Know Your Lesions: The Many Variations of Seborrheic Keratosis

SKs are benign lesions that may be removed for medical or aesthetic reasons. It’s essential to distinguish SKs from malignant lesions.

BY GARY GOLDENBERG, MD

An estimated 83 million Americans have seborrheic keratosis (SK), making it one of the most common cutaneous lesions. SKs are benign lesions, although they may be associated with other malignant lesions and serve as cutaneous markers of internal malignancy. Therefore correct diagnosis is important.

Medically indicated reasons for SK removal include inconclusive diagnosis (need to biopsy) or removal of traumatized or symptomatic lesions. Patients frequently seek removal of lesions for cosmetic reasons: lesions usually begin as well-circumscribed, dull, flat, tan, or brown patches that with time may become more papular, taking on a waxy verrucous or “stuck-on” appearance. Because they may increase in size, thickness, or color, SKs often are a cause for concern among patients, who worry that they may be malignant skin lesions.

In one recent survey, dermatologists reported that they diagnose an average of 155 patients per month with SK. According to the same survey, roughly one-third of all patients with SK had more than 15 lesions.

CONFIRMING THE DIAGNOSIS

The diagnosis of SK typically is made based on visual assessment of the lesion. However, in some cases, SKs

Figures 1a-1c. A 56-year old female patient presented with three SKs. A.) Located on the back; asymptomatic but cosmetically bothersome. B.) Located on the back; asymptomatic. C.) Located on the left thigh; pruritic.
may be difficult to distinguish from malignant lesions. Dermoscopic evaluation may be beneficial. In one analysis of dermoscopic features of SK versus melanoma, researchers showed that the presence of blue-white veil, pseudo-pods or streaks, and pigment network were the clearest indications of malignancy. While multivariate analysis found only the blue-black sign to be significantly associated with a correct diagnosis, hyperkeratosis and fissures and ridges were independent risk markers of dermatoscopically SK-like melanomas.1

The recent identification of frequent mutations in SK via exome sequencing2 open the door to the eventual development of biologic tests to confirm an SK diagnosis.

TREATMENT OPTIONS

The above-mentioned survey of dermatologists found that, on average, they treat 43 percent of patients who present with SKs. Cryosurgery is the most common removal method. Other commonly employed removal methods include shave excision, electrodessication, curettage or a combination.1

Not surprisingly, an analysis of cryosurgery use in dermatology found that SK was the second most common lesion treated with liquid nitrogen (25 percent of all visits), following on the heels of actinic keratoses (48 percent of visits). Verrucae rounded out the list, accounting for 21 percent of cryosurgery visits. Data show that the use of cryosurgery for these indications has increased over time, especially in patients over the age of 65 years.6

Laser devices have been used to treat SK, with Er:YAG lasers showing both efficacy and good cosmetic outcomes.

In one trial, Er:YAG laser treatment was associated with complete clearance of all lesions (versus 68 percent clearance for cryosurgery) with reduced risk of hyperpigmentation or erythema associated with the laser.7

The 532nm diode laser has also shown benefit for treatment of SK, although use of color enhancement is needed. In a trial of the diode laser, complete resolution of SKs occurred in 93 percent of lesions. No hyperpigmentation or hypertrophic scar formation was seen. Hypopigmentation occurred in six percent of patients and was associated with old, chronic, or recalcitrant lesions.8

Currently under FDA investigation is what may become the first topical agent for the treatment of SKs. Aclaris Therapeutics’ A-101 40% topical solution is a proprietary, high-concentration hydrogen peroxide formulation developed as a non-invasive, in-office treatment administered by physicians or other licensed health care professionals. In clinical trials, patients treated with A-101 40% achieved statistically and clinically significant improvement in clearing SK lesions compared to placebo and with a similar adverse event profile. ■

Gary Goldenberg, MD is Assistant Clinical Professor, Dermatology, Icahn School of Medicine at Mount Sinai Hospital and in private practice in New York City.