



Research Article

Section: Otorhinolaryngology

Case Report on a Case of Right Nasolabial Cyst in Young Female with Dental Remnant

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ABSTRACT

Background: Nasolabial cyst also known as klestadt's cyst is a rare nonodontogenic cyst that arises from the soft tissues of the maxillofacial region. Previous review of literature of nasolabial cyst include it as an asymptomatic swelling located beneath the ala of the nose, along with a distinctive swelling of the lip. The presentation of patient is usually asymptomatic and the patient usually presents when it enlarges in size leading to cosmetic deformities. It is quite often more common in age group 40-50 years, but in our case it was seen in young female. Usually it might be confused as an odontogenic lesion. If infected it leads to infective cyst and can be mistaken for facial cellulitis. We are describing in our case a surgically managed case report and also discussing the etiopathogenesis and management.

Case report: The article presents a case of nasolabial cyst in a young female who presented with swelling on right side of nasolabial region, resulting in cosmetic deformity, which was excised and follow up of the patient was done. **Conclusion:** Nasolabial cyst is a rare cyst of maxillofacial region that result in deranged cosmetic appearance and if infected leads to cellulitis. For evaluation generally radiological investigations as CT scan is done. This helps us easily diagnose and plan surgical management of the case.

INTRODUCTION

Emil Zukerkandl was the first to describe an extra osseous lesion, growing in nasal ala region, also known as nasolabial cyst.[1]. Similar study in the year 1953 and the lesion was done by Klestadt, also known as Klestadt cyst.[2] Nasolabial cyst is rare and ectoderm all in origin and accounts to be 0.7% among all maxillofacial cysts [3]. People in 40s and females are mostly affected by it, our is a rare case in young female [4]. It is most common in African Americans. Often these lesions have gone unnoticed or misdiagnosed, as they are not evident on common radiographs. Patient may report with clinical symptoms related to cosmetic deformity and large lesions may result in nasal obstruction. Diagnosis is usually made by clinical findings and with other imaging modalities.

CASE PRESENTATION

A 27-year-old female reported to the Department of Otorhinolaryngology with a painless swelling on the right side of the nose, which was noticed 5 months back. No history of trauma was elicited. Swelling was persistent and was enlarging in size, as per history.

On extraoral examination, a swelling sized 3cm*2cm with ill-defined borders was elicited, lateral to the ala of the nose. The surface was smooth, and no punctum was seen. Bimanual palpation was done. The swelling was soft and cystic with mild tenderness on palpation. The swelling was palpable intra-orally into the buccal vestibule of the upper right canine region (Figure 1a,1b). It was nonmobile and cystic in nature. Infective foci of dental origin was ruled out. Hence the possibility of a radicular cyst or dentoalveolar abscess was ruled out. A computerized tomographic (CT) scan revealed a well-defined round soft tissue lesion in the right pyriform aperture.

Based on the findings, a provisional diagnosis of a non-odontogenic/ soft tissue cyst or tumor was made, which included nasolabial cyst, dermoid cyst and epidermoid cyst. An excision was planned under general anesthesia. Patient was admitted, and routine investigations were done, CT scan was done to know the extent of the swelling. Then, intraorally sublabial incision at level of nasal floor only through the mucosa, and careful blunt dissection done to deepen to the lesion (Figure 2) was performed.

Once the lesion was exposed, blunt dissection was proceeded around to free it from the floor of nose. Intraoperative inspection revealed that the lesion was surrounded by a lining, which was opened to expose the cystic lesion with a dentigerous lesion, surrounded the lesion. Once the lesion was freed from the nasal floor, dissection was done to free the lesion completely and removed in total, and the lining was sent for histopathological evaluation (Figure 3). Hemostasis was obtained and the wound was closed with placing a antibiotic soaked gauze, using vicryl 3-0. The excised specimen was sent for histopathological examination. Post operative period was showed a slight swelling in

right peri orbital region. Histopathological examination showed cyst lined by double layered goblet cell rich columnar epithelium with focal squamous metaplasia and the diagnosis was consistent with nasolabial cyst. Patient was shifted to Intensive Care Unit and regular monitoring was done, regular monitoring of the patient was done and regular dressing was done, patient was kept on ryles tube feeding, and slowly the swelling subsided after 2 weeks and pack removal was done (Figure 4). Soft diet was introduced slowly, after removal of ryles tube. Regular monitoring of the patient was done at 3wk, 4wk, 6wk respectively, the follow up period was uneventful.



Figure 1a



Figure 1b



Figure 2a



Figure 2b



Figure 2c



Figure 2d



Figure 3



Figure 4

DISCUSSION

Nasolabial cyst is nonodontogenic cyst categorised under jaw cysts. It is also termed even klestadt's or nasoalveolar cyst. Most of the reported cases have been unilateral in nature, but bilateral cases have also been reported in the literatures [5,7]. The Nasolabial cyst is hypothesised due to a number of factors [6] (1) embryological detention of cells in the medial and lateral nasal wall, (2) detention of cell in the nasolacrimal channel

formation. Number of clinical presentation involve swelling in right nasolabial region, numbness. This results in swelling around nasal ala and if infected can result in pain and if it ruptures can cause drainage of swelling and pus into oral cavity. It can result in nasal blockage, thus resulting in blockage of nasolacrimal duct, resulting in infection of nasolacrimal duct, thus resulting in dacrocystitis and epiphora. Therefore need to evaluate patient meticulously is required

Proper diagnosis has to be made as many pathological lesions mimic the same lesion. Primarily a dentoalveolar lesions has to be excluded and it can easily be done using plain radiographs. For better evaluation CT scan as an imaging modality can be used, and for soft tissue evaluation MRI. History also plays an important role in diagnosis as we can rule out the childhood lesions like dermoid and epidermis cyst.

Diagnosis is usually made by clinical findings with CT or MRI. Several imaging modalities may be used. Since without bone involvement, it is rarely identified in plain radiographs. Though MRI gives good soft tissue definition, CT is preferable as it is less expensive. Ultra sound can also be a diagnostic method and has advantages over other invasive techniques.

Surgical excision is the treatment of choice with less morbidity, other things like FNAC can also be done, but chances of recurrence is common. An intra oral approach is ideal with good cosmetic results. Other modalities include endoscopic excision or even marsupialization. Earlier Caldwell-Luc procedure was done. Intra operative nasal mucosal perforation is a common complication which can be sutured or small perforations will heal spontaneously even if left untreated. Such complications were not observed in our case. Recurrence becomes rare on complete removal of lining and malignant transformation has not been reported but cellular changes have been reported in some cases in literature reviews. Informed consent from patient obtained.

CONCLUSION

Nasolabial cysts are rare lesions of maxillo-facial region, and can be confused with a number of lesions like vascular malformations, lipoma or odontogenic lesions. Proper evaluation and radio-logical management helps in proper planning and surgical management.

CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

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