Epidermoid cyst a rare entity in lower left side of the face -A case report

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Abstract

Epidermoid cyst is a rare developmental cyst of the oro-facial region which results from entrapped epidermal elements without adnexal appendages. Dermoid and epidermoid cysts occur in orofacial region with an incidence of 6.9-7%. Teratomas always refered to as dermoid cysts. Epidermoid dermoid cyst is also used to describe inclusion cysts of face, neck, and floor of the mouth. These cyst also also shows epidermal tissues and even hair follicles, sweat and sebaceous glands in the cyst wall and keratin and sebum in the cyst cavity.

Keywords: Cyst, Dermoid cyst, Epidermoid cyst, Inclusion cyst

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Introduction

Epidermoid, dermoid, and teratoid cysts are non odontogenic cyst. These lesions derived from germinal epithelium and not frequently occurred. While a dermoid cyst has an epidermal lining with skin a dnexa such as hair follicles and sebaceous glands, the epidermoid cyst contains no such adnexa^{2,3}. Teratoid cysts have been rarely described in the floor of the mouth. These cysts contain respiratory, gastrointestinal, and connective tissues such as bundles of striated muscle and distinct areas of fat.⁴

Dermoid and epidermoid cyst of the oral cavity most commonly encountered in the floor of the mouth although they may arise in other soft tissue location. These cysts also feature epidermal tissues and hair follicles, sweat and sebaceous glands in the cyst wall, and keratin and sebum in the cyst cavity.⁵

Epidermoid cysts can occur anywhere in the body, and are most common in the ovary and testicle. Only 1.6% of epidermoid cysts occur in the oral cavity. Intraoral epidermoid cysts are most commonly observed in the floor of the mouth and are seldom found in the lips or buccal mucosa.⁶

Epidermoid cysts slow and progressive growing, and even if they are congenital, the diagnosis is commonly possible in the second or third decade of life. They appear as painless, asymptomatic mass, slowly increasing in size, usually located in the midline, above or below the mylohyoid muscle. Treatment of epidermoid cysts of the floor of the mouth is surgical and

can be intraoral or extraoral according to the localization and the size of the lesion.

Case Report

A 40-year-old man reported to our department with a chief complaint of swelling on the left cheek region for the last 2 years, which was gradually increasing in size. Medical history of the patient was non-significant. Intraoral and extraoral examination revealed a swelling of 3 cm × 4 cm extending from the left commissure at the angle of the mouth along the occlusal plane up to first premolar region (Fig. 1). On palpation, the swelling was soft in consistency, non-tender and freely movable; no bleeding or pus discharge was evident. Intraorally, the overlying mucosa was normal and extraorally, the skin was warm, and no induration and bleeding were observed. (Fig. 2)

There was no associated lymph node enlargement. A detailed case history of the patient provided no association of cheek biting with the lesion. The dental examination also revealed no relevant findings. Oral hygiene history and systemic history was negative.

Provisionally diagnosis was given as lipoma. Differential diagnosis of epidermoid and dermoid cyst was given. Excisional biopsy of the lesion was planned to confirm the diagnosis. FNAC(fine needle aspiration cytology) was also done but aspiration was negative.

Enucleation of the cyst was done under local anesthesia.(Fig. 4)

The cyst was found immediately underlying the skin. Careful dissection was carried out, and the cyst was enucleated. Primary closure was obtained, (Fig. 3) and the specimen was sent for histopathological examination.(Fig. 4)

Histopathological report reveals the epithelium was 2-4 layers thick with a prominent granular cell layer. Keratin flakes were seen in the lumen. The stroma consists of loose collagen fibers with fibroblasts. Overall features were suggestive of epidermoid cyst.



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Discussion

Roser, in 1859 described the term epidermoid cyst. These cysts are dome-shaped and occur just beneath the skin. It is commonly seen in face, neck, chest or trunk. Occasionally, they are found in floor of the mouth, buccal mucosa and other parts intraorally. They may present at birth and in old patients. Most of the cases are reported in between 15 and 35 year's age group. Most of the intraoral cases are reported in the midline and floor of the mouth. Rarely seen in involving tongue, lips, temporomandibular uvula, joint, intradiploic, intracranial, maxilla and mandible and buccal mucosa Origin of epidermoid cysts can be explained as either congenital or acquired⁷. Congenital epidermoid cysts may result from the failure of the ectodermal layer to separate from underlying neural tube. It can also occur due to abnormal implantation of surface ectoderm along the embryologic sites of fusion such as along the eyes, ears, and face. Such accidents usually take in between 3rd and 5th week of gestation. Acquired epidermal inclusion cysts usually arise from the inclusion of epidermal structures in the dermal tissues. The exact etiopathogenesis of epidermoid cyst is not known.

Congenital cysts are dysembryogenic lesions that arise from ectodermal elements entrapped during midline fusion of the first and second brachial arches between the third and fourth week of the intrauterine life.⁸

Conclusion

Epidermoid cysts of a buccal mucosa are generally an uncommon entity. Usually understanding about this slow growing mass is essential because of the symptoms it produces and also due to the malignant potential.²

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