



ACTINIC KERATOSES - ALSO KNOWN AS SOLAR KERATOSES

This leaflet has been written 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', but for convenience we shall use only the term 'actinic keratoses' in this leaflet.

What are actinic keratoses?

Actinic keratoses are rough areas of skin found predominantly on sun- exposed parts of the body, particularly the backs of the hands and forearms, the face and ears, the scalp in balding men and the lower legs in women. They are usually harmless but there is a very small risk of some actinic keratoses progressing to a form of skin cancer called [squamous cell carcinoma](#).

What causes actinic keratoses?

They are caused by repeated sun damage over many years (from sunbathing and sunbeds, as well as from working or playing outdoors) and are therefore commoner in older people. Fair-skinned, blue-eyed, red- or blond-haired individuals, who burn easily in the sun but tan poorly, are at particular risk. Actinic keratoses are not contagious.

Are actinic keratoses hereditary?

No, not simply or predictably, but some of the factors that increase the risk of getting actinic keratoses such as fair skin, a tendency to burn rather than tan, and freckling, do run in families.

What are the symptoms of actinic keratoses?

They often cause little trouble. Many affected individuals are not aware of them at all. The involved skin feels rough and dry, and frequently it becomes pink, red or brown, giving a blotchy appearance if there are a lot of them.

However, if an actinic keratosis starts to grow into a lump, becomes itchy or tender or bleeds, medical advice should be sought as these changes could indicate the development of a skin cancer.

What do actinic keratoses look like?

Actinic keratoses can be variable in appearance, even differing from one another within a single individual. At first they can be hard to see, and are more easily felt, being rough, like sandpaper. They may grow up to a centimetre or two in diameter. Some are skin coloured, others are pink, red or brown. They can become raised, hard and warty, and may even develop a small horny outgrowth. The surrounding skin often looks sun-damaged: blotchy, freckled and wrinkled.

How are actinic keratoses diagnosed?

Usually the appearance of an actinic keratosis is sufficient to enable the diagnosis to be made, but in cases of doubt, for example if an early skin cancer is suspected, a sample (or the whole lesion) may be removed under a local anaesthetic for laboratory examination.

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?

Some small actinic keratoses may go away spontaneously, so a few small lesions may not require treatment, but it is important to protect the skin from the sun (for example, by wearing a hat, long sleeves and a high factor sunblock). It is advisable to treat more extensive and larger actinic keratoses as there is a small risk of some of them transforming into a skin cancer.

Treatments used for actinic keratoses:

- *Freezing with liquid nitrogen ([cryotherapy](#))*. This is an effective treatment when there are only a few, smallish actinic keratoses. It can be painful, but often the actinic keratoses go away without leaving a scar, though occasionally there may be a pale mark.
- *Surgical removal*. This requires local anaesthetic, 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 specimen that can be analysed in the laboratory to confirm the diagnosis.
- *Creams*. Creams containing a drug called 5-fluorouracil or imiquimod are useful treatment for actinic keratoses, especially if there are a lot of them. These preparations appear to selectively destroy the abnormal cells in sun-damaged skin. However, they often cause a good deal of inflammation of the treated areas. Diclofenac and retinoic acid are other drugs in cream or ointment form that are helpful when applied to actinic keratoses.

- [Photodynamic therapy](#). A chemical is applied to the affected area, which is then treated with the correct wavelength of visible light. This treatment is only available in certain centres.

What can I do?

Even though your skin is already damaged, protecting it from the sun from now on will reduce the number of new actinic keratoses you get, and also reduce the risk of getting a sun-induced skin cancer. You should be extra cautious in the sun by following these recommendations:

- Protect yourself from the sun at its height, from 10a.m. to 3p.m.
- Wear protective clothing - hats, long sleeves, long skirts or trousers.
- Apply a sunscreen regularly, of sun protection factor 30 or above (and able to block both UVA and UVB light) to exposed skin before going into the sun, and again every two hours when you are out in the sun.
- Protect your children from the sun in the same way.
- Avoid sunbeds.
- Examine your own skin every few months and see your doctor if an actinic keratosis starts to itch, bleed, or thicken, in case it has changed into a skin cancer.

Where can I find out more about actinic keratoses?

Web links to detailed leaflets:

www.skincarephysicians.com/actinickeratosesnet

www.emedicine.com/derm/topic9.htm

This leaflet aims to provide accurate information about the subject and is a consensus of the views held by representatives of the British Association of Dermatologists: its contents, however, may occasionally differ from the advice given to you by your doctor.

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