

CASE REPORT

Epidermoid Cyst of Tongue: A Case Presentation

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ABSTRACT

Epidermoid cyst occurring within the tongue is rare. A 5-year-old male child was brought to outpatient department (OPD) with a tongue mass which was gradually increasing in size. There was associated difficulty in speech and mastication as the swelling increased in size. Intraoral examination revealed moderately tender, fluctuant and enlarged tongue. A diagnosis of dermoid cyst was made and the patient was booked for surgery. Excision of the cyst was done under general anesthesia. Postoperative histopathology was done. The histopathological findings confirm the diagnosis of an epidermoid cyst, characterized by the presence of: (i) a cyst cavity lined by stratified squamous epithelium with keratinization on the surface; and (ii) connective tissue with a mild inflammation. The proposed treatment was considered successful as the case was solved and there was no recurrence.

Keywords: Epidermoid cyst, Keratinization, Mastication, Recurrence.

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INTRODUCTION

Epidermoid and dermoid cysts are nonodontogenic cyst lesions.¹ They are rare lesions derived from germinal epithelium. While a dermoid cyst has an epidermal lining with skin adnexa, such as hair follicles and sebaceous and sudoriparous glands, the epidermoid cyst contains no such adnexa. These cysts are usually sole lesions.^{2,3} It is suggested that these cysts are derived from epithelial remains from the closure process of the first and second branchial arches.⁴ Particularly in the tongue region, these lesions may be formed by remains of the tuberculum impar, which, together with the lateral lingual prominences, form the body of the tongue and

floor of the mouth.⁵ In the oral cavity, these cysts occur most frequently in the area of the floor of the mouth and may also occur on the tongue, lips or the interior of the bone.^{4,6-8} We report a case of epidermoid cyst of the tongue with review of literature.

CASE REPORT

A 5-year-old male child presented with a swelling on the anterior part of tongue (Fig. 1). This swelling was present since birth. It was small in size and progressed gradually to the current size of about 3 cm diameter. It was a well circumscribed cystic swelling, tender with a smooth surface. The swelling was embedded in the substance of the anterior tongue. There was no extension of the swelling to the sublingual part or any other regions of oral cavity. There was no discharge from the swelling and it was not causing disturbance for deglutition initially. The swelling was mostly asymptomatic, but recently started affecting speech articulation and mastication which forced the parents to approach doctors for treatment. Otherwise, child had a good health without any other complaints. Complete excision of the cyst was done (Fig. 2) and the mass was sent for histopathological study. Histopathology was confirmed the cystic mass to be an epidermoid cyst. Postoperative period was completely event free and the patient was completely normal and symptom free after 1 month of surgery (Fig. 3).

DISCUSSION

Epidermoid cyst is a congenital cyst that may appear due to trapping of ectoderm at the time of fusion of neural tube or other epithelial linings. They may also



Fig. 1: Preoperative photograph

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Fig. 2: Intraoperative photograph



Fig. 3: Postoperative photograph after 1 month

be secondary or acquired due to inclusion of epidermal elements into dermis post-traumatically or iatrogenically in which case the term epidermal inclusion cyst would be a better terminology.⁹ Epidermoid and dermoid cysts represent less than 0.01% of all oral cavity cysts.¹⁰ Epidermoid cysts have been described in various parts of the body, out of them only 1.6% are found in the oral cavity.¹¹ In the oral cavity, they are commonly seen in the sublingual area, they may also be seen on the lips, tongue and bone.¹² The clinical aspect is not characteristic and merely consists of a cystic swelling. As they enlarge, functional problems, such as difficulties with deglutition, speech and respiration, can be expected to occur.¹³ On histopathology, it is a keratin filled cavity lined by stratified squamous epithelium.¹⁴ Epidermoid cyst has to be differentiated from a dermoid cyst. Unlike a dermoid, epidermoid cyst lacks appendages like hair, sweat glands, etc.¹⁵ The treatment is complete excision of the cyst.⁹ In most instances, epidermoid and dermoid cysts can be enucleated. Very large cysts may require marsupialization. Recurrence is rare.¹³ If the epidermoid cyst of tongue is left untreated, it may grow in size and may cause discomfort in articulation, deglutition and mastication.¹² Epidermoid cysts in the oral cavity may be derived from the entrapped epithelium during closure of first and second branchial arches which fuse during the 3rd and 4th weeks of intrauterine life. In the tongue, it is believed to be the remains of *Tuberculum impar*.¹⁶ Multiple epidermoid cysts may be part of Gardner syndrome.¹⁷ Rarely, malignancies like squamous cell carcinomas, basal cell carcinoma, Bowen's disease and even mycosis fungoides have developed in epidermoid cysts.¹⁸

CONCLUSION

Epidermoid cyst of the tongue is a rare tumor of oral cavity. It presents as a swelling in the tongue with speech

disturbances. Complete excision will not cause any recurrence. Possibility of syndromic association with Gardner's syndrome should be kept in mind. Malignant transformation is rare. This case is presented for its rarity and to highlight the spectrum of clinical features and management with a brief review of literature.

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