162 Evaluation of Skin Lesions in the Cosmetic Patient Made Simple: Actinic Keratosis

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Actinic keratoses (AKs) are the earliest form of malignant transformation in the skin. The primary initiator of this malignant transformation is exposure to ultraviolet radiation, which explains their clinical predilection for the head and neck, dorsal hands, and extremities. Many times, patients with AKs will present chiefly with what they perceive to be a cosmetic complaint, such a dry or rough skin. In the context of an aesthetic practice, recognition of AKs has important medical implications for the patient. Left untreated, AKs can progress into invasive squamous cell carcinoma.

The clinical presentation of AKs is variable, but certain features are commonplace. Typically AKs are found in light-skinned Caucasians. AKs tend to be palpable, and early lesions can be felt more easily than seen, hence the complaint of dry or rough skin. More advanced lesions exhibit greater degrees of hyperkeratosis and are readily visualized. Figure 162.1 illustrates a field effect of actinic damage with discrete lesions. A common misperception is that AKs are only found in the elderly. These lesions can be identified in patients in their twenties. Particular attention should be paid in those patients with risk factors for the development of AKs: light skin, excess sun exposure, or artificial UV source use, such as a tanning bed.

There are multiple modalities available for the management of AKs. Factors in the selection of treatment are patient goals, compliance with treatment regimens, and physician experience. Table 162.1 highlights the most commonly utilized treatments for AKs. Prevention strategies are simple, but patient compliance can be low. Patients should be advised to practice sun avoidance, wear sun-protective clothing and hats, and utilize broad-spectrum sunscreens.

Fig. 162.1 Typical actinic keratoses manifest as rough scaly papules

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Table 162.1 Treatments for actinic keratosis

Modality	Advantages	Disadvantages	Comments
Cryosurgery	1. Effective, especially for thicker lesions 2. Physician administered	1. Treats individual lesions only 2. Risk of hypopigmentation 3. Physician experience and skill important	1. Long-standing traditional therapy 2. No issues with patient compliance 3. Hypopigmentation may be unacceptable in some patients
Topical 5-fluorouricil	1. Can treat broad areas and address subclinical lesions 2. Long history of safety and efficacy	1. Requires patient to apply 2. Prolonged erythema and potential crusting	1. Commonly utilized topical treatment 2. Requires good patient education regarding treatment course
Topical imiquimod	1. Can treat broad areas and address subclinical lesions	1. Requires patient to apply 2. Erythema and crusting. Frequency and duration of adjustment	1. Newer topical agent 2. Some evidence to suggest that can induce long-term clearance
Photodynamic therapy (PDT)	1. Can treat broad areas and address subclinical lesions	1. Photosensitivity after treatment for 24–36 h 2. Erythema- and sunburn-like reaction 3. Requires physician to be familiar with treatment protocols	Evidence suggests that PDT has a photorejuvenation effect that decreases erythema and rosacea, which may be desirable in the cosmetically sensitive patient
Chemical peels/laser ablation	1. Can treat broad areas and address subclinical lesions 2. Physician administered	1. Requires physician to be familiar with treatment protocols 2. May have prolonged healing and erythema	Has well-known cosmetic benefits
Topical ingenol mebutate	1. Can treat broad areas and address subclinical lesions 2. Short duration of treatment. Patient applied Face/scalp: 0.015 % gel daily for 3 days. Trunk/extremities: 0.05 % gel daily for 2 days	Erythema can be significant	Newer treatment