Case Report

Epidermoid Cyst Localized in Bilateral Palatine Tonsils – A Rare Case Report

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DOI: 10.21276/APALM.3315

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Submitted: 25-Feb-2024
Final Revision: 03-Apr-2024
Acceptance: 19-Apr-2024
Publication: 07-May-2024

Abstract

Epidermoid cysts (ECs) are benign lesions that can occur throughout the body, but they have a low incidence in the head and neck region (1.6 to 7%). In the oral cavity, the most commonly affected site is the floor of the mouth, while tonsillar location remains extremely rare (less than 0.01%). Here, we present a case of bilateral epidermoid cysts of the palatine tonsils, which were incidentally detected in a patient.

Keywords:

Epidermoid cyst, Chronic tonsillitis, Surgery

Introduction

Epidermoid cyst was first given by Roser in 1859 [1]. Few synonyms of epidermoid cyst are epidermal cyst, epithelial cyst, keratinous cyst, sebaceous 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 the 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 bilateral tonsil, which was encountered as an incidental finding in the patient with the diagnosis of chronic tonsillitis.

Case Report

13-year-old male patient came to our clinic with complain of on and off fever and sore throat for 6 months. On local examination there was hypertrophy and congestion of the bilateral tonsils. The patient underwent bilateral tonsillectomy for diagnostic purposes. The excised specimen was sent for histopathological examination. Grossly the specimen was brownish white and cystic. On cut surface shows cheesy necrotic area. On light microscopy of hematoxylin and eosin-stained sections shows tonsillar tissue and occasional cystic cavities. Cavities contained keratin in a lamellar arrangement and their epithelium was of a squamous character. These findings justified a diagnosis of Epidermoid cyst localized in the tonsil.

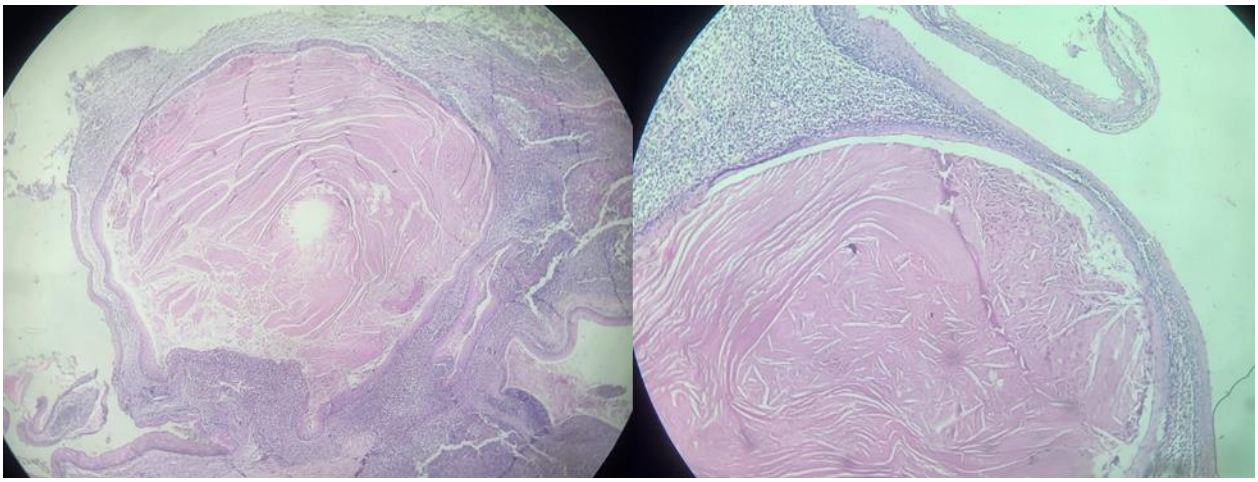

Figure 1: Section from right tonsil showing tonsillar tissue contain cystic space lined by stratified squamous epithelium along with lumen containing keratinous material (H&E, 4x and 10x).

