(e) ISSN Online: 2321-9599
(p) ISSN Print: 2348-6805

CASE REPORT

NASOLABIAL CYST – A CASE REPORT

Ganesh Prasad B [1], Niloufa Z Aziz[2], Savithalakshmi[3], Arathi K[1]

[1]Reader, [2]PG Student, [3]Senior Lecturer, Department of Oral Pathology, AJ Institute of Dental Sciences, Mangalore – 575004, India

ABSTRACT:
Nasolabial cyst is an uncommon non – odontogenic, developmental cyst of maxillofacial soft tissues which usually presents as a unilateral swelling in the ala - nasal region, causing facial asymmetry. This paper reports a case of Nasolabial cyst of a 44 year old female patient and discusses the clinic radiographic features, differential diagnosis, histopathology, treatment plan and prognosis of nasolabial cyst.
Key words: Klestadt's cyst, Nasolabial cyst, Non-odontogenic cyst.

Corresponding Author: Dr. Niloufa Z Aziz, 3Senior Lecturer, Department of Oral Pathology, AJ Institute of Dental Sciences, Mangalore – 575004, India, Email: nilu9005@gmail.com

This article may be cited as: B Prasad G, Aziz NZ, Savithalakshmi, K Arathi. Nasolabial Cyst – A Case Report. J Adv Med Dent Scie Res 2016;4(2):67-70.

INTRODUCTION:

Nasolabial cyst is a rare non-odontogenic cyst originating in the Maxillofacial soft tissues.[1] It is an uncommon lesion located near the alar cartilage and extending into the inferior nasal meatus, superior alveolabial groove and floor of the labial vestibule.[2,3] It was first described by Zuckerkandl in 1882.[2] The term nasolabial cyst was coined by Rao in 1951.[2,4] Various other names have been used for this cyst. such as mucoid cyst, naso alveolar cyst, nasal vestibular cyst, nasoglobular cyst, maxillary cyst, nasal wing cyst, Klestadt's cyst.[5] It is classified as a developmental, non-odontogenic, extra osseous cyst. It accounts for approximately 7% of Maxillary cysts, and is unilateral in 90 % of cases.[2,4] Its pathogenesis is uncertain. It was initially believed to originate during the fusion of the globular lateral nasal and maxillary processes due to proliferation of epithelium along the fusion line.[2,4,6] Currently the most widely accepted theory is that it originates from the inferior and anterior portion of the nasolacrimal duct.[2,3,7] This theory is supported by the fact that nasolacrimal duct is lined with pseudostratified columnar epithelium which is found in the nasolabial cyst.[2,8] Women are most commonly affected, and it mainly occurs in the fourth and the fifth decades of life.[1,2,4] Clinically patients show enlargement causing facial asymmetry, elevation of the alanasi and effacement of the nasolabial sulcus.[8] It can sometimes cause local pain, nasal obstruction.[9] It causes a fluctuant swelling and can be palpated bimanually with one finger on the nasal floor and the other in the labial sulcus.[10] Periapical radiographs may show a radiolucent area in the apical region of the maxillary incisors in some cases.[1,2] Standard occlusal radiographs show a pronounced posterior convexity in half of the bracket shaped radio-opaque line border of the nasal aperture.[1,11] When more precise analysis of the region is required , Computed Tomography and MRI can be done.[2,12] The differential diagnosis includes periapical lesions, nasal abscess, nasopalatine duct cyst, salivary gland neoplasms, residual cysts, dermoid or epidermoid cysts.[2]

In this report we have described a case of nasolabial cyst with its clinical and radiographical features, diagnosis, histopathology and treatment.

CASE REPORT

A 44 year old female patient reported with the chief complaint of swelling on the right side of the nose since 4 years. The swelling was not associated with pain, nasal discharge or difficulty in breathing. Extraoral examination revealed facial asymmetry with a diffuse swelling involving the right side of the face and elevation of right ala of the nose (Figures 1- 3). On palpation the swelling was soft, non-tender, and circumscribed. The intranasal examination showed the swelling partially obstructing the right side of the nasal cavity. Intraorally there was no significant finding regarding this lesion. The lesion could be palpated

from the right side of the labial sulcus, and revealed findings that were consistent with the extra oral findings. Computed tomography revealed a cystic lesion on the right nasal region with a mean diameter of 19mm. Under general anaesthesia and aseptic conditions surgery was performed, Vestibular incision was placed and myomucoperiosteal flap was raised. Soft tissue dissection was done to identify the lesion and to separate it from bony defect, muscle attachment and nasal floor (Figure 4). Closure was done with 3 – 0 vycryl suture.

