

ACTINIC KERATOSIS



Actinic keratosis is a rough or scaly patch that typically occurs on areas of the skin that have seen a lot of sun exposure over the years. While this common skin condition isn't usually serious in itself, it should be treated without delay because some cases can lead to skin cancer.

OVERVIEW

Actinic keratosis, also known as solar keratosis or sometimes "sunspots", is a precancerous skin condition in which lesions (abnormal spots) - actinic keratoses - form as a result of overexposure to the sun. These lesions typically appear as areas of rough, scaly or crusty skin on the most sun-exposed parts of the body.^{1,2,3}

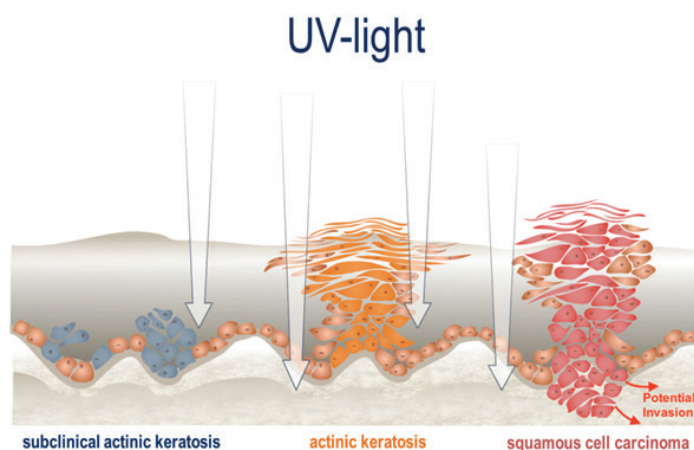
CAUSES AND RISK FACTORS

Actinic keratosis is caused by excessive, frequent exposure to the sun's ultraviolet (UV) rays; it develops gradually in the upper skin layer. The damage that results can be repaired naturally by the body to some degree, but when unprotected, previously damaged skin is exposed to yet more UV rays and actinic keratosis may occur.^{1,4,5}

Risk factors for developing actinic keratosis include:^{1,3,5}

- Having a lighter complexion, blonde or red hair, or blue or light-coloured eyes
- A tendency to burn or freckle with sun exposure
- Working outdoors
- Being older than age of 40. Actinic keratosis can occur in your 20s and 30s, but it's less common

- A history of sunburns or excessive sun exposure
- Living in sunny places, like South Africa
- Having a weakened immune system (e.g., due to illness, or treatments such as chemotherapy)
- Using tanning lamps or beds



SIGNS AND SYMPTOMS

As actinic keratosis develops in the top skin layer that receives the most UV radiation, lesions appear most commonly on exposed parts such as the head, face, neck, forearms or backs of the hands.

Actinic keratosis lesions may typically:^{3,5}

- Appear as flat patches on the face, head and neck
- Appear as bumps on the arms and hands
- Look pink, red, tan or brown, dark or light, or more than one of these colours
- Have a crust or scale that feels dry, rough or horny
- Feel itchy
- Feel sore, tender or "prickly"
- Come and go, usually after sun exposure
- Range in size from 1-6 mm, but can grow to several centimeters wide
- Occur as several lesions together
- Have red, irritated surrounding skin
- Appear on the lips (actinic cheilitis), causing dry, scaly or rough textures, cracked lips or loss of colour



DIAGNOSIS

Consult your doctor without delay if you suspect you have symptoms of actinic keratosis, especially if you notice any of the following:^{1,2,4}

- New lesions develop
- The patch changes colour
- Patches feel tender or painful
- The patch develops into a lump
- Lesions or scaly spots persist
- Lesions become bigger
- Lesions bleed

Actinic keratosis is diagnosed through skin examination, often using a bright light or magnifying lens.

If your doctor suspects a lesion might be cancerous, a skin sample will be taken and analysed in the lab (biopsied).⁵

IMPACT ON QUALITY OF LIFE

Actinic keratosis may be unsightly and sometimes uncomfortable. But most importantly, untreated actinic keratosis can develop into a type of skin cancer - squamous cell carcinoma. This can grow into deeper layers of skin, spread to other parts of the body and potentially be disfiguring and even deadly. While most cases of squamous cell carcinoma are successfully treated, it is far preferable to manage actinic keratosis while it still in the precancerous stage.⁶

TREATMENT

The good news is that most cases of actinic keratosis can be effectively and easily treated. There are different treatment options available to destroy or remove the lesions, while limiting scarring as much as possible.⁵

