NASOLABIAL CYST / Klestadt’s cyst

- First described by Zuckerkandl
- Also known as Nasoalveolar cyst, fissural cyst, Epithelial inclusion cyst, Klestadt’s cyst

**DEFINITION**

- Nasolabial cyst is a rare non Odontogenic tumor arising from maxillo facial soft tissues.

**THEORIES OF NASOLABIAL CYST**

- Two main theories have been proposed to explain the etiopathogenesis of nasolabial cyst.

**Theory I**: Postulates that nasolabial cyst arises from entrapped nasolacrimal tissue. (The cyst is derived from epithelial cells retained in the Mesenchyme after fusion of the medial and lateral nasal processes)

**Theory II**: Was proposed by Klestadt’s. He postulated that nasolabial cysts are embryonal fissural cysts.

**CLASSIC FEATURES OF NASOLABIAL CYST**

1. This lesion classically is seen in the extra osseous region of the nasolabial fold.
2. There is swelling over the nasolabial fold
3. Projection of upper lip
4. Common in females (3:1)
5. Usually it is unilateral
6. There is no displacement of teeth
7. Usually 4th decade
8. Slowly enlarging asymptomatic swelling.
9. Patients usually seek medical advice on secondary infection of the cyst or due to the resulting disfigurement.
10. Can lead to unilateral nasal block
11. Rarely pain (infected cyst)
12. This cyst can also erode the anterior wall of the maxilla. In rare cases radicular absorption are also known to occur.
13. On palpation, there is a non-tender, fluctuant, mobile swelling. The soft-tissue swelling may obliterate the nasolabial fold, elevate the ala or the floor of the nose (or both) and fill in the labial vestibule intraorally, with or without nasal obstruction. The lesion may spontaneously rupture and drain orally, nasally or, occasionally via a cutaneous fistula.

- Nasolabial cyst should be clinically differentiated from epidermoid cyst.
- Nasolabial cyst usually has a bluish tinge, while epidermoid cyst is usually yellow in color.
- Odontogenic cysts should be ruled out in all cases of nasolabial cyst by dental xrays.

**HISTOLOGY**

- Nasolabial cyst is usually lined by pseudostratified columnar epithelium, but can also be lined by cuboidal or stratified squamous epithelium.
Numerous goblet cells can be seen within the lining epithelium. These goblet cells are responsible for collection of straw colored fluid inside the cyst. In long standing cases the cyst wall may contain fibrous tissue. The presence of this fibrous tissue in the cyst capsule will facilitate complete enucleation of the cyst during surgery.

**RADIOGRAPHIC FEATURES**

- Computed tomography (CT) shows a well-demarcated, rounded, homogeneous, low-density soft tissue lesion at the nasolabial region. An evidence of scalloping and bone remodeling may be depicted.
- Magnetic resonance imaging (MRI) shows the characteristics of fluid in T1 (low intense) and T2 (bright) views.

**MANAGEMENT**

- Small cysts can be surgically extirpated via sub labial approach. Care must be taken when large cysts are to be operated. Nasal mucosa may be perforated when large cyst is to be removed. In such cases the torn nasal mucosa should be sutured back in place.

**DIFFERENTIAL DIAGNOSIS**

- Odontogenic cyst
- Dentigerous cyst
- Epidermoid / Epidermal inclusion cyst