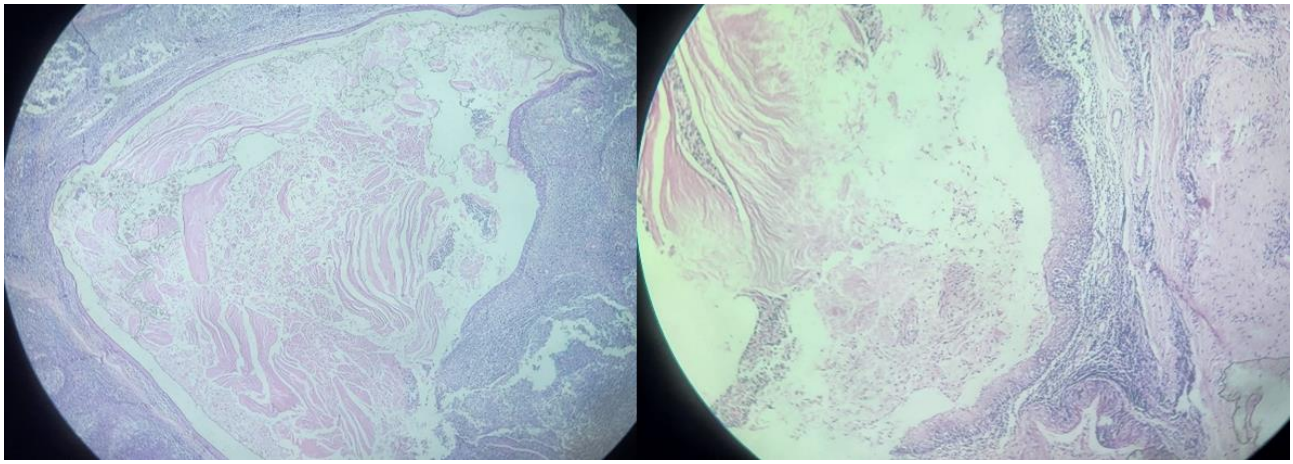

Figure 2: Section from left tonsil. (H&E, 4x and 10x)

Discussion

Epidermoid cysts are defined as benign lesions that are histologically characterized by cystic spaces lined by squamous epithelium. Among the different types of cysts that can arise in tonsils, tonsillar retention cysts are the most common type, while epidermoid cysts, lymphoepithelial cysts, and hydatid cysts contribute to the rare causes of tonsillar cysts [5]. Epidermoid cysts can be of two types: congenital or acquired, which are similar both clinically and 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 these cysts. Remark and Bucy in 1854 proposed the theory of inclusion of ectodermal tissues during embryogenesis, Wendt in 1873 proposed the 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 result from the direct entry of epithelium into a site during trauma [7]. They can occur in any age group, from birth (the congenital type) to 72 years, and show a male preponderance [1]. Our patient was a 13-year-old male. The oral cavity accounts for about 0.01% of epidermoid cysts. They usually present as asymptomatic, painless, slow-growing masses [9].

Histologically, Shivkumar et al. described epidermoid cysts as cysts lined by squamous epithelium with the granular layer filled with lamellated keratin material [9]. A 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 pachyonychia congenita [2]. The differential diagnosis of tonsillar masses includes tonsillar tumors, tumors of the parapharyngeal space, infections, and inclusion cysts [10]. Diagnosis is confirmed by fine needle aspiration or excisional biopsy [11].

Treatment for these lesions is surgical excision of the cyst. It should be excised without opening because its contents could have an irritating effect on the surrounding fibrovascular tissue [12]. Recurrence after surgery is rare. Malignant evolution has only been seen in the teratoid type and was reported to have an incidence of 0.5% [13,14]. A tonsillectomy was performed in our patient; the cyst was excised within its capsule, and the follow-up during 10 months was entirely uneventful.

Conclusion

Epidermoid cysts, although rare in the head and neck area, can indeed manifest inside the palatine tonsils and lead to asymmetrical hypertrophy.

Acknowledgement Nil

Funding None

Competing Interest: None Declared

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