Figure 1: Pre- Operative extra oral photograph

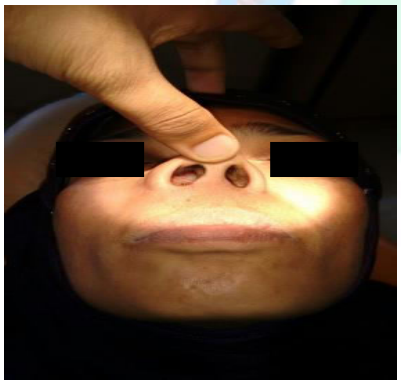

Figure 2: Pre- Operative extra oral photograph

Figure 3: Pre- Operative Intra Oral Photograph

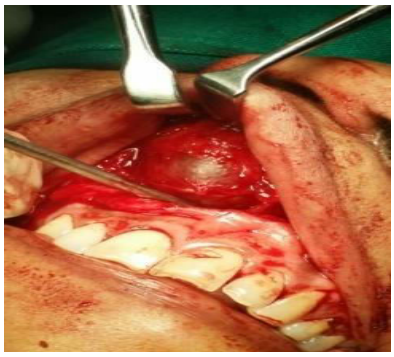

Figure 4: Surgical exposure of the cyst

On gross examination the excised mass was reddish, soft, round in shape, fluctuant, and about 17mm in diameter (Figure 6). Histopathological analysis revealed a cystic cavity lined by pseudostratified ciliated columnar epithelium. The epithelium was supported by a fibrous connective tissue capsule (Figure 5). The histopathological diagnosis of nasolabial cyst was rendered.

Figure 5: Gross Specimen of the enucleated cyst

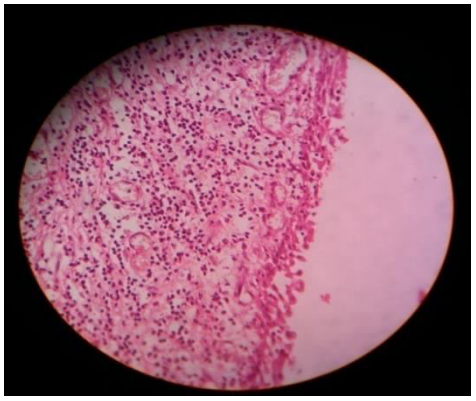

Figure 6: Histopathological Examination- Nasolabial Cyst Lined By Pseudostratified Columnar Epithelium Containing Many Goblet Cells

After 1 year of follow up, the patient remains asymptomatic and without any evidence of recurrence.

DISCUSSION

The most common type of cysts of the head and neck region is odontogenic cysts. Nasolabial cyst is a rare non-odontogenic cyst affecting the maxillofacial region. It represents about 0.7% of all cysts in the maxillofacial region, and 2.5% of all non-odontogenic cysts.[10] Nasolabial cyst presents as swelling in the soft tissue beneath the ala of the nose.[13] The diagnosis is confirmed by correlating the histopathological findings of the lesion with the clinical features. They tend to be unilateral in 90% of the cases and bilaterality was reported to be 10%.[5,10] Nasolabial cysts are not detectable in plain radiography as they only contain soft tissue. [2,9] Seward described 2 possible radiographic aspects : increased radiolucency adjacent to the apical regions of the maxillary incisors and deformity of the radio-opaque line corresponding to the inferior border of the periform aperture. [11] Although it is a soft tissue cyst , nasolabial cyst can sometimes cause erosion of the underlying maxillary bone which may be observed on radiographic examination. The common differential diagnosis includes, periapical abscesses, granulomas and odontogenic cysts. Pulp vitality testing of the adjacent teeth may help to rule out periapical pathology. Dermoid and epidermoid cyst should also be considered in the differential diagnosis as they are associated with yellow discoloration of the overlying mucosa, whereas in nasolabial cyst the mucosa is normal pink hue or blue tinged.[3] Computed tomography usually reveals a homogenous cystic lesion with no contrast to the periform aperture.[2] Histologically, the cyst is usually lined by pseudo-stratified columnar epithelium which is ciliated, often with goblet cells and mucous cells or by stratified squamous epithelium. Enucleation and marsupiliazation are the treatment of choice.[1,2,14] Alternative treatment modalities are aspiration, cauterization, injection of sclerosing agent and incision and drainage. However, these methods are associated with higher recurrence rate.[15] As these cysts are in close proximity with the floor of the nasal cavity, caution should be exercised towards the possibility of perforation of the nasal mucosa during their removal. Reported post operative complications include nasal obstruction and esthetic problems.[16] Malignant transformation is questionable and has been documented in only one case.

