

Keratoacanthoma

Keratoacanthoma (KA) is a low-grade tumor that closely resembles squamous cell carcinoma (SCC). By many, it is considered a variant of invasive SCC and is commonly referred to as "squamous cell carcinoma, keratoacanthoma-type" in most pathology/biopsy reports. However, there has been some argument for the classification of KA as a distinct clinical entity. Distinguishing characteristics of KAs include 1-2 cm dome or crater-shaped nodules that grow rapidly over an average of 4-6 weeks. KAs most commonly present as a solitary nodule on sun-exposed skin and are generally seen in middle-aged and elderly individuals with lighter skin. If left untreated, most KAs spontaneously involute and resolve within 6 months, leaving an atrophic scar; however, due to the association with SCC, a wide excisional biopsy is recommended for confirmatory diagnosis and treatment.



PLAY PICMONIC

Low-Grade Skin Tumor

Low-grade on test with tumor stamp

Keratoacanthoma (KA) is a low-grade, 1 to 2 cm dome-shaped skin tumor with a centralized keratinous plug--clinically distinguished by its rapid growth cycle. Controversy has existed surrounding the classification of this low-grade tumor. Some have considered this to be a distinct clinical entity while others have considered this to be a highly-differentiated form of squamous cell carcinoma. Recently, KAs have been reclassified as squamous cell carcinoma keratoacanthoma type (SCC-KA).

Dome-shaped Nodule with Central Crater

Dome Nodule-knob with Central Crater

The most common clinical presentation of a KA is a skin-colored, single or solitary dome- or crater-shaped nodule with keratin-filled center. Size typically ranges from 1-2 cm. Less common KA clinical variants include: giant KAs greater than 2 cm, subungual KAs, mucosal KAs, keratoacanthoma centrifugum marginatum (KCM) with prominent horizontal growth patterns up to 20 cm, and disorders presenting with multiple KAs.

More Common in Elderly

Fair-old farmer

Most commonly seen in fair-skinned, middle-aged and elderly individuals with a peak incidence between the ages of 50 and 69.

Sun-exposed Skin

Sun-exposed

Seen on sun-exposed areas of the skin. Most commonly found on the face, neck, arms and hands.

Characteristics

Resembles Squamous Cell Carcinoma of the Skin

square-mouse car-gnome

KAs are difficult to distinguish from squamous cell carcinoma (SCC) of the skin, because they share very similar histopathologic features. A lack of histopathologic features to definitively distinguish between the two has caused controversy surrounding KA being considered a variant of SCC or a distinct entity. KA is commonly referred to as low-grade SCC.

Grows Rapidly over 4-6 Weeks

Rapid-rabbit growth

A rapid growth cycle over 4-6 weeks is a key distinguishing characteristic of KAs that helps differentiate the lesion from SCC.

Workup & Management

Wide Excisional Biopsy

Wide-Cutting Exorcist

Most KAs, if left untreated, have been shown to spontaneously involute and resolve within 6 months; however, some KAs persist for greater than one year-- further complicating the clinical distinction from SCC. While KAs are generally recognized as benign, treatment is recommended due to the association with SCC. Surgical excision, with the recommended surgical margins for SCC (at least 4 mm), is the first-line treatment for a solitary KA lesion--the most common clinical presentation of KA. This allows for both the histopathologic evaluation for diagnosis and the removal of the skin lesion.

Mohs Micrographic Surgery

Mower with Surgeon

Mohs micrographic surgery is a more complex and expensive surgical excision method that is tissue-sparing and allows for intraoperative assessment of tissue margins. When available, Mohs surgery is the preferred treatment for KAs in cosmetically sensitive locations such as the face. Due to this procedure being more costly and less widely available, it is typically reserved for patients in whom a tissue-sparing procedure is desired, or for lesions greater than 2 cm in diameter (giant KA--a less common KA variant).