NASOLABIAL CYST: A RARE PRESENTATION TO THE ORAL & MAXILLOFACIAL SURGEON

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ABSTRACT

The nasolabial cyst is non-odontogenic fissural cyst. It appears in the soft tissues of the oral cavity on the region corresponding to the nasolabial furrow and alar nose. The time of appearance of this cyst is late in origin and frequently asymptomatic swelling elevating the nasal ala. The occurrence rate is extremely low and the clinical characteristics of this lesion and histopathology play very important role to recognize this cyst. The management of the cyst is by surgical excision intraorally.

The purpose of this case report is to express the occurrence and diagnostic confirmation of this cyst to oral & maxillofacial surgeons and to understand the importance of the cyst in facial disfigurement.

Key words: Nasolabial cyst, nasoalveolar cyst, enucleation.

INTRODUCTION

The nasolabial cyst is a mucus-secreting, non-odontogenic cyst in the nasofacial area. This is a nasolabial fold swelling due to epithelial remnants at the sites of embryonic fusion. It is usually situated behind the ala nasi and extends anteriorly into the labio-gingival sulcus behind the upper lip. Patients with nasolabial cysts generally undergo surgical removal of the cyst via a transoral sub-labial approach. This article reports a simple, less invasive surgical procedure for the treatment of nasolabial cyst is a rare non-odontogenic cyst originating in maxillofacial soft tissues. Zuckerkandl1 proposed two main etiological theories in 1882. One describes that the lesion arises from trapped nasolacrimal duct tissue whereas the other stresses that it is an embryonic fissural cyst. Klestadt2 first postulated an embryologic origin for these cysts and considered that these lesions originate from embryonic epithelia which are entrapped in the developmental fissures between the lateral nasal and maxillary processes. Klestadt's embryologic theory as a fissural cyst has been widely accepted by many authors”.

CASE REPORT

A forty two years old Saudi female named Naha Saud Al-otaibi was referred to the department of oral & maxillofacial surgery and diagnostic sciences at King Saud University Dental College Riyadh. She presented with a painful swelling on the left side of upper lip. She gave the history of present illness that 5 years ago, she noticed a small painless swelling which was gradually increased in size and few weeks ago developed pain.

Patient is known diabetic and hypertensive for last five years and the disease is controlled with regular...
Fig 1. Front view of face showing nasolabial swelling

Fig 2. Lateral view of face showing nasolabial swelling

Fig 3. Labial sulcular mucosa showing bulge of the cyst

Fig 4. Cyst almost enucleated transoral approach

Fig 5. Enucleated cyst showing mucoid secretion

Fig 6. Histopathology of cyst

Fig 7. Postoperative wound showing resorbable suture

Fig 8. Postoperative front view of the patient's face
medication. The swelling was initially diagnosed as hemangioma and later on diagnosed as nasolabial cyst at the university college.

Clinically upper lip was flattened on the right alar base of the nose. The sulcus at nasolabialis was indistinct that suggested diagnosis of the possibility of nasolabial cyst. Palpation of the swelling showed a fluctuant mobile mass. The lesion measured 1.6 cm radius. Periapical radiograph showed a diffuse radiolucent area around the apical region of the right lateral incisor and the pulp testing confirmed its vitality. A diagnosis of nasolabial cyst was made and it was removed surgically after giving local anesthesia under prophylactic antibiotic cover. The postoperative healing was uneventful.

The histopathology of excised tissue confirmed the diagnosis of nasolabial cyst. Microscopically, the cyst was lined by thin of cuboidal epithelium and thin fibrous connective tissue filled with mucoid secretion. The histological and clinical findings were compatible with nasolabial cyst. The postoperative six months follow up was unremarkable.

DISCUSSION

Nasolabial cysts are rare but easily identifiable when they do occur. They are thought to arise from the remnants of the nasolacrimal ducts whereas the most of the available literature on the cysts is limited.

Many names have been suggested for nasolabial cysts whereas the nasoalveolar cyst and nasolabial cyst being the two most widely used. Nasolabial cysts represent about 0.7% of all cysts in the maxillofacial region with frequently middle age presentations. The cysts are usually unilateral without side prevalence with greater (4:1) female incidences. It has been documented that approximately 10% of the cases are bilateral and common among Blacks'. This lesion is usually asymptomatic unless secondarily infected.

The clinical findings of the nasolabial cyst are fairly typical. Patients usually complain of a swelling adjacent to the nose, and sometimes the cyst may be observed on routine examination. The increase of this swelling in the maxillary buccal sulcus may reach great dimensions causing discomfort with the use of dentures, breathing obstruction and facial asymmetry. Because of the similar signs and symptoms, the lesion may be misdiagnosed as a dental abscess, odontogenic cyst, nasal polyps or tumor and if not diagnosed properly may lead to maltreatment.

Although it is a soft-tissue cyst, the cyst can sometimes cause erosion of the underlying maxillary bone which may be observed in radiographic examination thus detailed radiographic examination must be obtained to distinguish them from odontogenic or other non-odontogenic etiologies. Treatment with injection of sclerotic substances, marsupialization or surgical removal, all were attempted to resolve these lesions. However, unlike the large intraosseous cysts, the soft-tissue lesions do not respond to marsupialization and surgical excision is the treatment of choice. As these cysts are closely related to the floor of the nose, the perforation of the nasal mucosa may occur during their removal and it needs repair before closure.

In short the nasolabial cyst is rare and difficult to identify. It needs careful diagnostic protocol but confirmation may only be made with histopathology. The treatment of choice of this cyst is enucleation and transoral method is preferred approach.

REFERENCES