

ACTINIC KERATOSES

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Actinic keratoses (AK) are the earliest form of Squamous Cell Cancer (SCC), a type of nonmelanoma skin cancer.

- Appear as small red patches with a rough sandpaper like feel to the surface.
- Typically found on sun exposed areas (backs of the hands, V of the neck, arms, scalp & face).
- 60-80% of SCC arise from AK.

Risk Factors:

- 1 High sun exposure, frequent sunburns**
- 2 Age > 40 years, male sex**
- 3 Fair skin, red/blond hair, blue eyes**
- 4 Tendency to burn/freckle with sunlight**
- 5 Past history of skin cancer or AK**
- 6 Diseases or treatments that suppress the immune system – HIV, cancer, chemotherapy**

- The 10 year risk of AK progressing into SCC is 6-10% & is higher if the following features are found (IDBREU):
 - Induration (Hardness)
 - Diameter > 1cm
 - Bleeding
 - Rapid Growth
 - Erythema (Redness)
 - Ulceration

TREATMENT:

Up to 65% of AK will regress however this is not predictable & thus treatment is always recommended. Many options exist depending upon number of lesions, patient age, medical disease/skin cancers, cost & your preference. Treatments are directed at individual lesions if you have just a few AK or at an entire area for widespread disease (> 4 AK in a 25 cm² area). With numerous AK & sun damaged skin, there is a high chance of having nonvisible lesions (subclinical AK). Treating an entire area, (field directed) has the advantage of picking up subclinical AK. There may be subclinical AK 10x the amount we see.

Treatment Tips:

- It is **NORMAL** (& optimal) to have a reaction with the creams (Efudex & Imiquimod, Picato). Symptoms of redness, blistering, burning & pain indicate that treatment is working!!
- Reactions can usually be managed with gentle skin care (moisturizers), cold compresses & occasionally mild steroid creams.

LIQUID NITROGEN:

Primarily used for small numbers of AK. This is applied in the office directly to the lesions. It is a very cold substance with common side effects of pain, burning, redness, swelling, blistering, scarring & changes in skin pigmentation.

IMIQUIMOD: (Zyclara 3.75%, Aldara 5%)pfp1

These creams work at the immune system level. **Zyclara** is used 1x/day for 2 cycles of 2 weeks on & then off & **Aldara** 3x/week for up to 16 weeks. Supplied in packets or metered dose pump. Possible side effects include: redness, swelling, scabbing, flu like symptoms.

EFUDEX:

This cream disrupts DNA synthesis of tumour cells. It is applied twice daily for 2-4 weeks. It is covered under the provincial drug program. It is applied to washed affected skin with a gloved finger or nonmetal applicator. Hands should be washed after application. Common side effects could include pain, itching, burning & changes in skin pigmentation.

PICATO (0.015%, 0.05%):

This gel induces cell death & is used once daily for 2 or 3 days depending on site affected. Side effects include: redness, pain, swelling & blistering. Supplied in individual tubes, it should be refrigerated & discarded after single use.

OTHER:

Photodynamic therapy, laser, retin creams or surgical removal.

Prevention:

- Avoid sun exposure & tanning bed use.
- Wear a broad spectrum sunscreen – see info sheet on this site under “sunscreens.”
- Wear sun protective clothing.
- Examine your skin & see your doctor for regular skin exams.