

*Case Report***Nasolabial Cyst- A Case Report with Review of Literature**Amitkumar Bapuso Pandav^{1*}@, Alka V. Gosavi^{1**}, Dhaneshwar N. Lanjewar^{1***}

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@Correspondence Email: dramitpandav@gmail.com*Received: 18/12/2011**Revised: 30/12/2011**Accepted: 30/12/2011***ABSTRACT**

Nasolabial cyst is a rare extraosseous lesion normally appearing beneath the ala of the nose on the maxillary alveolar process. In this report we present a case of 63-year-old women having a nontender, fluctuant, soft, cystic lesion in left gingiviolabial sulcus. Based on the history, clinical findings and radiological features, a provisional diagnosis of a nasolabial cyst was made, which was later confirmed by histopathological examination.

Key-words: Nasolabial cyst, Nasoalveolar cyst**INTRODUCTION**

Nasolabial cyst is also called as Nasoalveolar cyst, Klestadt's cyst or Mucous cyst. It was first described by Zuckermandl in 1882.^[1] Only few cases have been reported in the world literature. This cyst is usually unilateral, but may be bilateral. It is located lateral to the midline in the region of the maxillary lip and alar base and occurs more commonly in females.^[2] The histological structure of the cyst was described by Brown Kelly in 1982.^[1] It is classified as a nonodontogenic soft tissue cyst. As the alveolus is not involved, the

term nasolabial is preferred to Nasoalveolar.^[3]

Case History:

63-year-old women presented with a swelling at the base of the left ala of nose of about seven month duration. There was history of gradual enlargement of swelling producing nasal obstruction. On palpation the lesion was approximately 2.5 cm, fluctuant, nonmobile and nontender. The clinical diagnosis of nasolabial cyst was made by evaluating the clinical examination and radiographic features (Figure1). The cyst was removed completely under general

anaesthesia via sub labial approach. On gross examination the cyst was 2.5 cms in diameter containing brownish fluid. The cyst wall was thin with smooth inner surface. Microscopic examination revealed a fibrocollagenous cyst wall lined in areas

with pseudo-stratified columnar epithelium containing goblet cells and in other areas by stratified squamous epithelium (Figure2 and Figure3).

FIGURES:



Figure1 – X-Ray of skull, do not show skeletal abnormality.

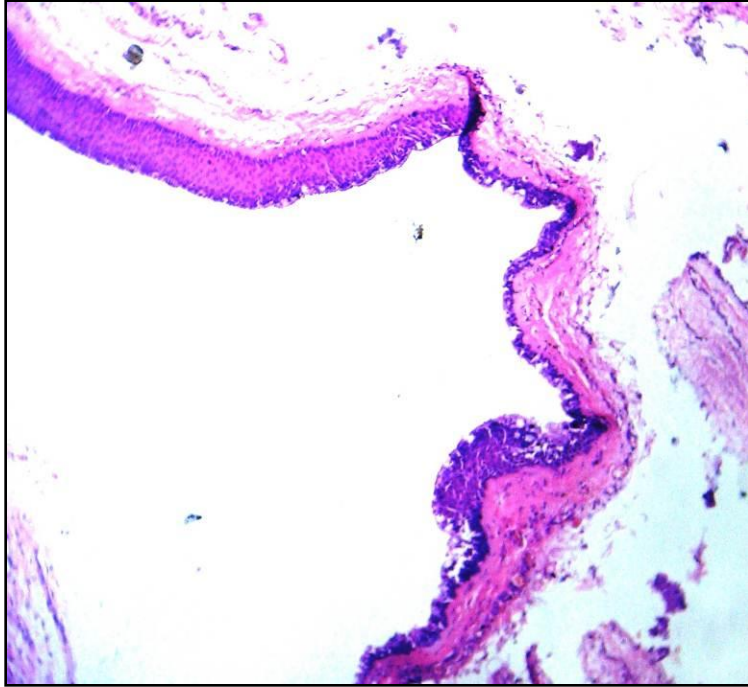


Figure2 - Shows cyst lined by pseudostratified columnar and stratified squamous epithelium (H and E x 100).

