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Case report
Olgu sunumu

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A case of epidermal inclusion cyst which causes open roof deformity in the nasal bone

Nazal kemikte açık çatı deformitesine neden olan epidermal inklüzyon kisti olgusu

Erkan Yıldız [1], Şahin Ulu [2]

[1] Department of Otorhinolaryngology, Afyonkarahisar Şuhut State Hospital, Afyonkarahisar, Turkey
[2] Department of Otorhinolaryngology, University of Health Science, Afyonkarahisar Hospital, Afyonkarahisar, Turkey

ORCID ID of the author(s)
EY: 0000-0002-0265-7327
ŞU: 0000-0003-0193-1942

Abstract

Epidermoid cysts; in the midline of the body is composed of internal keratin filled cysts. They occur when the branch arches are not fully closed. They usually have limited involvement. They occur mostly in the genital area and rarely hold the head and neck region. Nasal dorsum involvement is very rare. In this case report, we present a case of epidermal cyst that disintegrates the nasal bone at the age of 33 and forms an open roof deformity.

Keywords: Epidermal cyst, Nasal bone, Open roof deformity

Öz

Epidermoid kistler; vücudun orta hattında oluşan içi keratin dolu kistlerdir. Brankial arkların tam olarak kapanmamasıyla oluşurlar. Genellikle sınırlı tutulumları vardır. En çok genital bölgede görülürler ve nadiren baş ve boyun bölgesinde bulunurlar. Nazal dorsum tutulumu çok nadirdir. Bu olgu sunumunda, 33 yaşında nazal kemiği destrükte eden ve açık çatı deformitesi oluşturan bir epidermal kist vakasını sunuyoruz.

Anahtar kelimeler: Epidermal kist, Nazal kemik, Açık çatı deformitesi

Introduction

Cysts in the mid-fascial region are divided into three groups as dermoid, epidermoid and teratoid cysts. Dermoid cyst contains skin inserts, all three germ leaves (such as muscle, bone, gastrointestinal system epithelium), the teratoid cyst contains only the multilayer squamous epithelium, and is called epidermoid cyst if it does not contain skin attachments [1].

Epidermal inclusion cysts; they are frequently seen in the head, neck, face, behind the ear, chest, genital area. They are round shapes and contain dermis remnants. Epidermal cysts are formed by pathological migration of epidermal elements below the dermis. They contain cheese-like secretions. Parotid and jaw region cases have been reported in the head and neck region [2].

The diagnosis of cysts is made by ultrasound (USG), computed tomography (CT) and magnetic resonance imaging (MR). Histopathological examination is important in definitive diagnosis. Pericapsular excision is sufficient for its treatment; but it is impossible to take the whole epithelial layer completely. Recurrences are rare. They do not destroy the bone. They don't spread [3].

Epidermal cysts of the nasal region are rare. Cysts formed in this region can form the tract and open to the skull base or sinuses. Mostly they do not come out of the skin. Nasal dorsum cyst after rhinoplasty is mentioned in the literature [4-6]. It has not been reported that epidermal cysts are destroying bone. In this presentation, we present a 33-year-old patient with open roof deformity that completely obscures the superior wall of the bone in the nasal bone radix section.

Corresponding author / Sorumlu yazar:
Erkan Yıldız
Address / Adres: Afyonkarahisar Şuhut Bölge Hastanesi, 03800 Şuhut, Afyonkarahisar, Turkiye
e-Mail: dr.erkanyildiz@hotmail.com

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Case presentation

A 33-year-old female patient was admitted to our clinic with the complaint of swelling in the upper part of her nose which had been growing slowly for 2 years. There was no color change in the skin. USG reported as 3x3 cm cystic formation in the nasal dorsum. The patient underwent excision of the cystic mass by introducing dorsum with a classical inverse V incision of rhinoplasty (Figure 1). After the cyst was removed, it was found to infect the region, eat the bone in the nasal bone radix area and cause open roof deformity. The area was cleaned and the roof was closed with oblique and lateral osteotomies. The patient was closed with sutures in the rhinoplasty. Histopathologic diagnosis of the excised cystic mass was defined as epidermal inclusion cyst. There were no postoperative complications. The written consent was obtained from the patient presented with images in this study.

