# key points

SELECTED BY

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**Actinic, or solar, keratosis is caused by chronic** ultraviolet-induced damage to the epidermis. In the UK, 15-23% of individuals have actinic keratosis lesions. It is more common in fair-skinned individuals and patients who are immunosuppressed. Risk factors include: advanced age; male gender; cumulative sun exposure or phototherapy; Fitzpatrick skin phototypes I-II; long-term immunosuppression and genetic syndromes e.g. xeroderma pigmentosum and albinism.

**Actinic keratoses are regarded by some authorities as** premalignant lesions that may transform into invasive squamous cell carcinoma (SCC) and by others as in situ SCC that may progress to an invasive stage. The risk of malignant change appears low; up to 0.5% per lesion per year. Up to 20-30% of lesions may spontaneously regress but in the absence of any reliable prognostic clinical indicators regarding malignant potential active treatment is considered appropriate.

**Actinic keratosis lesions may present as discrete** hyperkeratotic papules, cutaneous horns, or more subtle flat lesions on sun-exposed areas of skin. The single most helpful diagnostic sign is an irregularly roughened surface texture: a sandpaper-like feel almost always indicates actinic damage. Dermatoscopy can be helpful in excluding signs of basal cell carcinoma when actinic keratosis is non-keratotic. It is always important to consider the possibility of SCC.

**Education regarding sensible sun protection measures** is particularly important. This will minimise further actinic damage but will not totally reverse the damage already done and thus will not entirely prevent more actinic keratoses developing. Patients should be able to recognise features that might indicate malignant transformation.

**Cryotherapy using liquid nitrogen can be effective but** uncomfortable. Topical therapy with 5-fluorouracil, diclofenac, imiquimod or ingenol mebutate are alternative options. All can cause irritant reactions. Large areas of actinic keratosis may require piecemeal treatment. Surgical curettage is particularly useful for treating very keratotic or hypertrophic actinic keratoses but formal excision should be considered when neoplastic change is a possibility.

**The principal indication for referral to secondary care** is the possibility of cutaneous malignancy. However, widespread and severe actinic damage in patients who are immunosuppressed is also a reason for referral.