

## Case Report

**Keratoacanthoma of Oral and Maxillofacial Region: A Case Report**Yahya A Musawa<sup>1</sup>, Aiman Abdullateef Ahmad<sup>2</sup>, Ali Atiyah Dahesh Derrbishi<sup>3</sup>, Youssef Ahmed Maadi<sup>3</sup><sup>1</sup>Oral & Maxillofacial surgery Resident, Jazan Dental Centre, Jazan. Saudi Arabia<sup>2</sup>Oral & Maxillofacial surgery Resident, Abu Arish General Hospital, Jazan. Saudi Arabia<sup>3</sup>Dental Intern, Dept of Oral & Maxillofacial Surgery, College of Dentistry, Jazan University, Jazan. Saudi Arabia**\*Corresponding author**

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**Abstract:** A self-limited benign epithelial proliferative lesion, keratoacanthoma (KA), presents very similar clinical features to that of squamous cell carcinoma. It is a benign epithelial tumor of pilosebaceous origin composed of keratinizing squamous cells and characterized by rapid evolution followed by spontaneous resolution. Here we are presenting a case report of keratoacanthoma in a 98 year old male from the rural part of Jazan, Saudi Arabia.

**Keywords:** Benign epithelial tumor, Keratoacanthoma, Squamous cell carcinoma.

**INTRODUCTION**

Keratoacanthoma is a benign epithelial proliferative lesion and its most common site is the vermilion border of the lips. The disease frequently presents a diagnostic challenge for clinicians as both clinical and histopathological features of KA has great resemblance to those of a well differentiated squamous cell carcinoma (SCC) [1].

It was described first in 1889 by Hutchinson [2]. Keratoacanthoma is characterized by rapid evolution and, most often, by spontaneous resolution. Clinically and histologically, it could be confused with a de novo highly malignant squamous cell carcinoma (SCC). However, KA can be regarded as an abortive cancer that did not grow into an aggressive SCC [3].

Here we are presenting a case report of keratoacanthoma in a 98 year old from the rural part of Jazan, Saudi Arabia.

**CASE REPORT**

A 98 year old male patient reported to the OMFS clinic with a complaint of solitary nodular growth on the right temporal area. The lesion started as a small nodule and attained the present size over the

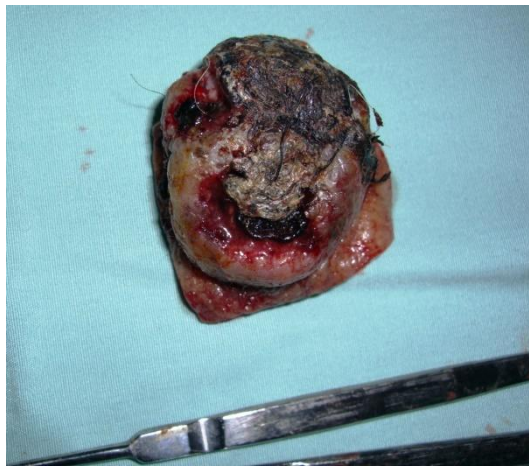
period of 3 to 5 months. The growth had well defined borders; covered with brownish-black skin with presence of some hair follicles of size approximately 2.5 X 2.5 X 1.0 cm. The patient was not having any systemic history. On palpation, the lesion was non-tender and rubbery in consistency.

On incisional biopsy, report came positive for the keratoacanthoma. Then excisional biopsy was done under deep sedation using propofol. The operation site was checked for the clean edges and then closed by a rotation flap. The excisional biopsy specimen was brownish-black in color, firm in consistency, round in shape and of size 2.5 X 2.5 X 1.0 cm.

The histopathological examination of Hematoxylin & Eosin stained tissue sections showed parakeratinized, stratified squamous epithelium showing proliferation. The epithelium had shown downward proliferation with many areas of keratin plugging. Keratin pearl formation was also present and the basement membrane was not lost. The underlying connective tissue had shown presence of chronic inflammatory cell infiltrate in moderate amount. Based on the histopathological examination, final diagnosis of keratoacanthoma was given.



