What are Actinic Keratoses?

Actinic keratoses (AKs) are red, rough, scaly spots on the skin. AKs are considered a “pre-cancer” or precursor lesions because they have the potential to progress into squamous cell carcinoma (SCC), the second most common type of skin cancer. Because predicting which AKs will evolve into SCC is unreliable on a clinical basis, conventional wisdom suggests all AKs be treated.

Actinic keratoses develop in areas on the body that have had chronic sun exposure, i.e., they are most prevalent in areas with the highest amount of sun exposure. Common areas include the face, lips, ears, neck, back of the hands and arms. They are also commonly found on the scalp, particularly in patients who have thinning hair.

There are numerous methods of treatment for AKs. Common methods of treatment include cryotherapy, topical creams (5-FU, Aldara), photodynamic therapy and laser skin resurfacing. Cryotherapy is the most common modality and involves the use of liquid nitrogen to “freeze” the surface of the skin. The AK flakes off and is replaced by new, healthy skin. This is a good method for solitary lesions.

When patients have more than a few AKs, a history of skin cancer and/or extensive sun exposure, a field treatment may be recommended. A field treatment is when an entire surface area (e.g. scalp or face) is treated one at a time. This is beneficial as patients can have up to 10 times as many undetected lesions as they do clinically evident lesions. For example, for every one visible AK there may be 5-10 AKs underneath the surface.

Field treatments for AKs can include photodynamic light therapy, Efudex cream (5-FU), Aldara cream, topical NSAIDs, chemical peels or laser resurfacing.

What is PDT?

Photodynamic light therapy (PDT), also known as Blue Light, is a “field type” treatment for AKs. PDT combines a photosensitizing drug (Levulan) and a type of light (blue light within the visible light spectrum). Precancerous cells absorb the Levulan medication and make these cells extremely sensitive to the blue (and other types of) light. Once the AKs are exposed to the blue light, a chemical reaction occurs that leads to the eventual destruction of the precancerous cells.
What should I expect during a PDT treatment session?

When you arrive at the Skin Surgery Center, your skin will be washed with soap and water and prepped with an alcohol scrub. Once dry, we will apply the photosensitizing medication (Levulan). The Levulan needs to stay on for 60-120 minutes to allow time for it to be absorbed by the precancerous cells. After that waiting period, we will have you wash your face with soap and water and position you under the blue light. The treatment time under the blue light is typically 16 minutes and 40 seconds.

While under the light, most patients feel a sensation of heat in the treated areas, that is described as “hot” or “burning”. The discomfort is alleviated with use of a bottle of water that the patient uses to spritz on the skin as well as a fan. Typically the discomfort dissipates after a few minutes under the light. However, everyone reacts differently.

Immediately after treatment, patients experience a sunburn type reaction. The most common side effects are redness, mild tenderness, and peeling which typically resolves in one week.

It is very important that patients avoid all exposure to natural sunlight and strong artificial light for 48 hours after treatment. Since the Levulan medication is active for 48 hours, any additional sun or light exposure can result in a continued and stronger than desired reaction.

Where is this treatment offered?

We offer PDT Treatment most days of the week at our Seattle location. Please call 206.346.6647 to schedule two treatments, typically 2-6 weeks apart. Plan to be in the office for 1.5-3 hours the day of your scheduled treatment. Patients should come prepared to wait in the waiting room and feel free to bring reading material, etc. Also, bring a broad brimmed hat to wear during and after treatment.

Will my insurance cover this?

Currently, PDT is offered as a benefit by most insurance companies. Deductible’s, co-pay’s and limitations may apply. Please check with your individual insurance plan provider for coverage details prior to the start of treatment. Our staff is available to assist you with the required information.


Nicole Marshall  Sarah Patton
May is Skin Cancer Awareness Month!

The Skin Surgery Center offers comprehensive, full body skin exams as well as site checks if you have a specific area you are concerned about. Yearly skin cancer screening is advised, especially for those patients at risk (personal or family history of skin cancer; fair skin; history of excessive lifetime sun exposure; history of blistering sun burns; etc.). Please contact us if you wish to schedule an appointment for a skin cancer screening.

Skin Cancer is by far the most common malignant tumor in humans. The most common types of skin cancer are basal cell carcinoma, squamous cell carcinoma, and melanoma. Basal cell carcinoma and squamous cell carcinoma begin as a single point in the upper layers of the skin and slowly enlarge, spreading both along the surface and downward. These extensions cannot always be directly seen. The tumor often extends far beyond what is visible on the surface of the skin. If not completely removed, both types of skin cancer may invade and destroy structures in their path. Although these skin cancers are locally destructive, they do not tend to metastasize (spread) to distant parts of the body. Metastasis of basal cell carcinoma is extremely rare. Squamous cell carcinoma is slightly more dangerous, and patients must be observed for any spread of the tumor. Such spread is still infrequent. Melanoma is a very different and potentially more dangerous kind of skin cancer if it is not adequately treated in its early phases.

Excessive exposure to sunlight is the single most important factor associated with the development of skin cancers. In addition, the tendency to develop these cancers appears to be hereditary in certain ethnic groups, especially those with fair complexions and poor tanning abilities. Fair-skinned people develop skin cancers more frequently than dark-skinned people, and the more sun exposure they receive, the more likely they are to develop a skin cancer. Other factors, including exposure to radiation, trauma and exposure to certain chemicals may also be involved in the development of skin cancers.

To schedule a skin cancer screening call today!
Seattle office at 206-346-6647 or Bellevue office at 425-453-8647

New Clinic Area at our Seattle Location

Skin Surgery Center has expanded the Seattle location to include additional exam rooms, Photodynamic Light Therapy and skin cancer screening. Enjoy our comfortable waiting room during your visit. Come to suite 1460 and say hello. Call today to schedule an appointment! Seattle Office: 206-346-6647.