

## Epidermal Inclusion Cyst of Buccal Mucosa: A Rare Case Report



### Medical Science

**KEYWORDS :** Epidermoid Cyst; Epidermal Cyst; Sebaceous Cyst; Inclusion Cyst

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### ABSTRACT

*Epidermal inclusion cysts are the result of implantation of epidermal element which is followed by its cystic transformation. The enucleation of cyst is the well established treatment modality. We are presenting a rare case report of epidermal inclusion cyst of buccal mucosa along with relevant literature review.*

#### Introduction-

Epidermal inclusion cysts are the result of implantation of epidermal element which is followed by its cystic transformation. The term epidermoid cyst is used in general context irrespective of the source of epithelium and is more commonly used in place of epidermal inclusion cyst. These cysts should not be called sebaceous cyst as these cysts are not of sebaceous origin. The origin of epidermoid cyst is varied. They developed from the sequestration and implantation of epidermal rest during embryonal period, iatrogenic or surgical implantation of epithelium into the oral cavity mesenchymal tissues or due to occlusion of pilosebaceous unit. The lipid pattern analysis demonstrates similarity with epidermis and is different from sebaceous cysts. Additionally, epidermoid cysts express cytokeratin 1 and 10, which is present in the suprabasilar layer of the epidermis. The source of the epithelium is often the infundibulum of the hair follicle. The epidermoid cysts are indolent in growth and slowly progress over a period of months. These cysts are usually asymptomatic unless secondarily infected. Malignant transformation into basal cell carcinoma or squamous cell carcinoma has been reported but is rare. The males are affected twice more commonly than females. These cysts are firm, round, mobile and contain thick cheesy material. Sites commonly involved are face, trunk, neck, extremities and the scalp. Multiple epidermoid cysts is one of the manifestation of the Gardner's syndrome. Surgical removal of the cyst is the mainstay of the treatment and recurrence is seldom reported [1,2].

#### Case Report-

A 30 years old male patient reported to the Department of Oral & Maxillofacial Surgery with the chief complaint of swelling of right side of face since 12 months. The swelling was asymptomatic and is slowly enlarging over a period of one year. On inspection there was an obvious swelling on right side of cheek which is approximately 4 cm in diameter [Figure 1]. On palpation swelling was firm in consistency with well defined margins and is non tender. Intraoral examination revealed normal buccal mucosa. No other abnormality was detected intraorally. Aspiration of the lesion with wide bore needle was very difficult because of the thick consistency of the aspirate and the aspirate was cheesy and keratin like. The provisional diagnosis was epidermal inclusion cysts of buccal mucosa and it was planned to enucleate the cyst. The cyst was enucleated under local anaesthesia and was sent for histopathological examination. Histopathological examination revealed stratified squamous epithelium with orthokeratin toward the cystic lumen. The underlying connective tissue stroma revealed some chronic inflammatory cells along with melanin pigmentations. No other skin appendages were present [Figure 2]. The histopathological diagnosis was consistent with the provisional diagnosis. Sutures were removed after 7 days. There was no recurrence in this case during

1 year follow up period.

#### Discussion-

Epidermal inclusion cysts are very uncommon intraorally and the mean age of occurrence is between third and fourth decade of life. Surgical enucleation of the cyst is the definitive treatment modality and the recurrence is rare. We treated our patient in accordance with the established management protocol of enucleation and there was no recurrence during 1 year follow up period.

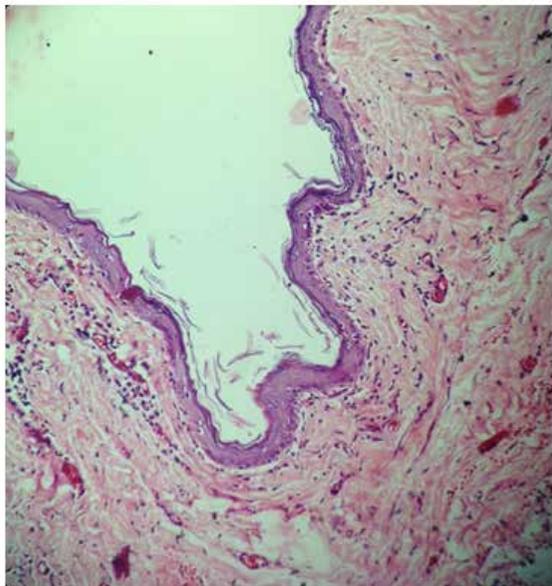
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**Figure 1-** Well defined circular swelling on right side of cheek.



**Figure 2-** Cystic cavity lined with keratinized epithelium with keratin in the lumen. No skin appendages are present and the connective tissue stroma show chronic inflammatory cells. [H & E Stain, x 10]

## REFERENCE

1. Rajendran R, Sivapathasundharam B, "Shafer's Textbook of Oral Pathology" 5th Edition, Page 94-97. | 2. Neville BW, Damm DD, Allen CM, Bouquot JE, "Oral & Maxillofacial Pathology" 2nd Edition, Page 31-32.