An unusual labial tumor: A case report and review

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ABSTRACT

Keratoacanthoma is a benign epithelial tumor with favorable evolution which poses a considerable problem of differential diagnosis with squamous cell carcinoma. We report the case of a patient who presented an unusual location of this tumor, causing an essentially diagnostic and aesthetic problem, it is a large keratoacanthoma taking the central part of the lower lip which appeared two months previously and increasing in size suddenly and which required surgical, diagnostic and therapeutic ablation in order to eliminate the risk of squamous cell carcinoma in situ. Postoperative treatment was simple but at the cost of a visible scar that can be improved by a combination of aesthetic techniques.

Key words: Keratoacanthoma; Epidermoid carcinoma; Lower lip

INTRODUCTION

Keratoacanthoma is a fairly frequent epithelial tumor of favorable evolution, which after controversy regarding its benign or malignant nature, has been considered since 2018 by the WHO as a variant of squamous cell carcinoma (CE). This decision was the subject of debates during the drafting of the 4th edition of the classification of skin tumors, and remains discussed by many teams. It can develop anywhere in the seed coat, but its labial location is unusual.

CASE REPORT

This is a 72-year-old smoking patient, followed for insulin-dependent type 2 diabetes and arterial hypertension with amlodipine, a farmer with no known dermatological history who consulted for a lower labial swelling that had appeared for two months and which rapidly increased in size, with functional discomfort in speaking and chewing. Dermatologic examination found an inferior labial Centro nodule measuring approximately 1 cm with a whitish warty irregular surface and a slightly crateriform center. This tumor is hard to the palpation, adherent to the deep plane and bleeds in places of contact (Fig. 1). Examination of the oral cavity and cervical lymph node areas was unremarkable. An excisional biopsy was performed and showed an hyperplasic squamous epithelium with a central crater-like depression extended into the underlying connective tissue. The papillary surface of the lesion was covered with a thick layer of parakeratin having central plugging. The accumulation of keratin, configuring as keratin pearls, was observed and individual cell keratinization could sporadically be detected; mostly in the upper parts of the lesion (Fig. 2). The proliferation of the epithelial cells in the base of lesion had protracted into the underlying fibro-connective tissue in ritual of irregular aggregates. However, it was not spread into the muscles and sweat glands. The superficial epithelium on the lateral border of the tumor appeared to be normal. The diagnosis of keratoacanthoma was retained. And the follow up of six months didn’t show any recurrence. However the scar was still visible given the large size of the initial lesion.

DISCUSSION

Keratoacanthoma (KA) is defined as a benign keratinocytic neoplasm which arises from human’s
hair follicle. There may be a seasonal variation in the appearance of keratoacanthoma which suggests that ultraviolet rays have a strong effect on tumor development, but they may develop on parts of the body not exposed to sunlight [1].

Keratoacanthomas can develop at the site of previous trauma. In most cases they are of the “crateriform” type, they grow rapidly then regress on their own.

It appears as a smooth, domed, red papule resembling molluscum contagiosum. Within a few weeks the tumor can grow rapidly, reach an inch or two, and end in a central crater filled with keratin and often filled with a scab. As it grows, it keeps a smooth surface, unlike squamous cell carcinoma.

If left untreated, growth stops within about 6 weeks and the tumor remains unchanged for a variable period of time. In most cases it then regresses slowly within 2 to 12 months and often heals leaving marks.

The limbs, especially the hands and arms, exposed to the sun, are the most common location; the trunk comes second, but keratoacanthoma can occur on any surface of the skin, including the anal area. Occasionally multiple keratoacanthomas appear, or a single lesion that extends for more than a few centimeters. These variants are resistant to treatment [1,2].

On microscopic examination, these lesions are distinguished from its parent squamous cell carcinoma (CE) by its good delineation. It is bordered by epidermal lips and appears to consist of well-differentiated squamous masses. The keratinocytes there present vitreous aspects (“glassy”) in the spiny layers and form a basal of little increased size which may present mitoses without aneuploid character. There appear variably parakeratotic horny globes within which an exocytosis of polynuclear neutrophils is classically observed (although sometimes absent). The lesion depth is very clear with aspects of repression (“pushing borders”) without any infiltrative aspect or flagrant desmoplastic reaction. During the regression phase, the microscopic examination is complicated by the uneven melting of the deep clumps partially compromising the symmetry of the lesion silhouette. This phase can be recognized by its lichenoid inflammation located around the depth of the lesion casings [3].

Many immunohistochemical markers are used for the distinction between keratoacanthoma and epidermoid carcinoma and the most useful seems to be the cytokeratin 17 and the ki67 [4].

The selected treatment for the lesion is complete surgical excision occurring the ability to examine the lesion histopathologically, to prevent local invasion and metastasis and to minimize the scarring [5].

However, the surgical procedure may be destructive and when the lesions are located on the esthetically or functionally important regions, the treatment could be unacceptable. Other treatment modalities such as electro-surgery, cryo-surgery, laser-surgery, curettage, radiotherapy, systemic chemotherapy, topical chemotherapy (intra-lesion injection) and photodynamic therapy have been also practiced. These different treatment modalities may convey different
CONCLUSION

The diagnosis and treatment of KA is a challenging task, hence, careful clinical, histopathologic and immuno-histochemical examinations of the lesion are the prerequisites. Its labial location is unusual and should be quickly distinguished from a real epidermoid carcinoma.

Consent

The examination of the patient was conducted according to the principles of the Declaration of Helsinki.

The authors certify that they have obtained all appropriate patient consent forms, in which the patients gave their consent for images and other clinical information to be included in the journal. The patients understand that their names and initials will not be published and due effort will be made to conceal their identity, but that anonymity cannot be guaranteed.

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