibuprofen or 1gram (two 500mg tablets) of Acetaminophen prior to your appointment. Do not take any narcotic pain medications or anti-anxiety medications prior to treatment.
- Notify us if you have a history of cold sores (herpes) in the treatment area. Anti-viral medication can be prescribed to minimize the risk of a flare with treatment. **IF YOU HAVE AN ACTIVE COLD SORE** in the treatment area, call us and your treatment will be rescheduled.

What to expect during PDT treatment:

- Your skin will be cleansed with acetone to enhance penetration of the ALA.
- The ALA will be applied to the treatment area – you may experience tingling/mild burning. The ALA is a clear liquid - there will not be any visible sign of anything on your skin while you sit in the patient lobby during the incubation period (60-120 minutes).
- Duration of the blue light treatment will be ~17 mins. During treatment you may experience tingling, stinging, burning, or itching. These symptoms are typically mild and improve after the first 6 minutes of treatment. The extent of discomfort will depend on the amount of sun damage and AKs that you have. We have fans to help with discomfort.
- After the light treatment, a thick layer of sunblock will be applied to the treatment area. Wear protective clothing and go straight home.

Instructions Following PDT Treatment:

- If your face and ears were treated, you must stay indoors for **48 hours and avoid exposure to bright light for the first 48-72 hours**. This includes direct or indirect sunlight, such as being outside or sitting close to a window while indoors, lamps, overhead lights. You can watch TV as long as you are at least 5-8 feet away from the TV screen. Wear a thick layer of sunblock that has at least SPF 30 and contains Zinc Oxide or Titanium Dioxide during the first 48-72 hours. If your scalp, hands, arms were treated, follow strict sun protection precautions (wear sunscreen and protective clothing) but you are not restricted to stay indoors for 48 hours.
- Wash your skin with a mild cleanser such as Cetaphil Gentle Cleanser or CeraVe Cleanser once to twice a day. Use pure Vaseline or Aquaphor in the evening to minimize crusting. Reapply emollients such as laser Enzyme Gel, Vaseline/Aquaphor, CeraVe, or Cetaphil Cream, frequently during the day to soothe and hydrate the skin.
- During the first **24-48 hours**, your skin may appear red and swollen or “hot” like a sunburn although it is not an actual burn. Swelling is not uncommon the first day or two after PDT and can be lessened by taking an anti-histamine. Application of frozen peas in their bag, cool packs, or ice every five to 15 minutes every hour for the first eight to 24 hours after your procedure may be very soothing. Swelling may be more common around the eyes or lips. Sleeping propped up on a few pillows or in a reclining chair may help decrease swelling after treatment of the face.
- After **24-48 hours**, your skin may start to peel. This may vary from no peeling or redness at all to severe peeling. Peeling may last up to 7 -10 days. Some patients do not have any redness or peeling which is normal – it does not mean the treatment was not effective. If you have peeling, DO NOT pick at peeling skin, scale, or crust – picking increases the risk of infection and scarring. The scale and crust will fall off naturally as the skin beneath it heals. You can wear make-up or shave once any crusting has healed.
- After **72 hours**: Avoid sun exposure as your skin is healing and practice diligent sun protection with at least SPF 30 sunblock that contains Zinc Oxide or Titanium Dioxide.
- If you have an emergency and must go out during daylight during the first 48-72 hours after PDT, you need to wear sunblock, a scarf, a broad brimmed hat, or appropriate clothing to cover and protect the treated area.
- If arms or legs were treated, long sleeved shirts and pants should be worn for the first 72 hours, even during the summertime!
- Follow up in 1-2 months, or as instructed by your clinical provider.

***Please call the office if you have any questions or concerns: 360-254-5267***