

## Actinic Keratosis (Solar Keratosis) AKA AK.

### Why is Skin Cancer Important?

Skin cancer is estimated to account for over 80% of new cancers in New Zealand each year. New Zealand has one of the highest rates of skin cancer in the world which is reflected in the relatively high rates of melanoma. In 2013, there were 2366 registrations of melanoma in New Zealand and 489 deaths due to melanoma and other malignant neoplasms of the skin.

### What is an Actinic Keratosis (AK)?

An Actinic Keratosis (AK) is a small, thickened, scaly skin growth which develops on the skin. It is the most common skin condition caused by accumulated sun damage over years. Actinic keratoses are usually rough, scaly patches on sun exposed areas such as the head and face. Actinic keratoses are common, especially in older people, many of whom have more than one.

### What causes AK?

The commonest cause is too much exposure to ultraviolet (UV) light from the sun or from sunbeds. AK's can occur anywhere on your body but is most common in areas that are often exposed to the sun, i.e. your face, head, neck and ears. AK's mainly affects fair-skinned adults, but other skin types are also at risk.

### Those with the highest risk of developing a AK are:

- People with pale skin who burn easily and rarely tan;
- Those who have had a lot of exposure to the sun, such as people with outdoor hobbies or outdoor workers, and people who have lived in sunny climates such as NZ;
- People who use sunbeds or sunbathe;
- People who have previously had a AK or other skin cancer.

### What does a AK look like?

Each actinic keratosis can range from the size of a pinhead to 1-3 cm across. Their colour can be light, dark, pink, red, the same colour as your skin, or a combination of these. The top of each one may have a yellow-white, scaly crust. Redness may develop in the surrounding skin. The picture shows actinic keratoses on a forehead.

Actinic keratoses feel rough and dry. They are slightly raised from the surface of the skin. Often it is easier to feel rather than see them. They can also be hard and warty. Sometimes hard skin grows out of an actinic keratosis like a horn (called a cutaneous horn).

Several actinic keratoses may develop at about the same time, often in the same area of skin. Sometimes they can join together and form a large, flat-ish, rough area of skin.

### How is AK diagnosed?

Sometimes the diagnosis is clear from its appearance with the assistance of a microscope (dermoscope). If further investigation is necessary to confirm the diagnosis then a small area of the abnormal skin (a biopsy) or the entire lesion (an excision biopsy) may be cut out and examined under the microscope. You will be given a local anaesthetic beforehand to numb the skin.



### Can Actinic Keratosis be treated?

Actinic keratoses are common, especially in older people, many of whom have more than one. Usually they are harmless but there is a small risk that they may eventually turn into skin cancer. So, treatment is usually advised.

- **Freezing with Liquid Nitrogen:** Liquid nitrogen is a common treatment in people who have small numbers of actinic keratoses. It is also called cryotherapy or cryosurgery. Liquid nitrogen is so cold that it destroys tissue. Liquid Nitrogen destroys the AK which falls off a few days later. A small scab is left and is gradually replaced by fresh healthy skin.
- **Efudix:** Another cream which is sometimes used contains a medicine called fluorouracil. This kills the abnormal cells and fresh normal skin grows back. This cream is usually applied for 5-7 days but it can cause significant (but temporary) inflammation, soreness and blistering of surrounding skin. Fluorouracil cream is often used if someone has several actinic keratoses.

### Self-care (What can I do?)

Treatment will be much easier if your sun damage and Actinic keratosis is detected early. AKs can vary in their appearance, but it is advisable to see your doctor if you have any marks or scabs on your skin which are:

- Growing
- Bleeding and never completely healing
- Changing appearance in any way

### Top sun safety tips:

- Protect your skin with clothing, and don't forget to wear a hat that protects your face, neck and ears, and a pair of UV protective sunglasses.
- When choosing a sunscreen look for a high protection SPF (SPF 15 or more) to protect against UVB, and the UVA circle logo to protect against UVA.
- Apply plenty of sunscreen 15 to 30 minutes before going out in the sun and reapply every 2 hours and straight after swimming and towel-drying.

**For further information contact your Skin Cancer Doctor for advice or review of any lesions of concern.**