IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)
e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 20, Issue 11 Ser.6 (November. 2021), PP 18-20
www.iosrjournals.org

Intraoral Epidermoid Cyst in the Buccal Mucosa: A Rare Case Report

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Abstract
Dermoid cysts can be found anywhere in the body, particularly in areas where embryonic elements fuse together Dermoid cysts are malformations that are rarely seen in the oral cavity. An intraoral dermoid cyst grows slowly, but may enlarge and interfere with deglutition and speech, or can pose a critical risk to the airway and therefore require immediate surgical intervention. Here we present a rare case of epidemoid cyst occurring in the oral cavity and the associated surgical management of the same.

Date of Submission: 08-11-2021 Date of Acceptance: 24-11-2021

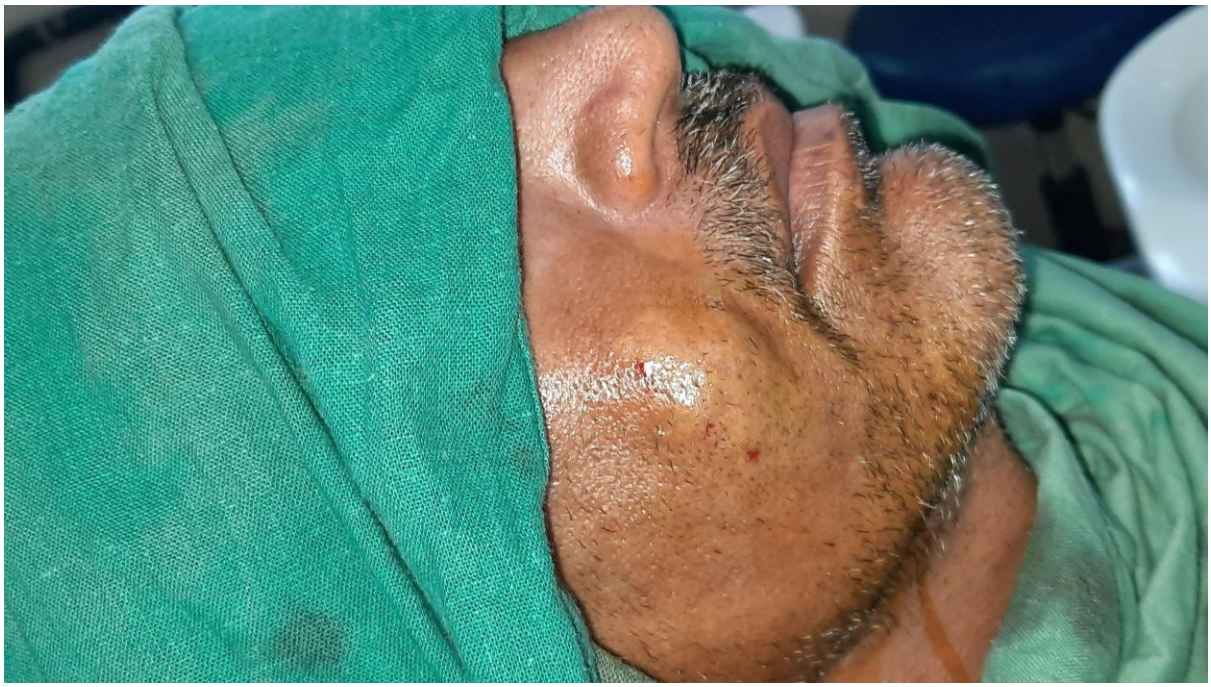
I. Introduction

Dermoid cysts can be found anywhere in the body, particularly in areas where embryonic elements fuse together[1,3]. Most cases have been reported in the ovaries, the testicles, as well as the hands and feet. Dermoid and epidermoid cysts in the mouth are uncommon and account for less than 0.01% of all oral cysts[2,6,7]. The great majority arise in the floor of the mouth, but there are rare and usually individual case reports of examples in other sites[10].

The purpose of this article is to describe a rare case of an epidermoid cyst in the buccal mucosa-cheek region of a 47 year-old man.

