Nasolabial Cyst- A Case Report of Rare Non-Odontogenic Cyst

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ABSTRACT

Introduction: Nasolabial cyst is a rare nonodontogenic, soft-tissue lesion, embryonic in origin occurring in the nasolabial region and comprising approximately 0.6% of all jaw cysts. Most of time it is an asymptomatic deformity of face and rarely can result in nasal obstruction.

Case Report: In this paper, we describe a case of nasolabial cyst in a 45 year old female patient and discusses relevant considerations. For the removal of cyst, incision was given at the upper gingivolabial sulcus below the pyriform apertures followed by dissection.

Conclusion: There is one reported case of malignant degeneration of the cyst in the literature. So its surgical removal is important.

Keywords: Klestadt's cyst; Non-odontogenic cyst

INTRODUCTION

Nasolabial cyst is a rare nonodontogenic, soft-tissue, developmental cyst occurring in the nasolabial region comprising approximately 0.6% of all jaw cysts.[1] Zuckerkandl first described this cyst in 1882, McBride reported the first case in 1892 and Brown-Kelly described it in greater detail in 1953.[2] There is still much debate about the origin of nasolabial cysts. It is considered to be originated due to the persistence of epithelial remnants from the nasolacrimal duct or from epithelial cells that retained within the mesenchyme after fusion of the nasal processes and the maxillary prominence during fetal life.[3]

This cyst can occur in any age group, however they are very uncommon in patients younger than 10 years and are commonly observed in the 30 to 50 years age group.[4] Moreover, there is a strong female gender bias for nasolabial cysts, with female to male incidence ratio 3:1.[5] Here we present a case of nasolabial cyst in a 45 year old female patient.

CASE REPORT

A 45 year old female patient came to Out Patient Department of ENT, GGSMC and H, Faridkot with complaints of a slowly enlarging asymptomatic swelling over right nasolabial area which elevated the ala and right sided nasal blockage which has progressively increased over time since one and half year. Patient was conscious, cooperative, well oriented to time, place and person. Vital signs were within normal range, pulse was 78/min, blood pressure was 120/90 mmHg, temperature was 98^0F and respiratory rate was 24/min. Pallor, icterus, cyanosis, lymphadenopathy, oedema were not present. On palpation, there was a nontender, firm swelling which obliterated the right nasolabial fold, elevating the ala and the floor of the nose with nasal obstruction (figure-1). Computed tomography (CT) showed a soft-tissue density mass lesion in the region of right nasal cavity, preantral region of right maxilla with mild smooth scalloping in anteromedial aspect of right maxillary antrum (figure-2). Routine investigations were within normal limits.

The cyst was excised by intraoral enucleation technique with a sublabial approach. The upper gingivolabial sulcus was incised just below the pyriform apertures followed by dissection. A well- circumscribed cyst swelling superficial to bony floor of nose was removed, some portion of floor of nose that had adhered to the cyst was removed under general anaesthesia. Histopathology was consistent with diagnosis of Klestadt cyst.

DISCUSSION

A nasolabial cyst presents as a smooth, mobile, soft-tissue mass between the upper lip and nasal aperture, producing protrusion of the upper lip, elevation of the nasal ala and inferior turbinate, and effacement of the nasolabial fold.[6] In the present case, firm swelling which obliterated the right nasolabial fold, elevating the ala and the floor of the nose with nasal obstruction. Nasolabial cysts are sometimes asymptomatic unless they become infected or are associated with facial deformity. It is manifested by swelling and nasal obstruction base implantation of nasal wing. Pain is an unusual sign signing infection.[6] In the present case lesion was slowly enlarging asymptomatic swelling over right nasolabial area which elevated the ala and right sided nasal blockage which has progressively increased over time since one and half year.

