NASO-LABIAL CYST

By R. VENKATA RAO (Hyderabad-DN)

A CYST pushing forward the junction of the ala nasi with the upper lip has been described variously, as fissural cyst, mucoid cyst of the nose, maxillary cyst, cyst of the nasal vestibule, cyst of the nasal floor, cyst near the nose and naso-alveolar cyst, by various authors. These various names, when considered together enables one to visualize the location, origin and the clinical features of the cyst.

This cyst is not frequently seen in the E.N.T. clinics. I have come across only nine cases in 20 years, during which period 250,000 new patients have been attended to. Zuckerkandl reported the first case in 1882; and since Arnoldi's report in 1929 the total number of such cysts in the literature does not exceed 120.

The cyst is not met with more often perhaps for the following reasons:

(*a*) It is situated on the surface of the alveolus and so the dental and oral surgeon is consulted. Two of my nine cases were referred from the dental department after some treatment.

(*b*) The cyst grows very slowly, painlessly and unless it causes: (i) disfigurement by lifting up the ala of the nose, or (ii) nasal obstruction by narrowing the anterior nares, through lifting up of the floor of the vestibule, the patient does not seek medical aid. Only one of my cases belonged to this group.

Miss A., 20 years. The parents and particularly the young lady were anxious to get the deformity corrected, because she was to be married.

Infection of the cyst by (1) accidental trauma or (2) deliberate surgery as aspiration or incision has been the main feature of the remaining six cases. As the cyst increases in size it pushes up the floor of the vestibule and sometimes bulges through the gingivo-labial fold in the region of the lateral incisor or canine teeth. The infected cyst presents all signs and symptoms of furunculosis of the nose or alveolar abscess (gum boil).

The first infection of the cyst apparently causes the size of the swelling to diminish very much, by the extrusion of the contents; but the cyst is not obliterated and reforms and re-infection is quite frequent. Six of my remaining cases sought my advice due to the above reason.

Clinical Features

(1) A unilateral swelling, gradually obliterating the naso-labial fold, pushing forward the ala nasi, projecting into the floor of the nose from beneath and on

https://doi.org/10.1017/S0022215100050799 Published online by Cambridge University Press

the lateral side, and sometimes into the buccal cavity through the gingivo-labial fold. (2) The swelling is painless unless recently infected, and if a fistula forms it invariably drains through the nose. (3) The swelling is not in the middle line or related to the base of the nasal septum. (4) It is cystic to feel and slightly mobile by bidigital examination. (5) It is not covered by bone.

The teeth—incisors and canine—in relation to the swelling are correct in position and number and not distorted in projection or alignment.

Radiological investigations reveal nothing abnormal. Differential Diagnosis, Dental cyst, and dentigerous cyst can be excluded by radiography and other characteristic clinical data. It is better to keep in mind other embryonic swellings arising in the midline of the nose. When inflamed, furunculosis of the nose, and acute alveolar abscess need consideration.

Treatment

Through a sub-labial approach the entire cyst is excised. The cyst wall is well demarcated, and only when there is history of recurrent infection of the cyst, the cyst wall is found adherent to the surrounding tissues, more so to the floor of the nose. When the cyst is removed, it is found to have been resting on the alveolar bone, which is smooth and sometimes appears like a polished fovea, perhaps the result of continuous pressure of a slow-growing cyst. The cyst was never found to cross the midline of the nose.

Main Features of the Nine Cases

1. Sex { Male .. 1 / Females .. 8
2. Average age .. 36 { Youngest .. 18 / Oldest .. 46
3. Site { Left side .. 7 / Right side .. 2

(All cases were unulateral.)

4. History of infection of cyst in 6 cases.
5. History of previous surgical interference in three cases.

Histopathology

The cyst has a well defined capsule, fibrous in nature, with loose connective tissue; the lining is epithelial in nature, cuboidal in some areas and squamous in other areas. In the larger cysts, the squamous epithelium is more predominant. In cysts that have been infected, there is cellular infiltration in several areas, with erosion in some areas and granulation tissue.

As to the origin of these cysts, there are several theories. Thoma (1944) has discussed these well. To-day two theories hold the field. Klestadt (1921) is of the view that "the cyst arises from an inclusion of ectodermal tissue in the lateral nasal cleft, occurring during the course of the embryological development of the face" (F. Montreuil, 1949). The second theory as advanced by Peter, Tuffers and Monesi and supported by animal experiments, is that the cyst arises from anteriorly misplaced lachrymal duct.

https://doi.org/10.1017/S0022215100050799 Published online by Cambridge University Press

Summary

1. Nine cases of the cyst are reported.
2. They are easily enucleated by a sub-labial buccal approach.
3. They are most probably of fissural origin.
4. All cysts have been unilateral and eight of them in adult females.
5. The name suggested—naso-labial cyst—may focus attention on the characteristic obliteration of naso-labial fold, as a diagnostic help.

REFERENCES

ARNOLDI, W. (1929) *Z. Laryng. Rhinol.*, **18,** 58.
KLESTADT, W. (1921) *Z. Ohrenheilk.*, **81,** 330.
THOMA, K. H. (1944) *Oral pathology, 2nd ed., St. Louis,* pp. 869-881 and 935.
MONTREUIL, F. (1949) *Ann. Otol. (St. Louis)*, **58,** 212.
ZUCKERKANDL, E. (1882) Normale und pathologische Anatomie der Nasenhöhle, Vienna, vol. I.

https://doi.org/10.1017/S0022215100050799 Published online by Cambridge University Press