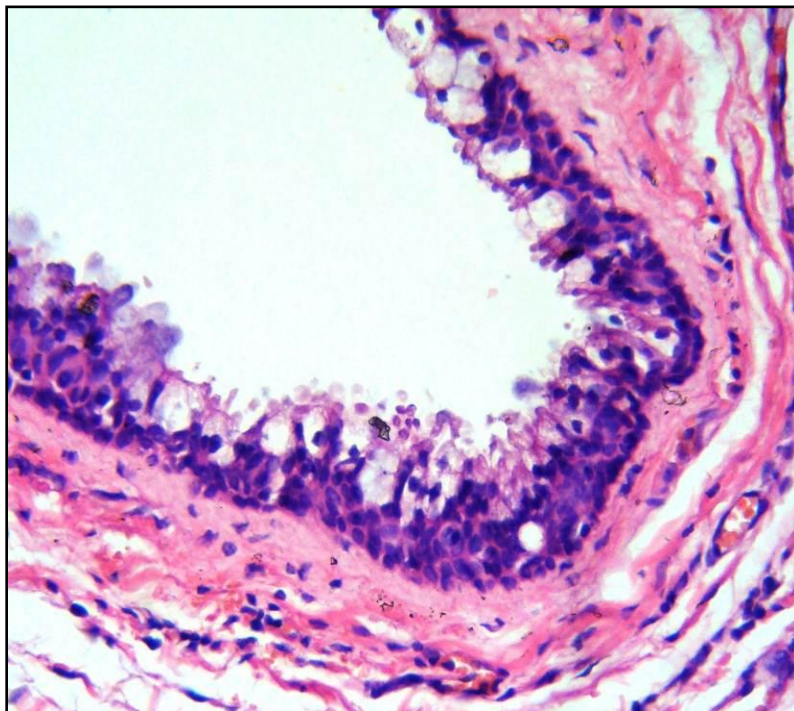


Figure 3 - Cyst lined by pseudostratified columnar epithelium with goblet cells (H and E x 400).

DISCUSSION

Nasolabial cysts are nonodontogenic masses that arise in maxillofacial soft tissues. Review of literature shows that the Nasolabial cysts are rare lesions accounting for 0.7% of all the cysts in the maxillo-facial region and 2.5% of all non-odontogenic cysts. [4] However, Allard found only three cases in 65,000 patients (<0.01%). El-Din andel-Hamd (1999) found eight cases in a population of 500000 in one year; Vasconcelos et al. (1999), identified only 15 examples among 12591 biopsy specimens over a 32-year period and the 18 cases reported by Choi et al. (2002) were seen over a period of 12 years. [1,3] Very few cases have been reported from India. [4,5]

The age distribution ranges from 12 to 75 years with a peak frequency in the fourth and fifth decades. There is a considerable preponderance of women with nasolabial cysts, compared with men. [1,3]

There are two theories on the genesis of the cysts. The first was proposed by Klestadt in 1913 who theorized that the cyst arises from trapped epithelium at the fusion point between the maxilla, medial nasal wall and lateral nasal process. The second theory put forward by Bruggemann (1920) proposes that the cysts arise from an epithelial remnant of the embryonic nasolacrimal duct. This second theory is supported by the finding that most of the cysts are lined by a Pseudostratified epithelium is the type of epithelium found in the nasolabial cyst wall. [1,2,3]

Nasolabial cysts are smooth fluctuant soft tissue swelling between the upper lip and nasal aperture with obliteration of the nasolabial fold and elevation of the nasal ala. [6] The clinical differential diagnosis of the cyst includes odontogenic cysts, epidermal inclusion cyst, periapical cysts, periapical granulomas, periapical abscess,

central line cysts, cyst of maxilla, frunculosis of base of the nose, and neoplasms of base of the nose. [1,7]

Routine intraoral periapical radiographic examination is important in differentiating odontogenic and nonodontogenic cysts of the region. On radiographic examination the cyst present as radiolucency in the nasolabial region which is separate from dentigenous and bony structures. [3] The cyst may be aspirated and a radiopaque liquid introduced, after which it may be viewed in tangential and posteroanterior views of the jaws or in vertex occlusal views. [3] Choi et al. (2002) reported their findings of computed tomography (CT) on 11 patients. They found that generally the scans showed a well-demarcated, low-density cystic lesion lateral to the pyriform fossa. They observed no invasion of bone in any of their patients. [1]

Histologically, it is most frequently lined by a pseudostratified columnar epithelium, although both stratified squamous and cuboidal epithelium and goblet cells may be found. In 1997 Lopez-Rios et al noticed extensive apocrine change in the lining epithelium of the cyst. [8] Scanning electron microscopic observations indicated that these cysts are lined by non-ciliated columnar epithelium consisting mainly of goblet cells and basal cells. [3,9] Pathologically Nasolabial cyst should be differentiated from Nasopalatine cyst, Odontogenic cyst and Epidermal cyst (Table 1). In the present case the diagnosis is established by correlating clinical, radiological and histopathological findings. Careful surgical enucleation of the cyst via a transoral sublabial approach is the treatment of choice with very low recurrence rate. It can be marsupialized transnasally under the guidance of nasal endoscopes. [1,10]

Table1. Differential diagnosis of nasolabial cyst.

Features	Nasolabial cyst	Nasopalatine cyst	Odontogenic Cyst	Dermoid Cyst
Site	Upper lip in the canine region	Intraosseous and Within soft tissues of palatine papillae	Intraosseous, Multilocular cyst on X-rays	Commonly located centrally
Histopathological features	Respiratory epithelium with ciliated and goblet cells, squamous metaplasia	Respiratory or stratified squamous epithelium . Nerves and vessels within cyst wall	Squamous epithelial lining with ciliated and mucous cells. Duct like structures in the cyst wall	Keratinized squamous epithelium. Cutaneous adnexa in cyst wall

CONCLUSION

Nasolabial cysts should be considered in the differential diagnosis in patients who have any fluctuant cystic lesions in the region beside the ala which is accompanied by swelling, nasal obstruction, and/or pain. The diagnosis should be confirmed by histopathological examination of the tissue after correlating with the clinical and radiological features.

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