

Photodynamic Therapy Treatment

Hello. My name is Doctor Nicole Annest. I am here to talk to you today about your Photodynamic Therapy or PDT light treatment.

PDT is used to treat pre-cancerous spots known to dermatologists as actinic keratosis. We treat these areas so they will not progress to become invasive skin cancers. PDT is also used to treat very thin or superficial skin cancers.

Before your treatment begins we will ask you to sign a consent form and ask you about some medications you may be taking as well as some details of your health history. PDT can have similar effects to other treatments which you may have used in the past. The total time required for your PDT light treatment today will be a few hours.

During the treatment, a solution called 5-aminolevulinic acid or Levulan will be placed on your skin. This solution is absorbed by the sun damaged areas of your skin. Then, a bright light is used to activate this solution, thereby killing the sun damaged cells. After your skin heals, the sun damaged cells are replaced with new, healthy skin cells.

There are a few important things to be aware of when undergoing PDT light treatment. First, you must strictly avoid any sun exposure for 48 hours after treatment. Second, if your face is being treated and you have a history of cold sores, you must take anti-viral medication to prevent a flare of the virus that causes cold sores. You should have been asked about a history of cold sores at the time of your appointment scheduling if your face is being treated. If you do have a history of cold sores but we're treating areas on your body other than your face you do not need to take anti-viral medication.

Now let's talk a little bit more about what you'll experience during and after your PDT light treatment session. We will first ask you to wash the areas that we are treating with soap and water. After this we will remove the top oils of your skin by scrubbing the area with gauze and a special cleaning solution. After your skin has been thoroughly prepared we will paint the clear Levulan solution on your skin. Your skin may feel slightly itchy, tight, or you may have mild staining. These sensations are all normal.

After the solution has soaked in, approximately two and a half hours after application, you will begin the actual light treatment. You will be given a pair of light protective goggles or protective eye shields to wear. The skin that we are treating will be a few inches from the light source, which is a blue light. This light source does not consist of x-rays or other harmful ionizing radiation but rather consists of visible blue light. You will be treated with the blue light for 16 minutes and 40 seconds. While you are being treated with the blue light you will feel a stinging or burning sensation similar to a sunburn. This is normal. This sensation is most notable during the first few minutes

of the light treatment. After the initial minutes of your treatment, this stinging tends to decrease. You will have either a small fan or wet cloths or a cool air device to help with this initial stinging sensation.

After your PDT light treatment is complete you will feel some mild stinging. We will have you wash the treated area with mild soap in order to remove any residual Levulan treatment solution. If your face was treated we will put a sun blocking sunscreen on your skin. You will also need to wear a hat, sunglasses, as well as a bandana or surgical mask. If other areas of your skin were treated, such as your arms or hands, your skin may be protected with a long-sleeved shirt or gloves.

Please be careful when driving home as the sunlight through your car windows and the light reflected off of your dashboard may activate the treatment solution. You need to protect your skin from the sun and other light sources for the next 48 hours because the natural sunlight will continue to activate the Levulan treatment solution. Light exposure to the treated areas may lead to a very exuberant skin reaction. Again, you should avoid all direct sun exposure for 48 hours after your PDT light treatment.

During the 48 hours after your PDT light treatment you may experience redness, swelling, and stinging of your treated skin, similar to the reaction that you might have with a bad sunburn. Your skin may feel hot. There are several things that you may do for relief: place cool compresses such as bags of frozen vegetables or wet washcloths that have been prepared in your freezer on your treated skin, spray your treated skin with a water mister, place refrigerated aloe vera gel on your face, stand in a cool shower, allowing the water to gently fall on your treated skin, pat your skin dry, do not rub, take ibuprofen, Motrin, or Tylenol in recommended doses, use plenty of petrolatum-based moisturizer such as Vaseline or Aquaphor on your skin. Three days after your PDT light treatment the redness and warmth in your treated skin will start to decrease.

Your skin will begin feeling very dry and tight, almost as if you are wearing a mask. The areas targeted by the treatment may turn dark or dusky in appearance. It is very important to keep moisturizing your skin with a petrolatum-based moisturizer such as Vaseline or Aquaphor at this stage of healing. On the fourth through sixth days after your PDT light treatment your skin will start to peel. Do not pick at your skin! Allow your skin to peel away naturally. You may stand in a warm shower up to a few times a day to help this process along. Continue to moisturize your skin with Vaseline or Aquaphor. On the seventh day after your PDT light treatment your skin will finish its healing process.

Thank you for your attention.

It is important to us here at the Kaiser Permanente Department of Dermatology to provide you with excellent care. A staff member will be in momentarily

to answer any questions you may have.