

Introduction

Actinic keratosis (AK) forms on the face, lips, back of neck, hands, and bald scalp following sun exposure over a period of time. It appears as a rough, dry, scaly patch or growth on the exposed skin. The blemishes are often elevated, rough in texture and resemble warts. Individuals with Actinic Keratosis usually have more than one blemish.

[Picture Credit: Actinic Keratosis]

If it is left untreated, AKs may turn into squamous cell carcinoma. In some cases it may turn into basal cell carcinomas, the most common form of skin cancer, it is, therefore important that a dermatologist is consulted before any cancerous changes occur.



Incidence of Actinic Keratosis (AK) in South Africa.

The National Cancer Registry (2014) does not provide any information regarding the incidence of Actinic Keratosis (AK) as it is a pre-cancerous condition.

Causes and Risk Factors of Actinic Keratosis (AK)

longterm sun exposure is the major cause of actinic keratosis. Sun damage to the skin is cumulative, so every period of sun exposure adds to the lifetime total.

Another important cause of actinic keratosis is exposure to the ultraviolet radiation given off by tanning beds.

[Picture Credit: Tanning Bed]

A further possible cause of actinic keratoses is extensive



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[D Litt et Phil (Health Studies); D N Ed; M Art et Scien; B A Cur; Dip Occupational Health; Dip Genetic Counselling; Dip Audiometry and Noise Measurement; Diagnostic Radiographer; Medical Ethicist]

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exposure to X-rays or certain industrial chemicals, like arsenic, coal tar, soot, pitch, creosote, shale oils, and petroleum products, such as mineral oil or motor oil.

The following individuals are also more vulnerable to actinic keratosis:

- Individuals whose immune defences are weakened by cancer chemotherapy, Aids, or organ transplantation
- People with fair skin, blonde or red hair, and blue, green, or grey eyes
- People with certain rare conditions that make the skin very sensitive to the sun's UV rays, such as albinism and xeroderma pigmentosum (XP), are also at higher risk.



[Picture Credit: Albinism]

Risk Factors Include individuals:

- Usually of the male gender
- A fair skin
- Light eye colour
- Who spend lots of time outdoors in the sun
- Who are organ transplant recipients
- High alcohol consumption

Signs and Symptoms of Actinic Keratosis (AK)

The signs and symptoms of an actinic keratosis include:

- Rough, dry or scaly patch of skin
- Blemishes may range in size from a tiny spot to as much as an 2,5cm
- Flat to slightly raised patch or bump on the top layer of skin
- In some cases it may have a hard, wart-like surface
- Colour varies between pink, red or brown, or flesh-coloured patches
- There may also be itching or burning of the affected areas

Diagnosis of Actinic Keratosis (AK)

A medical practitioner (preferably a dermatologist) should be consulted when blemishes on the skin are noticed. He/she will:

- Conduct a full physical examination
- Obtain a biopsy to confirm the diagnosis

Reducing the Risk of Actinic Keratosis (AK)

The following will assist in reducing the risk for actinic keratosis:

- Avoiding the midday sun.
- Apply an effective sunscreen (SPF30 or higher) regularly at least 20 minutes before going out into the sun

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- Pay special attention to the lips. Apply a lip balm that contains sunscreen (if available)
- Protect the skin with clothing, preferably with a good UPF value. Whenever possible wear:
 - A wide-brimmed hat
 - Long sleeves
 - Long pants
- Avoid tanning beds or other indoor tanning devices
- Check the skin as often as recommended by a dermatologist
- One should contact a dermatologist right away if patches:
 - Starts to itch or bleed
 - Become noticeably thicker
 - Remain after treatment
 - Change in size, shape, or colour.
- Avoid alcohol or, at least, reduce alcohol consumption

Treatment of Actinic Keratosis (AK)

Treatment may include:

- Application of liquid nitrogen
- Regular use of prescribed topical creams, gels and solutions

Medical Disclaimer

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