

# Actinic keratoses - also known as solar keratoses



## What are the aims of this leaflet?

This leaflet is to help you understand more about actinic keratoses. It tells you what they are, what causes them, what can be done about them, and where you can find out more about them. Another name for 'actinic keratoses' is 'solar keratoses'.

## What are actinic keratoses?

Actinic keratoses are areas of sun-damaged skin found predominantly on sun-exposed parts of the body, particularly the forearms, backs of the hands, face, ears, bald scalp and the lower legs. They may also occur on the lips. The terms actinic and solar are from Greek and Latin, respectively, for 'sunlight-induced', and the term keratosis refers to thickened skin. Actinic keratoses are generally harmless, although they may be unsightly, and can sometimes itch. There is a very small risk that the patches could progress into a form of skin cancer called squamous cell carcinoma.

## What causes actinic keratoses?

They are caused by cumulative sun exposure over many years (from sunbathing, sunbed use, outdoor work or recreational activities) and are therefore more common in older people. Fair-skinned, blue-eyed, red or blonde haired individuals, who burn easily in the sun but tan poorly, are at particular risk, as well as those on immunosuppressive drugs for other conditions.

## Are actinic keratoses hereditary?

No, but some of the risk factors for developing actinic keratoses do run in families – for example, a tendency to burn easily in the sun rather than tan (skin type), red or fair hair and freckling.

## What are the symptoms of actinic keratoses?

They may not trouble you at all but affected skin often feels rough and scaly.

Some patients describe them as being itchy or sore.

## What do actinic keratoses look like?

Actinic keratoses can be variable in appearance, even one patch differing from another within a single individual. At first they can be hard to see, but more easily felt, as they can be rough like sandpaper. They may grow to a centimetre or two in diameter. Some are skin coloured, others are pink or reddish brown. They occasionally develop a thick scaly, warty layer. The surrounding skin often looks sun-damaged - blotchy, freckled and wrinkled.

If an actinic keratosis develops into a lump, becomes tender or starts to bleed, then medical advice should be sought as these changes could indicate the early onset of skin cancer (a squamous cell carcinoma).

## How are actinic keratoses diagnosed?

Usually we can diagnose an actinic keratosis by appearance, but in cases of doubt, for example, if an early skin cancer is suspected, a sample (biopsy) may be removed surgically under local anaesthetic for microscopic examination in the laboratory.

## Can actinic keratoses be cured?

Yes, but others may develop in the future from the surrounding sun-damaged skin.

## How can actinic keratoses be treated?

We advise you to protect the skin from further sun damage (for example, by wearing a hat, long sleeves and a sunscreen with a high sun protection factor).

Occasionally, small actinic keratosis patches may go away on their own, but most will remain. They may be treated if they are unsightly or if they cause new symptoms such as growing quickly, bleeding or forming an ulcer. Patients with numerous actinic keratosis patches and those on immunosuppressive drugs should be assessed for treatment as they are also at risk for skin cancer.

Treatments used for actinic keratoses include the following:

- **Cryotherapy:** Freezing with liquid nitrogen. This is an effective treatment which does not normally leave a scar, but can be painful.
- **Surgery:** This requires a local anaesthetic injection into the affected skin, after which the actinic keratosis can be scraped off with a sharp spoon-like instrument (a curette), or it can be cut out and the wound closed with stitches. Surgical removal leaves a scar, but provides a skin sample that can be analysed in the laboratory to confirm the diagnosis.
- **Creams:** In some cases a cream or gel can be prescribed for use at home, such as 5-fluorouracil or Imiquimod or Ingenol mebutate gel. This method of treatment is especially effective if there are several patches. However, the creams often cause temporary inflammation (redness and soreness) of the treated areas.
- **Photodynamic therapy:** A special light is shone onto the affected areas after a cream has been applied; the light activates a chemical in the cream which then treats the actinic keratosis patch.

## Self care (What can I do?)

Protecting your skin from the sun will help reduce the number of new actinic keratoses you get and may also reduce the risk of getting a sun-induced skin cancer. You should be extra cautious in the sun by following these recommendations:

- Do not allow yourself to burn in the sun. Avoid strong sunlight. Spend time in the shade when the sun is at its strongest, particularly between 11 am and 3pm.
- Cover up on a bright sunny day by wearing protective clothing - hats, long sleeves, long skirts or trousers.
- Apply a sunscreen regularly to exposed skin before going into the sun, using a sun protection factor of 30 or above and one which is able to block both UVA and UVB light. Re-apply the sun cream according to the manufacturer's recommendations, especially if sweating or after swimming, when you are out in the sun.
- Protecting your children from the sun in the same way may reduce their risk of developing actinic keratoses.
- Avoid artificial sunlamps, including sunbeds and UV tanning cabinets.
- Be skin aware - examine your own skin every month and see your doctor if you notice something new. If an actinic keratosis starts to develop into a lump or starts to bleed, then visit your GP. These symptoms can indicate that it has changed into a skin cancer (a squamous cell carcinoma). Early treatment is usually curative.
- Patients who actively avoid sun exposure may be advised by their GP to take a vitamin D supplement.

## Who do I contact if I need further information, help or advice?

You can contact your GP or dermatologist.

QVH Macmillan Cancer Information and Support Centre on 01342 414369.

Macmillan Skin Cancer Clinical Nurse Specialists on 01342 306660 or [qvh.skincancernurse@nhs.net](mailto:qvh.skincancernurse@nhs.net).



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SKIN Department

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