

## EPIDERMOID CYST PRESENTING AS A MASS LESION IN FLOOR OF MOUTH IN AN ELDERLY MALE-A COMMON LESION AT AN UNCOMMON SITE

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### ABSTRACT

Epidermoid cysts are rare, benign, slow growing lesions that are histologically characterized by cystic spaces lined by simple squamous epithelium. Epidermoid cysts in the oral cavity are exceptionally rare accounting for only 1.6% of all cases. In this report, we present a case of epidermoid cyst in the floor of the mouth, an extremely rare site of presentation, which was diagnosed by fine needle aspiration cytology and confirmed histopathologically.

#### Key words:

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## INTRODUCTION

Epidermoid cysts are rare, benign, slow growing lesions that are histologically characterized by cystic spaces lined by simple squamous epithelium. Areas of embryonic fusion are the common sites for their occurrence. Head and neck region being an uncommon site for epidermoid cysts accounts for only 7 %. Epidermoid cysts in the oral cavity are exceptionally rare accounting for only 1.6% and the common sites are submental, submandibular and sublingual.<sup>1</sup> Diagnosis of such lesions often pose a dilemma because of similar clinical presentations. In such cases, fine needle aspiration cytology aids in their diagnosis and helps in effective management. Herein we present a case of epidermoid cyst presenting as a mass lesion in floor of mouth which was diagnosed on FNAC and later confirmed by biopsy.

### Case Report

A 65 year old elderly male presented with complaints of a painless mass in oral cavity for a period of 5 months. It was associated with difficulty in chewing and swallowing of solid foods and difficulty in speech (Fig 1). There was no history of trauma. On examination, a mass of size 5x4 cms was observed in the midline of the floor of mouth displacing the tongue. The mass was soft, cystic in consistency, nontender, nonfluctuating and covered with normal mucosa. The tongue was found to be atrophied and almost reached the palate. Ultrasonography revealed a well circumscribed, homogenous, non-enhancing cystic mass measuring about 6 x 5 cms in the floor of the mouth. All other routine investigations were within normal

limits. Associated cervical lymphadenopathy was not detected. A clinical diagnosis of benign cystic lesion was made and FNAC was advised.

FNAC was performed in the department of Pathology, PGIMS, Rohtak using a 23 gauge needle which yielded pultaceous material. Smears were prepared and stained with Leishmann stain. Smears examined under light microscope revealed numerous anucleated squames and occasional benign mature squamous cells in a background of amorphous debris (Fig. 2 A & B). Thus a cytological diagnosis of epidermoid cyst was made and excision of the swelling with histopathological examination was advised.

Histopathological examination of the specimen revealed a stratified squamous epithelium lined cystic cavity filled with lamellated keratin thus conforming the cytological diagnosis of epidermoid cyst (Fig.3).

## DISCUSSION

Epidermoid cysts in the form of cutaneous lesions are common presentation in the Otorhinolaryngology department and the common sites are face, scalp, neck and trunk. However, presentation of such cystic lesions in the deeper tissue is very rare constituting about 1.6-6.9% of all cystic lesions in the body.<sup>2</sup> Further such lesions are uncommon in the mouth constituting only less than 0.01% of all oral cysts.<sup>3</sup> Meyer divided the cysts of the floor of mouth into three histological categories: True dermoid cysts, epidermoid cysts, and teratoid cysts.<sup>4</sup> In the true dermoid cysts, the cyst cavity is lined by

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stratified squamous epithelium along with various skin appendages including hair, hair follicles, sebaceous, sweat gland etc., while these are lacking in epidermoid cysts. The teratoid cysts may be lined by simple squamous or ciliated respiratory epithelium containing skin appendages along with other tissues such as muscle, bone, cartilage, etc.