II. Case Presentation

A 47-year-old male presented to THE GOVERNMENT DENTAL COLLEGE , INDORE with a small painless swelling on the right cheek region. He asserted that the swelling(fig1) was present for the past 3 years and causing esthetic issues. The medical and family history was non-contributory to the chief complaint. The swelling was not associated with paresthesia, ulceration or discharge, recent fever within a month, and relevant loss of weight or appetite. The extraoral examination revealed a solitary non-fluctuating swelling in the right side of the cheek region 3 x 2 cm . Regional lymph was non-palpable. Intra orally a solitary non-tender, non-fluctuating circumferential swelling attached to the right cheek located opposite to the first premolar, second premolar, and first molar was palpated



(Fig 1)

Aspiration analysis did not offer any significant findings. A provisional diagnosis of lipoma was made based on history and clinical examination.

SURGICAL TECHNIQUE

Under strict aseptic conditions and antibiotic prophylaxis under conscious(moderate) sedation proper scrubbing, painting and draping of the patient was done.

The treatment plan included surgical excision under local anesthesia. The patient was explained about the surgical procedure with their advantages and risks for which the patient provided informed consent to undergo the treatment. A horizontal incision was given in the occlusal plane region , and the mass was surgically excised(figure 1) with blunt dissection technique. After removing the mass in toto, the specimen was sent for histopathological examination.

HISTOPATHOLOGICAL FINDINGS

The given H and E section reveals a cystic cavity lined by stratified squamous keratinized epithelium. The lumen is filled with degenerating orthokeratin.

Histopathological features suggestive of 'epidermoid cyst'

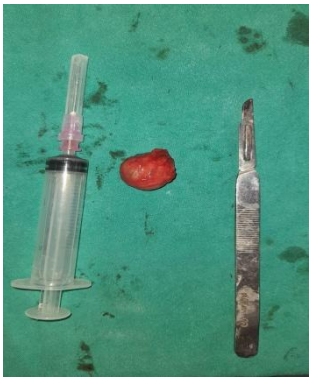


Fig 2 : Excised specimen

III. Discussion:

Dermoid cysts can be found anywhere in the body, particularly in areas where embryonic elements fuse together[6]. Dermoid cysts are developmental lesions found in the tissues or organs as a result of the inclusion of tissue from diverse sources (ectoblast, mesoblast, or endoblast) caused by a defective fusion of the embryonic lateral mesenchymatic mass (mainly the first and second arcs) during the fifth week of embryological development. Epidermoid, dermoid, and teratoid cysts are nonodontogenic cystic lesions[9,11]. 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 glands, the epidermoid cyst contains no such adnexa[10]. 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. Dermoid and epidermoid cysts in the mouth are uncommon and account for less than 0.01% of all oral cysts.

Dermoid cysts are histologically differentiated as epidermoid, dermoid or teratoid. There are no data on the incidence of the various forms; however, epidermoid cysts are said to be most common and teratoid cysts least common. In our case, the cyst showed simple squamous epithelium without skin appendages, characterizing it as an epidermoid cyst. Dermoid cysts contain skin appendages, and teratoid cysts contain endodermic and mesodermic elements in the cyst wall.

In most cases, dermoid cysts are treated by enucleation. Surgical access depends on the location and size of the lesion. Surgical approaches, such as transcutaneous, extended median glossotomy, median glossotomy and midline incision, may be performed[8-10]. In our case, excision was achieved without major complications by employing intraoral access under local anesthesia. This approach is supported by Akao and colleagues who state that intraoral access must be attempted first, even if dealing with a large cyst[9]. The intraoral approach leads to good cosmetic and functional results. Marsupialization has also been proposed as a treatment alternative in cases of giant cysts.

Differential diagnosis includes infections, tumours, mucous extravasation phenomena and embryonic abnormalities. Surgical excision is the treatment of choice and may be performed under local anesthesia through intraoral access, with no recurrence expected.

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Dr. Jyotirmay Chakrawarty, et. al. "Intraoral Epidermoid Cyst in the Buccal Mucosa: A Rare Case Report." *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*, 20(11), 2021, pp. 18-20.