The lesion is submucosal and extraosseous, it expands via the gingivobuccal sulcus and expands all the soft-tissues outwards.[7] Despite the fact that they are soft tissue cysts and are situated extra-osseously, they can at times cause bone destruction.[8] Although developmental in origin, clinical manifestations do not appear until adulthood. The nasolabial cyst is also called as Klestadt's cyst, nasoalveolar cyst, mucoid cyst of the nose and nasal vestibular cyst.[7]

Nasolabial cyst usually presents as unilateral with bilateral incidence in about 10% of patients and is more commonly located on left side of the jaw. The present case reports lesion on the right side of the jaw.[9]

Radiographs can reveal this soft tissue lesion only after significant maxillary bone erosion. However magnetic resonance imaging (MRI) and computed tomography (CT), detects the cystic characteristics of these lesions with greater detail and reliability, bone involvement and their location in relation to the nasal alae and the maxillary bone, which assists the diagnosis.[10] In the present case, Computed tomography (CT) demonstrated a soft-tissue density mass in the region of right nasal cavity, preantral region of right maxilla with mild smooth scalloping margins in the anteromedial aspect of right maxillary antrum. Computerized tomography provides a high contrast

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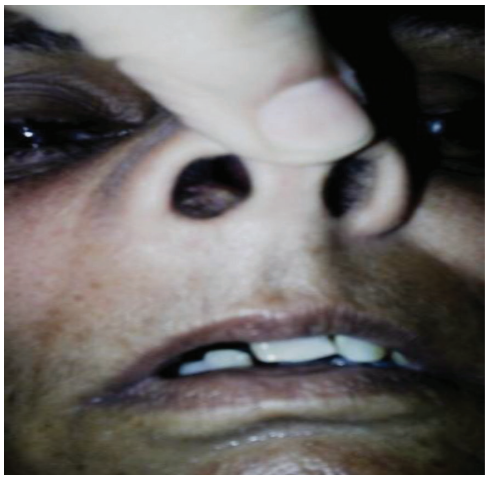

Figure-1: Clinical picture

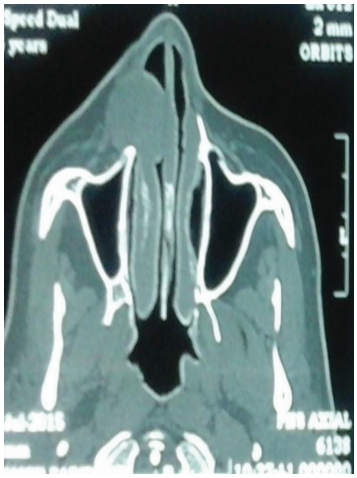

Figure-2: CT scan

resolution along with good bone and soft tissue definition. CT is preferable to MRI because of its lower cost for the diagnosis of suspected case of nasolabial cyst.[11]

The differential diagnosis of nasolabial cysts consists of various lesions presenting similar location that includes cystic lesions which consists mucous retention cyst, dermoid, epidermoid cyst and oral heterotopic gastrointestinal cyst; various jaw bone lesions with cortical perforation such as nasopalatine duct cyst, radicular cyst, dentigerous cyst and glandular odontogenic cyst.[4]

The histopathology of this lesion was first described by Brown-Kelly in 1898. The cyst comprises of respiratory epithelium (stratified ciliated cylindrical or pseudostratified ciliated cylindrical epithelium with goblet cells), however squamous metaplasia may occur in infected cysts. Fluid present within cysts is produced by goblet cells.[10] The final diagnosis in the present case was confirmed by the histopathological examination.

The common method of treatment is surgical excision using intraoral sub-labial technique, even though care must be considered to avert perforation or collapse of the cyst. The surgical outcome of this method is usually successful; though, complications associated with this procedure include gingival numbness, facial swelling, decreased sensation of the teeth, and wound infection. An alternative method of treatment is transnasal approach that allows endoscopic marsupialization of the cystic cavity.[12,13]

CONCLUSION

The clinico-radiographic and histological characteristics of the present case were suggestive of nasolabial cyst. The intraoral enucleation technique with a sublabial approach was used to excise the cyst. Incision was given at the upper gingivolabial sulcus below the pyriform apertures followed by dissection. There is one reported case of malignant degeneration of the cyst in the literature. So its surgical removal is important.

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