Epidermoid Cyst of The Tonsil: A Rare Finding
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ABSTRACT

Epidermoid cysts are benign developmental cyst with a low incidence in the head and neck region of approximately 2%. The various locations where the cyst can arise are sublingual, submental, submandibular, buccal mucosa and very rarely the tonsils. Here we present an epidermoid cyst of left tonsil which was incidentally detected in a patient diagnosed of chronic tonsillitis.

Key words: epidermoid cyst, tonsils, chronic tonsillitis

INTRODUCTION

The term epidermoid cyst was first given by Roser in 1859.[1] Few synonyms of epidermoid cyst are epidermal cyst, epithelial cyst, keratinous cyst, milia, epidermal inclusion cyst or the infundibular cyst.[2] These cysts can be congenital, formed during the fetal period from abnormal epithelial components of ectodermal tissue or they may arise after trauma or surgery due to implanted epithelium.[1] They can occur in any part of the body with approximately 1.6-6.9% cases arising in head and neck area.[1] Those arising in the oral cavity, are mainly found in the floor of the mouth such as in the sublingual, submental or submandibular areas or the labial, lingual, buccal mucosa.[3] The incidence of intraoral epidermoid cyst is even more rare with an approximate incidence of 0.01%.[4] Here we discuss a case of epidermoid cyst arising in the tonsil which was encountered as an incidental finding in the patient with the diagnosis of chronic tonsillitis.

CASE REPORT

A 47-year-old female patient came to our outpatient department for on and off sore throat and difficulty in swallowing since 9 months. On local examination, there was hypertrophy and congestion of the left tonsil as compared to the contralateral side. The ipsilateral cervical lymph nodes were enlarged and tender. Clinical diagnosis of chronic tonsillitis was given. The patient underwent tonsillectomy for diagnostic purpose after obtaining an informed consent from the patient. The excised specimen was sent for histopathological examination. Grossly the specimen was creamish white and cystic measuring 2x1.5x1cm. On light microscopy of hematoxylin and eosin stained sections, the tonsils showed reactive hyperplasia of follicles along with vascular congestion and focal fibrosis. Section also showed irregularly dilated cystic cavities lined by stratified squamous lining with the lumen containing keratinous material (Figure 1a-d). So, a final diagnosis of chronic tonsillitis with epidermoid cyst localized in the tonsil was made. The patient was discharged without any postoperative complications; her follow-up after 6 months was entirely uneventful.

DISCUSSION

Epidermoid cysts are defined as benign lesions that are histologically characterized by cystic spaces lined by squamous epithelium. Among the different types of cyst which can arise in tonsils, the tonsillar retention cyst is the most common type while epidermoid cyst, lymphoepithelial cyst and hydatid cyst attribute to the rare causes of tonsillar cyst.[5] Epidermoid cyst can be of two
types: congenital or acquired, which are similar both clinically as well as histologically.\(^6\) The congenital ones are found in areas where embryonic elements fuse together whereas the acquired types usually occur secondary to trauma or surgery. Various theories have been proposed regarding the origin of cyst. Remark and Bucy in 1854 proposed the theory of inclusion of ectodermal tissues during embryogenesis. Wendt in 1873 proposed metaplastic theory which states that the non-keratinizing squamous epithelium lining the cavity undergoes metaplastic changes in response to prolonged irritation due to chronic infection\(^7\) and lastly Ewing in 1928 proposed the implantation theory, which states that these cysts are a result of direct entry of epithelium into a site during trauma.\(^7\)

They can occur in any age group, starting from birth (the congenital type) to 72 years with peak age between 15 to 35 years and male preponderance.\(^1\) Our patient was a 47-year-old female. In oral cavity, the sites from which epidermoid cysts can arise are floor of mouth or the labial, lingual or buccal mucosa\(^7\) Oral cavity accounts for about 0.01% of the epidermoid cyst. They usually present as asymptomatic painless slow growing mass.\(^9\)

**Figure 1a-** Section showing two cystic spaces lying in the lymphoid follicle of tonsils along with a focus having minor salivary glands (H&Ex4x)

**1b-** Two cysts lined by stratified squamous lining within the lymphoid follicles (H&Ex10x)

**1c &1d-** High power of the cyst lining along with lumen containing keratinous material (H&Ex40x)

Histologically Shiykumar et al described epidermoid cyst as a cyst lined by squamous epithelium with the granular layer filled with lamellated keratin material.\(^9\) Similar picture was seen in our case. The surrounding connective tissue can also elicit a foreign body giant cell reaction if the cyst gets ruptured with the release of keratinous material. These cysts can be associated with certain hereditary syndromes like Gardner syndrome, basal cell nevus syndrome, and panchychnia congenital.\(^3\) The differential diagnosis of tonsillar mass are tonsillar tumors, tumors of parapharyngeal space, infections and inclusion cyst.\(^10\) Diagnosis is confirmed by fine needle aspiration or excisional biopsy.\(^11\)

**CONCLUSION**

Epidermoid cysts of tonsils are very rare. We reported a case of chronic tonsillitis with epidermoid cyst which was confirmed on histopathology.

**REFERENCES**


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