



Epidermal cyst of Oral cavity: A case study

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ABSTRACT

Epidermal cysts are common benign small, painless lump under the skin. Epidermal cyst is usually acquired due to infection of pilosebaceous gland or due to traumatic migration of epidermis to the deeper structure of skin. It may also be among developmental pathologies thought to be derived from aberrant ectodermal tissue. They may present in any part of body which is lined by squamous epithelium. They are rarely present in oral cavity. We present this case because of its extremely rare site of presentation and also to highlight the role of FNAC in the pre-operative diagnosis of this benign lesion.

KEYWORDS :

Introduction

Keratinous cysts have been known for many years as sebaceous cysts, a misnomer born of a mistaken gross interpretation of the cyst content and perpetuated by uncritical repetition. Two types of keratinous cysts occur with occasional hybrid forms, the most common (90%), known as epidermal or epidermoid type is lined by cornified epithelium, has a distinct granular layer and contains lamellated keratin without calcification [1]. The majority of these cysts probably arise from infundibular portion of hair follicles. The second type being pilar or trichellemal type showing sudden keratinization without the formation of granular layer, and an uneven border line between keratinized and non-keratinized cells. The keratin inside the cyst is not lamellated, some of the nuclei are retained and focal calcifications are frequent.

Epidermal and dermoid cysts can be present anywhere in the body lined by squamous epithelium. About 7% occur in head and neck region, and they represent about 0.01% of all oral cavity cysts [2]. The cysts can be defined as epidermal when the lining presents only epithelium, dermoid cysts when skin adnexae are found, and teratoid cysts when other tissue such as muscle, cartilage, and bone are present [3]. Because of the similar epithelial lining, all three of these cysts may have cheesy keratinous material within the lumen [4]. An epidermal cyst can be differentiated with other sublingual cysts by histopathological examination only.

Epidermal cyst and dermoid cysts are developmental pathologies thought to derive from aberrant ectodermal tissue. They are uncommon in the head and neck region. Rarely, they can be found in the oral cavity and buccal mucosa. However, epidermal cyst is extremely uncommon in the floor of mouth and is rarely reported. In this study, we report an uncommon case of epidermal cyst occurring in the floor of mouth and diagnosed by fine-needle aspiration cytology (FNAC). We present this case because of its extremely rare site of presentation and also to highlight the role of FNAC in the pre-operative diagnosis of this benign lesion.

Case Report

A 18 year old female patient presented with a moderate sized mass on sublingual region of oral cavity which caused her tongue to be raised and difficulty in eating.

Physical examination revealed a solitary soft mass in the sublingual region of oral cavity filling whole of sublingual cavity. General

examination of the patient could not show any other remarkable finding. There was no history of injury.

Fine needle aspiration cytology of the lesion was done using a 22G needle and diagnosis of epidermal cyst was made. Fine needle aspiration cytology smears were moderately cellular consisting of anucleated squamous cells against necrotic debris in the background.

The lesion was excised and submitted for biopsy. The excised mass was grayish white in colour measuring 3.5 cms in largest dimension. Section showed cyst wall lined by stratified squamous epithelium and filled with lamellated keratin. There was no evidence of malignancy.

Discussion

Epidermal cysts are lined by stratified squamous epithelium and contain keratin debris. Men are mostly affected and such cysts generally appear after puberty. It is common in young and old, but is rare in childhood [5]. The common sites are the face, neck, shoulders, chest areas, and oral cavity. They may be congenital or acquired type. Congenital type is due to entrapment of ectodermal substance between the midline fusion of first and second branchial arches during third and fourth intrauterine life [6]. Acquired type cysts usually occur due to infection around pilosebaceous follicle and sometime deep implantation of epidermis as a result of penetrating or blunt injury [7]. It is a slow growing and non tender mass. When present in dermis, it raises epidermis to produce a firm elastic dome-shaped protuberance which is mobile over the deeper structures. They grow slowly and may become inflamed and firm with passage of time. Suppuration may occur. In the oral cavity, they displace tongue superiorly and present with dysphagia, dyspnoea, and dysphonia. The differential diagnosis of sublingual lesions includes: infectious process, ranula, lymphatic malformation, dermoid cyst, epidermoid cyst, heterotopic gastrointestinal cyst, and duplication foregut cyst. Ultrasonography is the best investigation for these types of cysts. It is economical, reliable and without radiation exposure [8]. Epidermal cysts have fluid attenuation on CT scans and are hypointense on T1-weighted images and hyperintense on T2-weighted images, following the signal intensity of fluid on MRI. Computed tomography and magnetic resonance imaging allow more precise localization of the lesion in relationship to geniohyoid and mylohyoid muscles, and they also enable the surgeon to choose the most appropriate

surgical approach, especially for very large lesions [6]. Surgical excision of the cyst is often required and the entire cyst wall is removed to prevent recurrence. Incomplete removal is common if attempted in the presence of recent infections.

4. Conclusion

Epidermal cysts can occur in a variety of locations including the face, trunk, neck, extremities and scalp. Till now, oral cavity epidermal cysts are rarely reported in the literature. This case is being reported so that clinicians should keep the possibility of these rare cases in mind while evaluating the oral lesions especially those in the floor of mouth.

Figure 1 : Photograph of the lesion.



Figure2 : FNAC of lesion (400x)

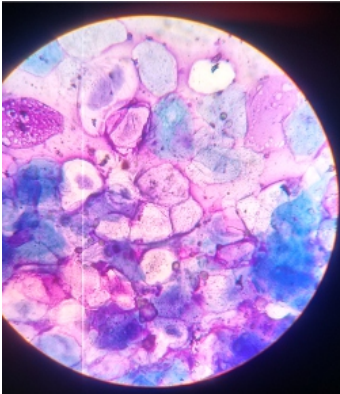
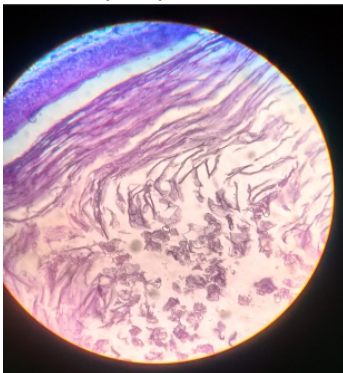


Figure 3 : HPE of section (100X)



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