**Fig-1: Clinical picture of the patient with presence of lesion at the temporal area**



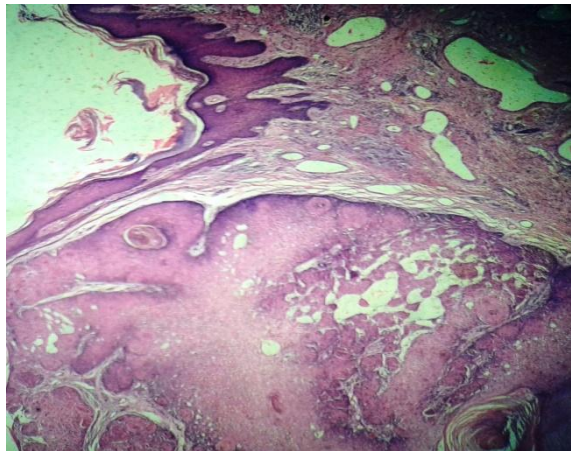
**Fig-2: During excision of the lesion**



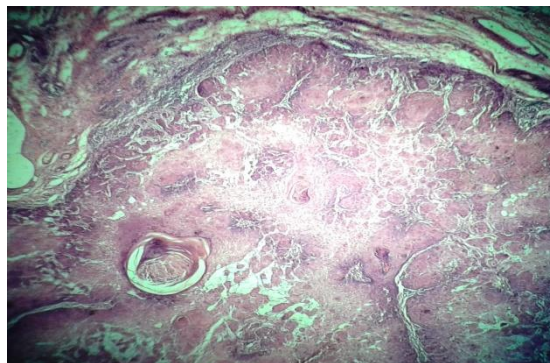
**Fig-3: The excised specimen**



**Fig-4:** After complete excision suturing was done and the operation site was closed



**Fig-5:** Histopathological picture at the scanner view



**Fig-6:** Histopathological picture at the high power view

## DISCUSSION

Keratoacanthomas are clinically distinct, benign, skin tumors commonly positioned at sun-exposed sites in elderly fair-skinned people [4]. KA is a cutaneous tumor affecting elderly patients commonly at the hair-bearing regions and central part of the face. It can also be present in the middle-aged patients. They frequently develop on chronic sun-exposed skin but can appear on non-overexposed skin. They have not been reported on the palms and soles, or mucous surfaces [2].

KA is categorized into solitary KA and its variants, and numerous forms of multiple KAs. Among the latter, two familial types have been defined:

multiple self-healing squamous epitheliomas and Muir-Torre syndrome [3, 4]. Intraoral KA, as an isolated pathology occurring in the oral cavity, is a very rare clinical entity [5].

KA can also be related with chronic scarring diseases like discoid lupus erythematosus, lichen planus, stasis dermatitis and chronic burns [6]. Clinically KA is a well-defined, rounded, firm papule, plaque, or nodule that is flesh colored or reddish. When it was first described, a yellowish aspect was described and it was termed molluscum sebaceum [2].

KA can occur in all age groups, but most of the cases have been reported to ensue over 40 years of age, with a male predilection, which is in accordance with the present case.

Clinically, regular history of KA comprise three phases; proliferative, mature and involutonal or resolving [7]. The trademark of the disease is unplanned resolution after an intermediary stationary stage. For this, the literature about the biological behavior of KA have suggested that the outer root sheath of the hair follicle infundibulum is the origin of these lesions and since pillous follicles naturally evolve through cycles including phases of activity/growth (anagen), transition (catagen) and resting/ loss (telogen) [1].

Though the precise etiology still remains unknown, certain etiological factors have been proposed like sun-light, chemical carcinogens, genetic factors, trauma, human papilloma virus and immunocompromised status. Recent research data suggests that about one-third of the cases bear chromosomal aberrations such as additions and deletions [6-9].

In the present case, although this is a benign neoplasm and the possibility of autoregression, the lesion was located in a region of the face which caused discomfort to the patient. Thus, surgical removal of the lesion was recommended.

#### CONCLUSION

It is important to distinguish between keratoacanthoma and other aggressive lesions and accordingly the treatment should be planned.

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