Treatment methods such as cryotherapy (freezing the tissue to destroy it) are effective in removing visible actinic keratosis lesions. However, actinic keratosis is a visible indication of a larger undamaged area that also includes invisible damage under or around the lesion which is associated with the risk of it progressing to cancer. Treatments that only remove visible lesions have higher recurrence rates as the untreated invisible damage becomes visible over time, creating the need for repeated treatments.^{5,7}

Studies have shown that treatment with topical Imiquimod creams remove both the visible lesions and the invisible damage.⁷

These creams work by stimulating your immune system to recognise and destroy the abnormal skin cells. They can be used in patients who have single or multiple lesions, as well as in immunocompromised patients.⁷

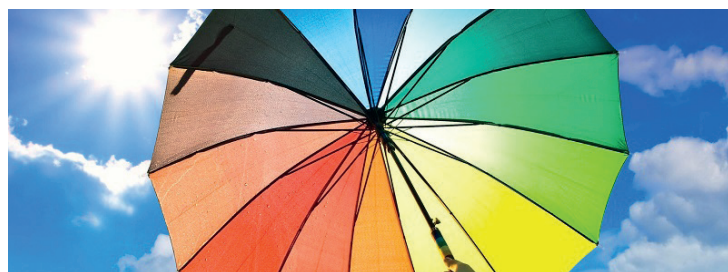
Some therapies such as cryotherapy may leave the skin looking damaged after treatment. However, with Imiquimod cream, better skin appearance has been reported post-treatment.⁸

In addition to its proven efficacy and cosmetic advantages, Imiquimod Cream has a simple regimen and easy self-application, making it patients' preferred choice.

TREATMENT

Take action to avoid developing actinic keratosis: ^{1,2,3,5}

- Limit time in the sun, especially between 10:00 and 14:00
- Avoid getting suntanned or sunburned
- Wear sun-safe clothes – tightly woven fabrics, broad-brimmed hats, and UV protective sunglasses
- Apply sunscreen at least 15 minutes before sun exposure, even on cloudy days, before spending time outdoors. Choose broad-spectrum, water-resistant sunscreens, with a sun protection factor (SPF) of at least 30
- Protect your lips with SPF lip balm
- Don't use tanning beds and lamps – UV exposure from these can be just as damaging as from the sun
- Examine your skin regularly for new lesions or patches, as well as changes to existing birthmarks, freckles, moles and bumps. Report any skin changes to your doctor
- Discuss your risk profile and how often you need skin check-ups with your doctor. For example, if you've already had actinic keratosis, you are at increased risk for developing new lesions and may need more frequent check-ups



Please note: this is an education information leaflet only and should not be used for diagnosis. For more information on Actinic Keratosis, consult your healthcare professional.

References: **1.** Actinic keratosis - Symptoms and causes. Mayo Clinic. 2021 [cited November 2021]. Available from: <https://www.mayoclinic.org/diseases-conditions/actinic-keratosis/symptoms-causes/syc-20354969> **2.** Actinic keratoses (solar keratoses). NHS.2021 [cited November 2021]. Available from: <https://www.nhs.uk/conditions/actinic-keratoses/> **3.** Actinic Keratosis: Risk Factors, Causes, Symptoms & Treatment. Cleveland Clinic. 2021 [cited 2021]. Available from: <https://my.clevelandclinic.org/health/diseases/14148-actinic-keratosis> **4.** Actinic keratosis: Overview. Aad.org. 2021 [cited 2021]. Available from: <https://www.aad.org/public/diseases/skin-cancer/actinic-keratosis-overview> **5.** Stanford Children's Health. Stanfordchildrens.org. 2021 [cited 2021]. Available from: <https://www.stanfordchildrens.org/en/topic/default?id=actinic-keratosis-85-P0135> **6.** Squamous Cell Carcinoma Overview. Skin Cancer Foundation. Updated March 2021. Available from: <https://www.skincancer.org/skin-cancer-information/squamous-cell-carcinoma/> **7.** Stockfleth E. The importance of treating the field in actinic keratosis. Journal of the European Academy of Dermatology and Venereology. 2017;31:8-11. **8.** Werner R, Jacobs A, Rosumeck S, Erdmann R, Sporbeck B, Nast A. Methods and Results Report - Evidence and consensus-based (S3) Guidelines for the Treatment of Actinic Keratosis -International League of Dermatological Societies in cooperation with the European Dermatology Forum. Journal of the European Academy of Dermatology and Venereology. 2015;29(11):e1-e66.