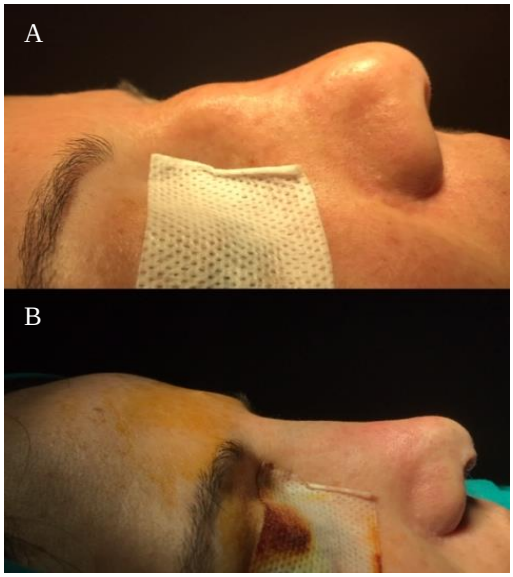

Figure 1: Before (A) and after (B) operation

Discussion

Dermoid, epidermoid and teratoid cysts occur congenitally due to disturbances in epithelial migration. Dermoid cysts contain skin inserts; while epidermoid do not contain skin attachment. Teratoid cysts originate from three germ leaves. There are many theories about etiology. The most accepted of these; the first and second branch arcs are formed by epidermal tissue debris around the midline closure [7].

They can occur in many parts of the body. Generalities occur with adolescence. The most reported cases are in the genital area (testis and ovary). Head-neck welds are around 5% of all cysts [8]. Epidermal inclusion cysts are less than dermoid cysts and they are mostly located in the submental region. Several cases have been reported in areas such as parotid, jaw and zygoma [9].

Epidermoid cysts do not open to the outside in the nasal region; they show the continuity of the sinus to the base and the base of the head. The first choice is USG. CT and MR are useful to find where the tract is opened in large masses. CT is very important in diagnosing and detecting intracranial spread [10,11]. Diagnosis is difficult in cysts that do not leave the nasal cavity. In this case, the differential diagnosis should be differentiated from the hemangioma and the encephalocele [12].

In order to prevent recurrence in the treatment, it is necessary to remove the entire tract and the wall of the cyst [12]. As the external approach can be used in the cysts, incisions used in rhinoplasty can also be used. In our case, a "İnverse V İncision" was performed due to the patient's cosmetic anxiety.

Recurrence of epidermal cysts is rare [13]. Epidermal cysts may rarely undergo malignant transformation. Cystic macular malignant cells are seen in the differential diagnosis of these cases [12]. In our case, superficial tissue USG 3x3 cm skin horse cystic formation was found. Histopathological examination revealed squamous epithelial cells. Histopathological examination revealed epidermal inclusion cyst. No recurrence was detected at follow-up of 2 years.

Open roof deformity; is usually a complication of rhinoplasty surgery. It occurs when the upper wall of the nasal bone is removed and osteotomy is not performed. Medial, oblique and lateral osteotomies are performed to reconstruct the deformity [14]. The most striking point in our case was bone involvement. The nasal bone radix region was completely destructed and it caused the open roof deformity. This deformity was reconstructed with oblique and lateral osteotomy. Bone involvement and destruction have not been previously reported in the literature [15-17].

In conclusion, epidermal inclusion cysts can be found in many parts of the body. Head and neck localizations are rare and most often occur in the jaw. Nasal bone involvement has not been previously reported in the literature. In surgery, the excision of the cyst wall and removal of the tract are sufficient.

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