KERATOACANTHOMA- A RARE CASE REPORT

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ABSTRACT
Keratoacanthoma is a common epithelial tumour of skin composed of keratinizing squamous cells originating in pilosebaceous follicles and resolving spontaneously if untreated. It predominantly affects the sun exposed sites in fair skinned, middle aged and old individuals with a peak incidence in the sixth and seventh decades. Males are affected about three times more often than females. Clinically presents as firm, rounded, solitary, flesh coloured or pink, dome shaped nodule with a central keratin plug. We report a case of keratoacanthoma in a 52 year old female who presented with complaints of erythematous raised lesion over the right shoulder for the past 8 months.

INTRODUCTION
Keratoacanthoma was originally described by Sir Jonathan Hutchinson in the year 1880 and given the name by Freudenthal of Wroclaw in the 1940s. It is a benign epidermal tumour which is characterized by rapid and abundant growth and has a tendency toward spontaneous regression and histologically similar to squamous cell carcinoma (Mackie, 1992). It presents with firm, rounded, flesh coloured or reddish papule which may resemble molluscum contagiosum or if keratotic, a viral wart. 70 % of keratoacanthoma is localized to the face but they can also involve the arms, dorsum of hands and lower extremities.

CASE REPORT
A 50 year old female presented to our skin OPD with complaints of erythematous raised lesion over the right shoulder for the past 8 months. It initially started as a small raised lesion and rapidly progressed to the present size. There was no history of trauma, pain or itching.
Dermatological examination revealed a single, round, pinkish to red coloured nodule with a central verrucous surface. [Figure 1] On palpation, it was firm, non tender, did not bleed on touch. Scalp, palms, soles and nail was normal. Systemic examination done was normal.
Routine investigations done were normal. A skin biopsy was taken from the nodule which showed stratified squamous epithelium overlying keratin filled crater lined by hyperplastic squamous epithelium and surrounded by dense inflammatory cell infiltration. [Figure 2]

DISCUSSION
Keratoacanthoma (Syn: Molluscum sebaceum) is rapidly evolving tumour of the skin characterized by rapid growth, histological features similar to those of cutaneous squamous cell carcinoma and certain tendency toward spontaneous regression. It is more frequent in fair skinned persons and rare in dark skinned individuals. Both sexes are equally affected with a slight predilection for men. Keratoacanthoma occurs mostly in adult life with a peak between in the ages of 55 and 65 years. The familial type of keratoacanthoma occurs often during adolescence.

Several factors involved in the pathogenesis of keratoacanthoma are ultraviolet radiation, chemical agents (tars and other agents), viral infections, trauma, genetic predisposition and immunosuppression. They can occur following trauma or spontaneously and have the propensity to regress with time (Schwartz, 1994; Kingman, 1984; Goldberg et al., 2004). It occurs mostly on sun exposed
sites such as face, fore arm and dorsal aspect of hands; thighs, chest, shoulder and scalp are less common. It presents clinically as solitary firm, rounded, flesh coloured or reddish dome shaped nodule with a central keratin plug. It evolves through three stages- proliferating, mature and resolving (Cerroni and Kerl, 2003; Karaa and Khachemoune, 2007). Lesions in the proliferative stage are rapidly enlarging erythematous papules that grow up to dimension of 1 to 2 cm or more, symmetric, firm and show a smooth surface. In the mature stage the lesions are symmetric, firm, erythematous or skin coloured nodules with a central keratotic core. The central part can appear crateriform if the keratotic core is removed. Mature keratoacanthoma may be bud, dome or berry shaped, the former arising from the upper follicular epithelium and the latter two of lower follicular origin. It grows rapidly over 1-2 months and spontaneously involutes in 4-6 months.

Recurrence occurs in upto 8% of cases especially on the hands, fingers, lips and ears possibly due to trauma. There are several variants of keratoacanthoma which includes: agglomerated form, giant form, keratoacanthoma centrifugum marginatum, keratoacanthoma involving the oral and other mucous membranes, multiple eruptive keratoacanthoma of Grzybowski, multiple familial keratoacanthoma of Witten and Zak, plate shaped keratoacanthoma, distal digital keratoacanthoma. Histologically, shows in the center a large, irregularly shaped crater filled with keratin. The epidermis extends like a lip or buttress over the sides of the crater. At the base of the crater, irregular epidermal proliferations extend both upward into the crater and downward from the base of the crater. The proliferation at the base to some extent resembles squamous cell carcinoma. There are many horn pearls most of which show complete keratinization in their center. Inflammatory infiltrates is often present at the base of the lesion.

Treatment includes spontaneous resolution of KAs over weeks to months but surgical excision is the gold standard of treatment. Other treatment modalities include electrodessication, radiotherapy, intralesional chemotherapy with 5-FU, bleomycin or methotrexate, interferons, oral retinoids, topical imiquimod and photodynamic therapy. We report this case because of its rarity and unusual site.

**CONCLUSION**
This case is presented for its rarity.

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**CONFLICT OF INTEREST**
The authors declare that they have no conflict of interest.

**REFERENCES**


