

Implementing the Primary Care Dermatology Society guideline and primary care treatment pathway for actinic (solar) keratosis^{1,2}

Description of actinic (solar) keratosis

- Actinic keratoses are common, sun-induced, scaly or hyperkeratotic skin lesions that:
 - have a very small potential to become malignant
 - are very uncommon under the age of 45 years, with the incidence increasing with age
 - have a high rate of spontaneous regression and a low rate of transformation (less than 1 in 1000 per annum)—if a patient has an average of 7.7 actinic keratosis lesions, the risk of one lesion transforming in 10 years is 10%.³

Identify high-risk patients

- Refer patients to secondary care or an accredited general practitioner with a special interest (GPwSI) in dermatology if:
 - there is diagnostic uncertainty
 - the patient is very young—consider xeroderma
 - the patient is immunosuppressed (especially post-transplant)
 - there is a previous history of skin cancer
 - there is extensive ultraviolet skin damage.

Red-flag indicators

- Refer urgently to secondary care as 'priority cancer' if lesions:
 - are growing rapidly
 - have a firm and fleshy base and/or are painful
 - are not responding to treatment.

Grading

- The majority of patients should be managed in the community based on the following grading system:

Grade I

- Single or a few lesions better felt than seen
- Flat, pink maculae without signs of hyperkeratosis and erythema
- Scale and possible pigmentation may be present

Grade II

- Lesions are easily felt and seen
- Moderately thick hyperkeratosis on a background of erythema

Grade III

- Thick hyperkeratotic lesion or obvious actinic keratosis

Field change

- Large areas of multiple actinic keratoses on background of erythema and skin damage
- Smaller areas up to 25 cm².



Management^[A]

General measures

- These measures are important for all patients and may be all that is needed for some
- Carry out thorough skin examination to exclude other sun-related tumours
- Provide a patient leaflet and advise the patient to report skin changes
- Encourage the patient to use sun protection and sun screen
- Consider using emollients to control any symptoms
- Nicotinamide (a form of vitamin B3) 500 mg twice daily can be recommended for those with a large number of lesions.

Specific therapies based on the grading of the lesions^[B]

	Strong recommendation	Relative recommendation
Grade I	<ul style="list-style-type: none"> • 3% diclofenac in sodium hyaluronate • 5% fluorouracil • 0.5% fluorouracil + 10% salicylic acid 	<ul style="list-style-type: none"> • 5% imiquimod • 3.75% imiquimod • liquid nitrogen • curettage
Grade II	<ul style="list-style-type: none"> • 5% fluorouracil • 0.5% fluorouracil + 10% salicylic acid 	<ul style="list-style-type: none"> • 3% diclofenac in sodium hyaluronate • 5% imiquimod • 3.75% imiquimod • liquid nitrogen • curettage
Grade III		<ul style="list-style-type: none"> • liquid nitrogen • curettage
Field change: small (up to 25 cm²)	<ul style="list-style-type: none"> • 3% diclofenac in sodium hyaluronate • 5% fluorouracil 	<ul style="list-style-type: none"> • 5% imiquimod • 0.5% fluorouracil + 10% salicylic acid • 3.75% imiquimod
Field change: large area	<ul style="list-style-type: none"> • 3% diclofenac in sodium hyaluronate • 3.75% imiquimod 	<ul style="list-style-type: none"> • 5% fluorouracil

Advice about treatments

- Warn patients to expect local skin reactions as an effect of treatment, which are more likely if large areas are being treated
- Complete clearance of lesions can be delayed several weeks beyond completion of therapy
- Large areas can be divided up and treated sequentially.

[A] Refer to the full guideline and the individual summary of product characteristics for further information and recommendations on the use of pharmacological therapies.

[B] These recommendations do not take the cost of treatment into consideration and are based on the clinical expertise of the guideline contributors.

1. Primary Care Dermatology Society. *Actinic (solar) keratosis clinical guideline*. www.pcds.org.uk/clinical-guidance/actinic-keratosis-syn.-solar-keratosis (accessed 16 April 2020)

2. Primary Care Dermatology Society. *Actinic (solar) keratosis—primary care treatment pathway*. PCDS, 2020. Available at: www.pcds.org.uk/ee/images/uploads/general/AK_guidelines_Macrh_2020.pdf

3. de Berker D, McGregor J, Hughes B. Guidelines for the management of actinic keratoses. *Br J Dermatol* 2007; **156** (2): 222–230.