



EPIDERMOID CYST OF THE TONSIL: AN INCIDENTAL FINDING

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<p>Article Info Received 15/03/2015 Revised 17/04/2015 Accepted 28/05/2015</p> <p>Key words: Developmental, Epidermoid cyst, rare.</p>	<p>ABSTRACT Epidermoid cysts are developmental cysts with incidence of 1.6-6.9% in head and neck region. These cysts can be congenital or acquired. The different sites where the cyst can arise within the oral cavity is sublingual, submental, submandibular, labial/lingual/buccal mucosa. The incidence of epidermoid cysts arising in the tonsil is very rare.</p>
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INTRODUCTION

The term epidermoid cyst was described by Roser in 1859[1]. Epidermoid cyst is also called as epidermal cyst, epithelial cyst, keratin cyst, sebaceous cyst, milia, or epidermal inclusion cyst or infundibular cyst [2]. Intraoral epidermoid cysts involve 0.01% of the population [3]. The incidence of epidermoid cysts in head and neck has been found to be 1.6-6.9% [1]. 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 17 year male patient presented with history of difficulty in swallowing and ear pain for the past 3 days. Routine investigations were within normal limits. ENT examination for ear and nose were within normal limits. The palatine tonsils were enlarged with congested anterior pillars (grade III tonsillitis). The cervical lymph nodes were enlarged and tender. Clinical diagnosis of chronic tonsillitis was given. The patient underwent uneventful tonsillectomy. The specimen was sent for histopathological examination. Multiple sections studied from the tonsils showed stratified squamous epithelium with underlying

lymphoid follicles. The tonsillar crypt contained mixed inflammatory infiltrate (lymphocytes and polymorphs) with increased vascularity. There was hyperplasia of lymphoid follicles with prominent germinal centres. Also seen in the same section was a cyst with wall lined by stratified squamous epithelium containing keratin flakes, cholesterol crystals, cyst macrophages and lymphocytes (Fig.1). Histopathological diagnosis: Chronic Tonsillitis with Epidermoid cyst.

DISCUSSION

Different types of cysts can arise in the tonsil with tonsillar retention cyst being the most common and; epidermoid cyst, lymphoepithelial cyst, hydatid cyst are very rare causes of tonsillar cyst [4]. Epidermoid cysts can occur in any age group from birth to 72 years with peak age between 15 to 35 years and more commonly in males [5]. Our patient was 17 years old male. In the oral cavity epidermoid cysts are seen in the floor of the mouth (in the sublingual, submental or submandibular areas) or labial, lingual or buccal mucosa [6]. In one retrospective study among 89 children, only 13.33% cases of head cysts were found to be epidermoid, compared to 58.88% of dermoid



cysts [7]. Hence the incidence of epidermoid cysts is very within the tonsil are a rare occurrence. They appear as painless, asymptomatic mass, slowly increasing in size [8].

Epidermoid cysts can be of two types: congenital or acquired based on their origin, although there is no difference between them clinically or histologically [5]. The inclusion cysts can be found in areas where embryonic elements fuse together (congenital) or can be acquired (post-traumatic). The most prevalent theory was proposed by Remark and Bucy in 1854, which suggests the inclusion of ectodermal tissues during embryogenesis [9]. The theory of metaplasia, proposed by Wendt in 1873, states that the non-keratinizing squamous epithelium lining the cavity undergoes metaplastic changes in response to prolonged irritation due to chronic infection [9]. In 1928 Ewing proposed the Implantation theory, which states that these cysts are a result of direct entry of epithelium into a site during trauma [10].

The histological variants of the dermoid cyst can be termed epidermoid if they are enclosed by the epithelium only, true dermoid cyst when they are

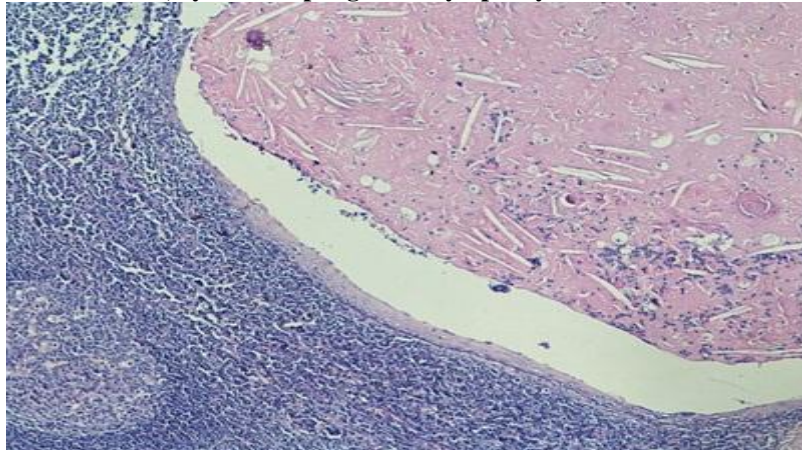
low in head and neck region and particularly cyst composed of skin appendages and teratoid when other tissues like muscle, cartilage or bone are included [11]. Shivkumar et al described the histopathology of an epidermoid cyst as a cyst lined by stratified squamous epithelium with a granular layer filled with lamellated keratin material [8]. Our case also showed same histopathological picture. Also there were presence of cyst macrophages, cholesterol clefts and lymphocytes in our case. The surrounding tissue can elicit a foreign body giant cell reaction if the cyst gets ruptured with the release of keratin material.

Epidermoid cysts can be associated with certain hereditary syndromes like Gardner syndrome, basal cell nevus syndrome, and pancytonia congenital [2].

The differential diagnosis to be considered for tonsillar hypertrophy include tonsillar tumors, tumors of parapharyngeal space, infectious etiology and inclusion cysts[12].

Diagnosis is mostly by imaging and aided by fine needle aspiration, followed by excision biopsy [13].

Figure 1. Epidermoid Cyst – Tonsil: shows cyst wall lined by stratified squamous epithelium and containing keratinous material, cholesterol clefts, cyst macrophages and lymphocytes



CONCLUSION

Epidermoid cyst within the tonsil is a very rare entity. We here reported a case of chronic tonsillitis with epidermoid cyst as an incidental finding.

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