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CASE REPORT

Epidermoid Cyst of Tongue

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ABSTRACT

Introduction: Epidermoid cyst is a rare cyst in head and neck region. We report a case of epidermoid cyst of tongue presented in a girl child.

Case report: A female child presented with a swelling in her tongue. The swelling was excised completely. A diagnosis of epidermoid cyst of tongue was made. The diagnosis was confirmed by histopathology. There was no recurrence after 6 months follow-up.

Conclusion: Epidermoid cyst of tongue is a rare tumor of tongue. Complete excision does not cause recurrence.

Keywords: Epidermoid cyst, Oral cavity, Tongue.

INTRODUCTION

Epidermoid cyst is a rare developmental cyst of the head and neck region which results from entrapped epidermal elements without adnexal appendages. We report a case of epidermoid cyst of the tongue with review of literature.

CASE REPORT

A female child aged 5 years presented with a swelling on the left side of 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, nontender 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 did not cause disturbance for deglutition. The swelling was mostly asymptomatic, but recently started affecting speech articulation which forced the parents to approach doctors for treatment. Otherwise, child had a good health without any other complaints.

Creamy white fluid was aspirated from the swelling and cytological smear showed lymphocytes in a fluid background. A provisional diagnosis of lymphangioma of tongue was thought of.

Under GA, with orotracheal intubation a Doyen's mouth gag was applied. The tongue was pulled laterally. A linear incision was placed along the left lateral border of the tongue and on the swelling. A thick-walled cystic mass was separated from the neighboring tissues and excised completely. It was sent for histopathological evaluation. The potential free space between the ventral and dorsal surfaces of tongue approximated with catgut suture. Following the surgery the child was given soft diet for one week and treated with antibiotics.

Fig. 1: Cyst causing a bulge on the left side of anterior part of tongue

On gross examination, a solitary swelling measuring 3 × 2 cm with a smooth surface noted. Cut section revealed cystic cavity filled with yellowish keratinous substance (Fig. 2).

Microscopic examination of the H&E stained section showed parakeratinized stratified squamous cystic epithelium of irregular thickness without rete ridges. The cyst wall was dense with no inflammatory cells. No dermal appendages were present. The histopathological features suggested epidermoid cyst of tongue (Fig. 3).

Patient was followed up for 6 months and there was no recurrence.

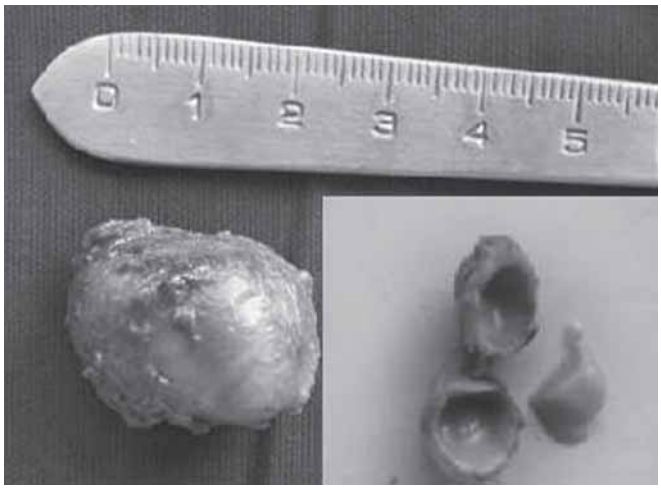

Fig. 2: Gross specimen—excised cyst and cut section with keratin material in the inset

Fig. 3: Photomicrograph showing cystic epithelial lining and fibrous wall (40× magnification H&E)

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 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.[1]

Epidermoid and dermoid cysts represent less than 0.01% of all oral cavity cysts.[2] Epidermoid cysts have been described in various parts of the body, out of them only 1.6% are found in the oral cavity.[3] In the oral cavity, they are commonly seen in the sublingual area, they may also be seen on the lips, tongue and bone.[4] Very few cases of lingual involvement have been reported. Isolated epidermoid cyst of the tongue without a sublingual component is very rare. Katagiri Wataru et al noted of only 14 reports of dermoid or epidermoid cysts of the tongue in the English and Japanese literature. Only four of these cases arose in the lateral aspect of the tongue.[5]

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.[6]

On histopathology, it is a keratin filled cavity lined by stratified squamous epithelium.[7]

Epidermoid cyst has to be differentiated from a dermoid cyst. Unlike a dermoid, epidermoid cyst lacks appendages like hair, sweat glands, etc.[8]

The treatment is complete excision of the cyst.[1]

In most instances, epidermoid and dermoid cysts can be enucleated. Very large cysts may require marsupialization. Recurrence is rare.[6] If the epidermoid cyst of tongue is left untreated, it may grow in size and may cause discomfort in articulation, deglutition and mastication.[4]

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.[9]

Hamilton S Mossman (1972) stated that by the 32nd day of intrauterine life, the endoderm of the floor of mouth can no longer be distinguished from stomodeal ectoderm and there is probably a considerable amount of intermingling of the two epithelia.[9]

Multiple epidermoid cysts may be part of Gardner syndrome.[10] Rarely, malignancies like squamous cell carcinomas, basal cell carcinoma, Bowen's disease and even mycosis fungoides have developed in epidermoid cysts.[11]

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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