Abstract: The nasolabial cyst is a rare non-odontogenic maxillofacial soft tissue swelling. The cyst grows slowly characterized by swelling in nasolabial region. This paper presents a case series report of 5 patients of nasolabial cyst studied in tertiary care hospital of SVNGMC Yavatmal, situated in trible area of Maharashtra. Three out of Five patients presented with scar mark over nasolabial region by previous treatment from quack and they belonged to the same locality. 2 out of 5 patients underwent repeated aspiration of cystic fluid and presented with infected swelling. On CT SCAN these two patients had erosion of anterior maxillary wall because of infection. Treatment in all patients was complete surgical excision by sublabial approach. The diagnosis is confirmed by histopathology. The purpose of this paper is to review the literature, discuss the histopathology, etiology, treatment and to increase awareness about this simple swelling in general population.

Keywords: nonodontogenic, sublabial, cyst, nasolabial, scar mark

I. Introduction

The nasolabial cyst is a rare nonodontogenic cyst in nasolabial region. The swelling was first described by Zukerkandl in 1882¹, later investigated by Klestadt ¹and labeled Klestadt cyst in 1953. Rao used the term nasolabial cyst in 1951.³ There are two main etiological theories proposed on nasolabial cyst. According to first, cyst is derived from epithelial cells retained from mesenchyme after fusion of medial and lateral nasal process. The second suggests that it develops from persistence of epithelial remnants from nasolacrimal duct extending between lateral nasal process and maxillary prominence. Clinically patients presents with swelling in nasolabial region, nasal obstruction, pain if cyst gets infected. It is most commonly seen in adults in fourth and fifth decade of life. 3 out of 5 patients belonged to same locality and had a scar mark over swelling of previous treatment from quack. In this report we have discussed case series of five patients with their clinical findings, diagnosis and treatment.

II. Material And Methods

A Retrospective study was made in 5 patients for a period of 1 yr. Diagnosis was based on clinical examination and CT findings. All patients underwent complete excision of cyst by sublabial approach and histopathology confirmed the diagnosis. Collected data includes age, sex, clinical findings, duration of disease, cyst location, previous treatment, surgical procedure, histopathology, post operative follow up.

III. Discussion

Nasolabial cysts are seen in 2⁰ to 5⁰ decade. They comprise about 0.3% of maxillary cysts.⁸ Presentation of nasolabial cyst is usually unilateral with bilateral incidence in 10%⁴ Schuman has reported no race preference and no difference in cyst location to right or left. On oorhinolaryngological examination, on inspection, there was evidence of swelling over nasolabial region obliterating nasolabial fold, upper gingivolabial and gingivobuccal sulcus and extending to floor of nose, on palpation revealed soft to firm mass in nasolabial region also palpable intraorally. Our 5 patients came with complaints of facial deformity, nasal obstruction caused by swelling. Swelling was tender in two patients due to infection, they had repeated history of aspiration by dentist and recurrence of swelling. On CT SCAN revealed homogenous non contrast enhancing well defined cystic swelling in nasolabial region with anterior maxillary wall erosion in 2 patients. 3 out of 5 patients presented with scar mark over nasolabial region, due to previous treatment from quack, and they belonged to the same locality. Complete enucleation by sublabial approach was done in all patients. Histopathology revealed Pseudostratified columnar epithelium or stratified squamous epithelium along with congenital fibrous tissue. Our management aimed to correct the deformity, to eliminate the nasal obstruction and treat the infection if any. The differential diagnosis includes oronasal cyst, nasopalatine cyst, mucous retention cyst, radicular cyst. Surgical excision is the most preferred treatment. The other methods include needle aspiration, marsupialization, cauterization, injecting sclerosants. However these methods have high recurrence rate.

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Nasolabial Cyst: A Case Series Report Of Five Patients

### Table

<table>
<thead>
<tr>
<th>Patient</th>
<th>Age</th>
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<th>Side</th>
<th>Symptoms</th>
<th>surgery</th>
<th>Follow up</th>
<th>Recurrence</th>
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<td>Enucleation</td>
<td>8 months</td>
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<td>Enucleation</td>
<td>12 months</td>
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<td>12 months</td>
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<tr>
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<td>Enucleation</td>
<td>10 months</td>
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<td>Left</td>
<td>Swelling, Pain</td>
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<td>12 months</td>
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</tr>
</tbody>
</table>

### Figures

**Preop**

![Fig 1](image1)

**Intraop**

![Fig 2](image2)

**Postop**

![Fig 3](image3)
IV. Conclusion

Five patients were studied for a period of 1 year in Shri VasantraoNaik Government Medical College, YAVATMAL, Maharashtra. Male predominance was found in our study with age group of 35-70 yrs. Predominant symptoms of patients were swelling in nasolabial region, nasal obstruction, facial deformity caused by swelling. The swellings were painful in 2 patients who had infection. Complete excision of cyst was done in all patients by sublabial approach. Follow up was done for a period of 1 yr. None of the cases recurred.

References

[6]. Elliott KA,Francesz CB/Pitman KT. Diagnosis and surgical management of nasopalatine duct cyst. Laryngoscope 2004;114:13336-40