Fig 1 65 year elderly male ,floor of mouth cystic lesion (white arrow) with displaced tongue (black arrow)

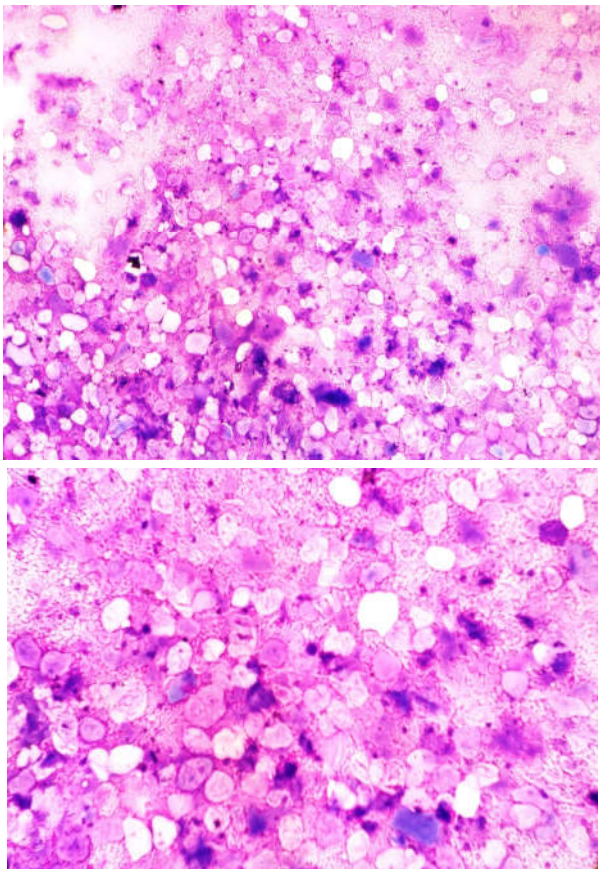


Fig 2 (A & B) :Leishmann stained FNA smears showing many anucleated squames and few benign nucleated squamous cells in a background of amorphous debris (100X, 400X).

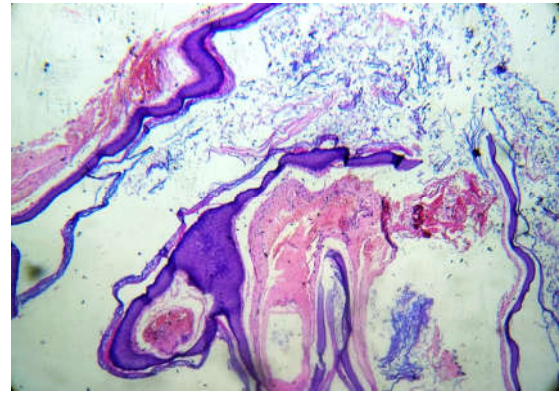


Fig 3 H & E stained section showing stratified squamous lined cyst filled with lamellated keratin. (100X)

Epidermoid cysts can further be categorized as congenital or acquired, although distinction between the two is not possible clinically or histologically. Numerous theories of their origin have been proposed however exact etiology remains unknown. The congenital variant are said to be dysembryogenetic lesions arising from ectodermal elements entrapped during the midline fusion of the first and second branchial arch between the third and fourth week of intrauterine life. While traumatic or iatrogenic implantation of epithelium or occlusion of a sebaceous duct leads to the formation of the acquired variant.<sup>5</sup> Second and third decades are usual age of presentation of epidermoid cysts with no gender predilection. However in our case the age of the patient was 65 years.

As epidermoid cysts are quite infrequent in the floor of the mouth, correct clinical diagnosis is usually not possible. The most common differential diagnosis of a cystic mass lesion in the floor of the mouth includes ranula, lymphatic malformation, infectious process, dermoid cyst, epidermoid cyst, cystic hygroma, cervical lymphoepithelial cyst and heterotopic gastrointestinal cyst.

FNAC of epidermoid cysts usually reveals mature squamous cells admixed with anucleated squames in a background of amorphous debris. This may be accompanied by inflammatory infiltrate and foreign body giant cell reaction.<sup>6</sup> The only effective treatment for such lesions is surgical enucleation which confers good prognosis and low recurrence rate.

We have presented this case because of the rarity of the site of presentation of epidermoid cyst in the floor of mouth. Also, we want to emphasise the role of preoperative FNAC in diagnosis of simple benign lesion as it can be more informative and guiding.

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