Case Report

Epidermoid cyst of Palatine tonsil: An incidental finding

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Abstract

Epidermal inclusion cysts also known as Epidermoid cysts present themselves in various parts of the body as developmental cystic lesions. They are seen in the head and neck region with an extremely low incidence, most commonly in the sublingual, sub-mandibular regions and buccal mucosa. Very rarely they present in the tonsillar location. Here we present a case report of an epidermoid cyst of tonsil in a child.

Key Words: Developmetal, Epidermoid cyst, Sublingual, Submandibular.

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Introduction

Epidermoid cysts, also referred to as epidermal inclusion cysts are developmental cystic lesions which can be seen in different parts of the body, including head and neck areas, having low incidence of around 2% (1,2). In head and neck regions, these cysts are commonly located in sublingual, submental, submandibular and buccal mucosa. In oral cavity, the most common affected site is floor of the mouth. However, tonsillar location remains extremely rare with incidence of less than 0.01% (1,3). In this case report, we have discussed about a case of epidermoid cyst of tonsil in a child.

Case Report

A 9-year-old male child presented with complaints of difficulty in breathing, snoring and mouth breathing since 3 months, which has now aggravated following a recent upper respiratory tract infection. On local examination, there was a mild asymmetric enlargement of the tonsils (grade 2), more prominent on the right side. There was no cervical lymphadenopathy. There was no history of post nasal drip, watery discharge, sneezing, facial pain, or change of voice. Patient had no family history or personal history of the same. Tonsillectomy was performed for both diagnostic and therapeutic purposes and the specimen was sent for histopathological examination.

Gross features showed both tonsils mildly enlarged, cut section of right tonsil was showing a tiny cyst measuring 0.5cm, filled with pultaceous material (Figure 1). Histopathology of right tonsil showed a submucosal cystic lesion surrounded by lymphoid tissue and lined with keratinizing stratified squamous epithelium with cystic space filled with lamellated keratinous

material (Figure 2,3,). Diagnosis of epidermoid cyst of palatine tonsil was made histologically. Left tonsil was showing lymphoid hyperplasia without any inclusion cyst.

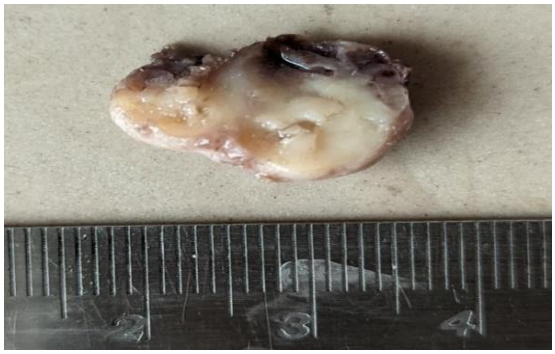

Figure 1: Cut section of right tonsil showing a tiny cyst filled with pultaceous material

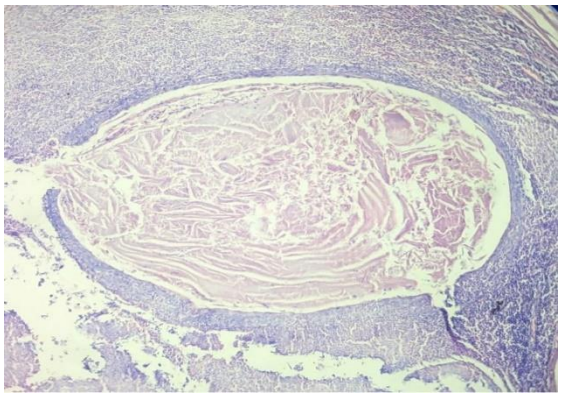

Figure 2: Histopathology of right tonsil showed a submucosal cystic lesion surrounded by lymphoid tissue and lined with keratinizing stratified squamous epithelium

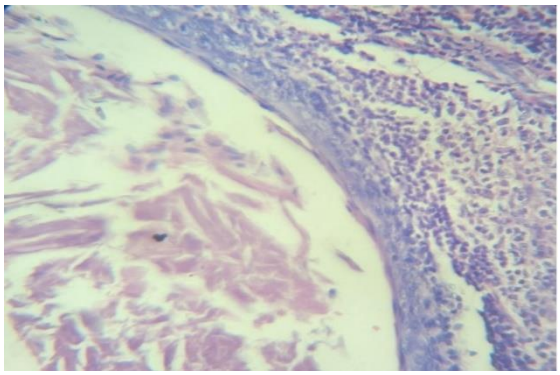

Figure 3: Histopathology showing cystic space filled with lamellated keratinous material

Discussion

Epidermoid cyst is a cystic lesion lined by a stratified squamous epithelium. Histologically, epidermoid cyst, dermoid cyst, and teratoid cyst are three distinct lesions with overlapping features (4). Mean age of presentation of this lesion is 10–35 years with female preponderance, with male to female ratio of 1:4 (5,6). In our case, the age of the patient was 9 years old. They generally appear in areas where embryogenic elements fuse. They can be classified as being either congenital or acquired based on their origin (7). Dermoid cysts are common in lines of fusion (8) Presence of epidermoid cysts in the palatine tonsil of the oropharynx is an extremely rare occurrence (9). A wide array of literature focuses on a theory that the aetiology of these cysts or lesions are developmental epithelial remnants isolated during the closure of first and second brachial arches in the midline. Another theory is the development of cysts from abnormal inclusion of cells during surgery or trauma (10). There was no past history of any kind of surgery in our case, supporting its developmental aetiology.

Several other kinds of cystic lesions such as lymphoepithelial cyst or branchial cyst on the palatine tonsil have also been reported. These cystic lesions can only be differentiated under microscopy (11,12). Squamous inclusion cysts are synonymous with epidermoid cysts, epithelial cyst, keratinous cyst, sebaceous cyst, epidermal cyst, epidermal inclusion cyst or infundibular cyst (13). Roser first gave the term epidermoid cyst in 1859 (14). The contents of the cyst lining determine the histological categories of the cyst: epidermoid, if epidermis is lining the cyst; dermoid, if skin annexes exist; or teratoid, if there are tissues derived from the three germinal layers (15). In our case, microscopic sections showed cyst with only squamous epithelial lining devoid of any adnexal structures. Rarely squamous cell carcinoma can develop from epidermoid cysts. In our case there were no features of dysplasia or malignancy.

Treatment of choice for epidermoid cyst is surgical excision. Fine needle aspiration cytology can provide diagnostic evidence prior to surgery. Tonsillectomy is sufficient for therapeutic as well as diagnostic purposes. All tonsillectomy specimen should be subjected to

detailed gross and histopathological examination in order to look for any additional pathologies that may be found in addition to tonsillitis and reactive lymphoid hyperplasia. Asymmetrical tonsillar enlargement may also be caused by cystic development at the tonsils (16).

Conclusion

Epidermoid cyst of palatine tonsil is an extremely rare condition. Histopathologic examination is the gold standard to diagnose this condition and to confirm the benign nature of this lesion.

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Conflict of interest

The author declares that there were no conflicts of interests in the present case study.

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