The diagnosis in this case was based on clinical findings, which included classic features of nasolabial cysts, and was confirmed by histopathological examination.

CONCLUSION

Although an uncommon type of cyst, nasolabial cyst is an important entity which may cause significant swelling and facial asymmetry, leading to esthetic concerns. It is important for the clinician to be aware of the clinical and histopathological features of this cyst to be able to guide the patient towards an appropriate diagnosis and treatment. Surgical enucleation of this cyst often results in good prognosis. Here we have presented a classic case of nasolabial cyst which presented as a unilateral soft tissue swelling which showed pseudostratified ciliated epithelial cystic lining on histopathological examination.

REFERENCES

1. M. Shear and P. M. Speight, Cysts of the Oral and Maxillofacial Regions, Blackwell Munksgaard, Oxford, UK, 4th edition, 2007.
2. Giongo CC, Antonello GM, Couto RT, Torriani MA. Nasolabial cyst: A case report.Rev port estomatol med dent cir maxillofac.2014;55(1):55-59.
3. Nixdorf DR, Peters E, Lung KE. Clinical presentation and differential diagnosis of nasolabial cyst. J Can Dent Assoc.2003;69:146–9.
4. Felix JADP, Ferreira PJF, Correa R, Cantini R, Neto RM, Felix F.Cisto nasolabial bilateral: relato de dois casos e revisão daliteratura. Rev Bras Otorrinolaringol. 2003;69:279–82
5. Yuen HW, Julian CL, Samuel CY. Nasolabial cysts: clinicalfeatures, diagnosis, and treatment. J Oral Maxillofac Surg.2007;45:293–7.
6. GoelAK, Sylonia S, Goel R. Nasoalveolar cyst. Clinical rhinology: An international journal. 2011;4(3):154-156.
7. Regezi JA, Sciubba JJ. Oral pathology: clinical-pathologiccorrelations. 2nd ed. Philadelphia: Saunders, WB;1991.
8. Oliveira SB, Castro JL, Silva JJ, Rosa MRD. Cisto nasolabial nãoodontogênico. Rev Bras Ciênc Saúde. 2003; 7:75–8.
9. Gomes CC, Dias Jr AB, Vidolin C, Silveira FCA. Cisto nasolabial bilateral. Rev Bras Otorrinolaringol. 1995;61:30–3.
10. Kajla P, Lata J, Agrawal R. Nasolabial cyst: Review of literature and a case report.J Maxillofac. Oral Surg.2014; 13(2):227-230.
11. Seward G.R. Nasolabial cyst and their radiology. Dental practitioner 12.1962; 154-161.
12. Seward GR. Nasolabial cysts and their radiology. Dent Pract.1962;12:154–61.12.
13. Choi JH, Cho JH, Kang HJ, Chae SW, Lee SH, Hwang SJ, et al. Nasolabial cyst: A retrospective analysis of 18 cases. Ear Nose Throat J 2002;81:94-96.
14. Parelkar K, Nagle S, Jagade M, Hanwate R, Pandare M et al. Klestadts : Case report. Int J of Otolaryngology and head and neck surgery 2015; 4 215- 219.

15. Crawford Jr WH, Korchin L, Greskovich Jr FJ. Nasolabial cysts:report of two cases. J Oral Surg. 1968; 26:582–588.
16. El-Hamd KEAA. Nasolabial cyst: a report of eight cases and a review of the literature. J Laryngol Otol 1999;113:747–749
17. R Kanmani, M Jonathan Daniel, SV Srinivasan, K Ramadoss. Nasolabial cyst mimicking a Radicular Cyst. J of Indian Academy of Oral Medicine and Radiology. 2010;22(3): 159-161.

Source of support: Nil

Conflict of interest: None declared