

Diagnostic Challenge: Keratoacanthoma vs. Giant Palpebral Squamous Cell Carcinoma - A Case Study of the Boundary between Benign and Malignant

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Abstract

Case Report

We presents a clinical case illustrating the diagnostic challenge between keratoacanthoma and giant squamous cell carcinoma of the eyelid, highlighting the boundary between benign and malignant conditions. This article highlights the importance of distinguishing these two entities for appropriate treatment and significant therapeutic implications.

Keywords: Keratoacanthoma, Squamous, Cell Carcinoma, eyelid, tumor, evolving.

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INTRODUCTION

Keratoacanthoma is a benign tumor affecting mainly the eyelid but also the conjunctiva. They appear in sun-exposed areas, most often on the face. The diagnosis is histological and poses a differential diagnosis with epidermoid carcinoma. Treatment is surgical and recurrence is rare. We report the case of a woman with a giant keratoacanthoma of the lower eyelid.

OBSERVATION

This is a 68-year-old female patient who presented with a tumor lesion of the left lower eyelid that

had been evolving for 1 year. Initially, it was small and then progressively increased in size. On examination, there was a well-limited, purplish, budding lesion measuring 3 cm by 2 cm, with a smooth-surfaced (Figure 1), telangiectatic peripheral bulge surrounding a central crater filled with corneal material. An excisional biopsy was performed under local anesthetic (Figure 2), and pathological examination confirmed the diagnosis of a keratoacanthoma, revealing a well-limited nodular epithelial tumor with a crater-like appearance and lateral spurs without epidermoid proliferation. The post-operative course was favorable (Figure 3), with no recurrence after 11 months.



Figure 1: Image showing the appearance of the lesion



Figure 2: Image showing the surgical specimen after excisional biopsy



Figure 3: Evolution 3 weeks post-op

DISCUSSION

The etiology of keratoacanthoma is unknown. Most authors consider this lesion to be a well-differentiated, spontaneously regressive squamous cell carcinoma.

Keratoacanthomas arise from the pilosebaceous glands and are generally solitary. They are more common in men than in women and usually appear in the elderly [1].

The most common kind is referred to as unique or solo. Mainly on the areas that have been discovered, the members' faces and portions farther away- the lesion is located.

Contrary to the traditional shape, the evolution of the giant keratoacanthoma is far more uncertain. It is defined by its larger than 3 cm size, and nothing makes it possible to predict its exact size [2]. Their evolution is not well known since, due to psychological issues, they are frequently treated without waiting for a spontaneous regress. Conversion of a giant keratoacanthoma into a carcinomatous lesion cannot be ruled out when the lesion becomes chronic [3]. Lasudry even advises considering every keratoacanthoma as a malignant lesion and doing systematic exercise in it [1].

Squamous cell carcinoma, which has a completely different prognosis and management, is the main differential diagnosis of keratoacanthoma, both clinically and histologically [4]. Biopsy removal of the

lesion is necessary, concentrating on the central crater and peripheral bead (using a transfixing biopsy) with a safety margin [5]. The authors stress the importance of a large biopsy for a precise morphological study of the tumor, in order to differentiate keratoacanthoma from squamous cell carcinoma. As a general rule, keratoacanthoma grows rapidly at first, followed by prolonged involution. It has a favorable spontaneous course, growing rapidly in two to three months, but early excision remains the treatment of choice [4].

They rarely reappear after involution or excision. Because of their clinical and histopathological appearance, as well as their favorable prognosis, keratoacanthomas have classically been distinguished from squamous cell carcinomas (SCC). However, some authors insist that keratoacanthoma is a type of squamous cell carcinoma (SCC) [6].

Because of the possibility of SCC and because keratoacanthomas can cause significant local tissue destruction before involuting, complete excision is recommended in the eyelid [6, 7].

Numerous therapeutic approaches have been proposed, ranging from cryotherapy to injections of methotrexate, bleomycin, interferon, 5-fluorouracil, or other substances. The most reasonable and satisfactory option, if feasible, is complete removal of the tumor, checking for excess margins [7].

CONCLUSION

Anatomopathological examination has a crucial role to play in the diagnosis of keratoacanthoma of the

eyelid, given the difficulty of differentiating between keratoacanthoma and verrucous squamous cell carcinoma in order to choose an appropriate treatment for the lesion, the therapeutic implications of which differ from those of these two entities.

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