Research Paper Medical Science

Epidermal Cyst in Floor Of Mouth

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ABSTRACT *Epidermal cyst in floor of mouth is rare and represents less than .01% of all cyst of oral cavity.We report a case in 23 year old female presenting with intraoral cystic swelling.*

KEYWORDS : epidermal cyst,floor of mouth,cytology, Histolpathology,ultrasound,MRI

CASE PRESENTATION-
A 23 year old female presented with a soft , cystic , reddish , non tender and movable intraoral swelling which was initially very small but it gradually increased in size over a period of 3years.

On examination the oral cavity was almost full of swelling and tongue was shifted to left side.

Upon bimanual examination a dough like non tender mass was felt. There was no evidence of cervical lymphadenopathy .The skin and mucosa over swelling was intact and normal. Ultrasonography was performed which revealed cystic area with echogenic material and internal echoes within it.MRI showed an encapsulated cystic mass without any calcification.

Due to absence of pain infective foci in oral cavity was excluded and hypothesis of malignancy was also excluded clinically and also due to absence of cervical lymphadenopathy.

So with tentative diagnosis of ranula which is far more common in floor of mouth aspiration was carried out. On aspiration putty like material was obtained and the smear showed mainly anucleated squames and cellular debris which pointed to new diagnostic hypothesis of epidermal cyst.

Treatment included surgical excision of lesion through intraoral midline incision under general anesthesia.Macroscopically the lesion was encapsulated and contained keratin like yellow material.Histopathological diagnosis was epidermal cyst lined by stratified squamous epithelium with lumen containing keratin.Post operative course was uneventful and there was no evidence of recurrence at a period of 4months after surgery.

INTRODUCTION-
Incidence of epidermal cyst in floor of mouth is rare and represents less than .01% of all cyst of oral cavity. Developmental site includes sublingual , submaxillary and submandibular space.

Epideramal cyst presents as slow and progressive growth and even if they are congenital diagnosis is possible in second and third decade of life.

It usually results from entrapped ectodermal tissue of first and second brachial arches which fuses during third and fourth week in utero. A second theory suggests midline epidermal cyst may be variant of thyroglossal cyst with predominantly ectodermal element.

DISCUSSION
Age of presentation of epidermal cyst is between 10 and 35 years. Growth of cyst is influenced by hormonal stimulation, producing a hypersecretion of fat during puberty which explains greater incidence cyst in young adults. Males and females are equally affected.

Type of epidermal cyst or keratinous cyst vary in manner of keratinisation and cyst content , which includes infundibular and trichilemmal type. Infundibular type clinicaly represents solitary , slow growing dome shaped mobile lump with visible small opening to skin (punctum). Common site includes face neck and trunk.Microscopicaly they are lined by stratified squamous epithelium with intact granular layer but devoid of rete and cyst contain laminated loose keratin.Trichilemmal type clinicaly represents solitary or multiple , smooth,mobile and firm lesion.Common site includes scalp of females.Microscopicaly they are lined by stratified squamous epithelium without granular layer and cyst contain compact eosinophilic keratin which may be focaly calcified.

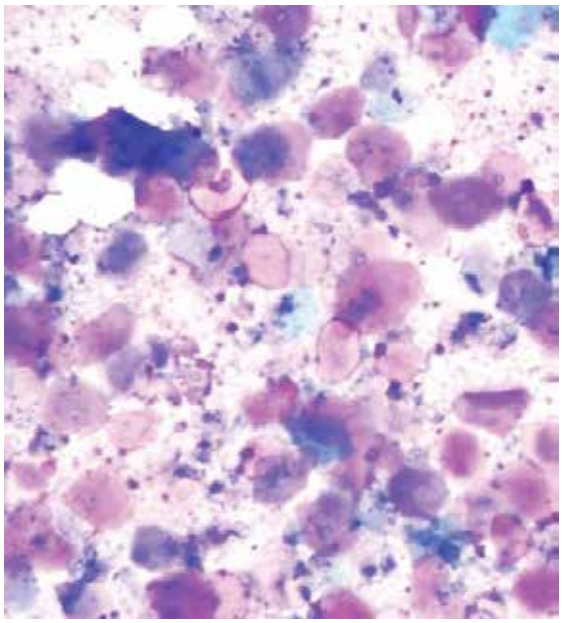
Anatomical classification of epidermal cyst in floor of mouth in relation to muscles of oral cavity –

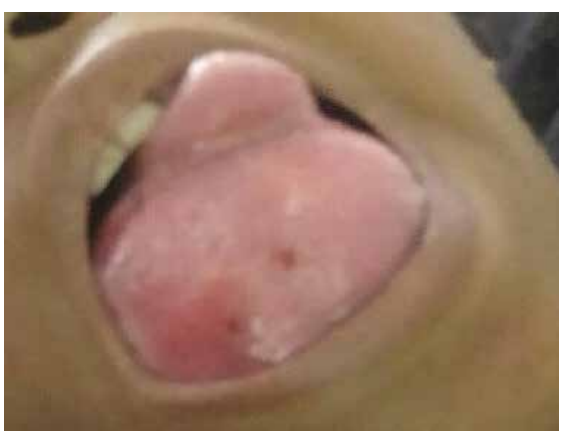
1) Sublingual/median genioglossal cyst- located above the geniohyoid muscles.
2) Median geniohyoid cyst – located in submental triangle between geniohyoid and mylohyoid muscles.
3) Lateral cyst-located in submaxillary region.

Clinical manifestation depends on size and location of cyst.Leison above mylohyoid muscles which is more common site displaces tongue towards palate creating difficulty in speech and mastication. Cyst located below the mylohyoid muscles produces submental and submandibular swelling.

Differential diagnosis of cystic swelling in floor of mouth includes ranula,dermoid cyst and malignant tumors

CONCLUSION-Floor of the mouth has always remained a challenging site for diagnosis and management of lesions pertaining to that site. Range of lesions that are seen in this region extends from mucocele to malignancy and hence it is prudent to investigate with recent modalities before final diagnosis and surgical exploration. Tightly netted vital structures can route infections till the mediastinum and can contribute to morbidity and mortality in these cases.





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