**Case Report:**

**Nasolabial Cyst**

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**Abstract**

**Objectives:** To report a case of nasolabial cyst, which is a rare lesion arising in the maxillofacial tissues.

**Case Report:** A 56-year-old man presented with a painless right nasolabial cyst. The swelling was soft, fluctuating, non-tender, 2.8 X 2.6cm, with subcutaneous tissue causing obliteration of the nasolabial fold. Computed tomography scan revealed a nonodontogenic cyst in the nasolabial area with minimal bony erosion and some scalloping in adjacent bone. The lesion was removed surgically under general anesthesia.

The nasal and buccal structures healed well without any recurrence.

**Conclusion:** Nasolabial cysts are rare. Common presentation is a well-confined painless swelling. Surgical enucleation is the treatment of choice with low recurrence rate.

**Key Words:** Nasolabial cyst – Non-odontogenic cyst – Enucleation – Klestadt cyst – Nasal alveolar cyst.

**Introduction**

NASOLABIAL cysts are very rare non-odontogenic cysts originating in the maxillofacial soft tissues [1]. Nasolabial cysts commonly present as a localized painless swelling in the nasogenian sulcus and the nasal alar base [2].

The pathogenesis of nasolabial cysts is not fully understood. Two hypotheses are currently accepted; the first hypothesis describes that they originate from facial fissure cysts or from remnants of the nasolacrimal ducts and suggests that these cysts derive from sequestering of embryological epithelial tissue in facial fissures resulting from fusion of the maxillary and nasal processes (lateral and medial). The second hypothesis suggests that a persisting nasolacrimal duct epithelial remnants located between the maxillary and nasal processes gives rise to nasolabial cysts [3].

Diagnostic tests include flexible nasofibroscopy, computed tomography and magnetic resonance imaging. Treatment is surgical, usually cyst marsupialization or enucleation [4]. The recurrence rate varies according to the technique, but it is generally low [2].

**Case Report**

In January 2013, a 56-year-old man presented at the ENT Department of Aseer Central Hospital, Abha, Saudi Arabia. The patient’s main complaint was swelling and elevation of the right nasolabial region that expands his lips outwards. The past medical history was unremarkable.

On examination, there was a facial asymmetry due to bulge on the right side of the nose, obstructing the right anterior nostril. The swelling was soft, fluctuating, non-tender, 2.8 X 2.6cm, with subcutaneous tissue causing obliteration of the nasolabial fold.

Intra-oral examination revealed bulging of the bucco-alveolar sulcus by the swelling. Computed Tomography (CT) scan revealed a nonodontogenic cyst in the nasolabial area with minimal bony erosion and some scalloping in adjacent bone Fig. (1). Based on radiographic and clinical findings, the lesion was suspected to be a “nasolabial cyst”.

The lesion was removed surgically via a sublabial incision approach under general anesthesia, and the surgical specimen was sent for histopathologic study Fig. (2). Histopathologic findings revealed pseudostratified columnar epithelium with intermittent occurrence of goblet like mucin producing cells and also cuboidal epithelial lining. The stroma exhibited a nonspecific chronic inflammatory infiltrate.
The nasal and buccal structures healed well without any recurrence of the lesion after one year Fig. (3).

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**Discussion**

Our case was a male, in his sixth decade, who had a right side painless nasolabial cyst. Nasolabial cysts are usually unilateral, though bilateral cases have been estimated in approximately 10% of the cases. There is a higher incidence of nasolabial cysts among females than males in their fourth to fifth decades of life, with a female-to-male ratio of 4:1 [1-3].

Our patient’s main complaint was painless swelling and elevation of the right nasolabial region which expanded his lips outwards. Sahin [5] noted that nasolabial cysts are submucosal and extra-osseous, which enlarge via the gingivobuccal sulcus and expand all the soft-tissues outwards. Nasolabial cysts are usually painless swellings in sublabial fold, lips, face and may cause nose obstruction. Pain can occur if the cyst becomes infected.

The diagnosis of our case was based mainly on clinical findings supported by radiographic investigations and confirmed by histopathology.

The initial diagnosis and treatment is usually made in early stages because the lesion causes cosmetic problems; very rarely it becomes large in dimensions [6]. The diagnosis of nasolabial cysts is essentially clinical. Radiographs do not detect this soft tissue lesion except when it causes significant maxillary bone erosion. More sophisticated image diagnosis, such as computed tomography and magnetic resonance imaging, may reveal the cystic nature of these lesions in greater detail and reliability, their relation with the nasal alae and the maxillary bone, as well as bone involvement, which facilitate the diagnosis [7].

El-Din and El-Hand [8] noted that histopathology of nasolabial cysts reveals a ciliated pseud stratified columnar epithelium and occasionally a stratified squamous epithelium lining the cystic lumen.

The differential diagnosis of nasolabial cysts is made with odontogenic lesions such as canine space abscess, follicular, periodontal and residual cysts, and salivary gland neoplasms. Infected nasolabial cysts may be mistaken for furuncle of the nasal vestibule floor; except for this entity, however, the features of infected nasolabial cysts are very specific, and there is little doubt in the diagnosis [9].

The nasolabial cyst in our case was removed surgically via a sublabial incision approach under general anesthesia. Jae Yong et al., [10] noted that
the treatment can be made by surgical excision, injection of sclerosing materials in the cyst, and endoscopic marsupialization methods. Excision of the cyst via the sublabial incision is the most preferred treatment modality with very low recurrence rate and cosmetic reasons. Sublabial incision is much better than external incision especially in terms of cosmetic reasons.

One year postoperatively, the nasal and buccal structures in our case healed well with no recurrence. Su et al., [4] stressed that recurrence does not happen if the wall of the sac is completely removed.

In conclusion, nasolabial cysts are rare in the general population. The usual presentation is localized painless swelling, local pain (if infected) with partial or total nasal obstruction. Diagnosis is mainly clinical and is supported by radiography. Histopathology reveals a non-ciliated columnar epithelium and mucus-producing cells. The treatment of choice is surgical enucleation, which has low recurrence rates.

References


المخصّص العربي

الهدف: تقرير حالة ورم كيس في المنطقة الأنفية الشفوية اليمنى، وهو ورم نادر ينشأ في أنسجة الوجه والفكين.

تقرير الحالة: حضر رجل يبلغ من العمر 65 عاماً لعيادة الأنف والأنف والحنجرة يعاني من تورم كيسي غير مؤلم في الشق الأنفي الشفوي الأمين لفترة سنة. وكان التورم لينًا وأبعاده هي 2.8 X 2.6 سم، في الأنسجة تحت الجلد مما سبب ضعف الفصية الأنفية الشفوية. لقد كشفت الأشعة المقطعية وجود الكيس في المنطقة الأنفية مع الحد الأدنى من تآكل عظمي في المنطقة المجاورة للتجويف الأنفي، وقد تم إزالة الورم جراحياً تحت التخدير العام.

الاستنتاجات: تعتبر الأورام الكيسية في منطقة الشق الأنفي الشفوي من الأورام النادرة، التي يتم استئصالها جراحياً، واحتمال ظهورها مرة أخرى نادر الحدوث.