Case Report

Nasolabial bilateral cyst as cause of the nasal obstruction: Case report and literature review

Cisto nasolabial bilateral como causa de obstrução nasal: Relato de caso e revisão de literatura

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Summary

Introduction: The nasolabial cyst is a rare disease, usually unilateral, benign, of embryonic origin, located in soft parts from the nasolabial folds and nasal wings. The diagnosis is essentially clinic, take into consideration the cyst topography, that is usually asymptomatic.

Objective: This article has as main goal the description of a unusual case of nasolabial bilateral cyst with nasal obstruction, its treatment, anatomic pathological and accompaniment, besides the literature review.

Case Report: Female patient, brown, 24 years old, showing bulging in nasolabial region and nasal obstruction. Physical and complementary exams with nasolabial cyst. Indicate surgical treatment of excision of the lesion.

Final Considerations: The nasolabial bilateral cyst, although is rare, is a possible cause for the nasal obstruction, with good response to surgical therapy.

Keywords: not odontogenic cyst, nasal obstruction, cysts.

INTRODUÇÃO: O cisto nasolabial é uma doença rara, normalmente unilateral, benigna, de origem embrionária, localizada em partes moles da região do sulco nasolabial e asa nasal. O diagnóstico é essencialmente clínico, levando em consideração a topografia do cisto, que geralmente é assintomático.

OBJETIVO: Este artigo tem como objetivo principal a descrição de um caso incomum de cisto nasolabial bilateral com obstrução nasal, seu tratamento, aspectos anatomo-patológicos e acompanhamento, além de revisão de literatura.


CONSIDERAÇÕES FINAIS: O cisto nasolabial bilateral, apesar de raro, é uma possível causa de obstrução nasal, com boa resposta à terapia cirúrgica.

PALAVRAS-CHAVE: cistos não-odontogênicos, obstrução nasal, cistos.
INTRODUCTION

The nasoalveolar cyst is a rare benign lesion, located in topography of nasolabial folds, anteroinferior of the piriform rim of nasal cavity. It’s a lesion that is usually unilateral (90% of the cases) (1,2), affecting mainly people of black race, of feminine gender, in the age group which comprises between the 4th and 5th decades of life (1,2).

The first to describe this pathology was ZUCKERKANDL in 1882 (3). This embryonic, non-odontogenic, usually asymptomatic, being diagnosed late, due to the facial aesthetics changes and breathing. Although diverse synonymy (nasoalveolar cyst, KLEISTADT cyst, congenital mucoid cyst of the nasal edge), the term considered most appropriate, at the moment, is nasolabial cyst (4).

Besides literature review, this study has as objective, report the case of a patient with bilateral nasoalveolar cyst, presenting clinical aspects, surgical, histopathological and radiographic.

CASE REPORT

Patient AWV, feminine gender, 24 year-old, mulatto, coming and natural of São Paulo, housewife, sought for treatment at Otorhinolaringoloy Paulista Hospital, SP, Brazil, complaining about bulge region of bilateral nasolabial, of progressive evolution for about 06 months, associated to the nasal obstruction in the last 02 months. Patient denied pain, rhinorrhea, nasal itching, sternutatory, epistaxis or other nasal complaints.

At the otolarinityngological examination, it was observed bulging without signs of inflammation at bilateral nasolabial region and superior gingivolabial sulcus, especially on the right, raising the nasal floor and erasing the bilateral nasolabial folds. The computerized tomography of paranasal sinuses showed two cystic lesions parallel to the bilateral nasal spine (Figure 1), nasal floor bulging, depression in the anterior maxillary bone bilateral and displacement of the anterior portion of inferior turbinate left up (Figure 2).

For this case, we had chosen to perform the surgical excision of the lesion, at surgical room, under general anesthesia. After local infiltration of anesthetic solution (Lidocaine at 2% with epinephrine 1:100,000), central incision was made (approximately 6,0 cm) in the superior gingivolabial sulcus, below the cystic lesions, between the lateral incisors of both sides, followed by detachment of the anterior region of cysts, with visualization of these two lesions separated by a bony septum, the left side measuring, approximately 2,0 cm and the right side,
around 3.0 cm (Figure 3). It was performed a dissection of the right cyst, initially, preserving its contents, being possible the detachment of the lateral walls. It was located the nasal floor plane (nasal mucosa) at the superior region of the cyst; at this point, for better detachment, it was chosen by emptying the contents serous, with yellowish color, of the cyst by needle and syringe. After emptying the cyst, it was performed a careful dissection in its upper portion, which kept contact with nasal mucosa, region where it presented greater adherence. The displacement was performed without lesion of the nasal mucosa. At the back region of the cyst, the displacement showed planes less adhered, facilitating the removal. The same surgical technique was performed at the left side of the cyst, being possible to indentify the nasal floor mucosa and perform the removal without lesion (Figure 4). Synthesis was performed at plans dissected, with absorbable lines (Catgut 2-0, simple).

At immediate postoperative, patient complained of paresthesia at anterior region of the upper lip and nasal vestibule, which remained for 03 months.

Patient is at ambulatory accompaniment of postoperative for 06 months, without evidences of recurrence or other changes, presenting improvement of nasal obstruction.

**Anatomopathology**

It was sent for histological study, two cystic structures previously sectioned, conserved in formaldehyde, and represented wall studs, smooth and bright, with shades of brown color. The larger structure measured 3 x 2.5 x 1 cm and the smallest, 2.5 x 1.5 x 0.5 cm.

The sample was submitted to the processing chemical pradonized, obtaining a block of paraffin to each cystic structures, being made the respective histological concoction, with thickness of 5 (five) micra and color by the technique of hematoxylin-eosin and PAS (Schiff periodic acid).

The histological study revealed identical aspect in both lesions, being identified of cystic wall constituted by loose connective tissue showing moderate edema, covered by two different types of epithelium: the predominant...
was of the type stratified squamous, with preservation of
the polarity and absence of nuclear atypia, removing
away the suspicion of malignancy.

The other type of epithelium was constituted by one
or two layers of cylindrical cells sometimes massive
clear vacuoles in the cytoplasm (Figure 5), that special
color by the technique of PAS revealed weak positivity to
the mucopolysaccharide substances (Figure 6). At the
connective tissue wall, the histological sections revealed
nerve fibers and blood capillaries of ecstatic lights,
alongside to the moderate interstitial edema. Some muscle
striated fibers was also indentified at the region of surgical
region.

The anatomopathological diagnosis was of bilateral
nasolabial cyst.

**DISCUSSION**

The nasoalveolar cyst is an embryonic cyst, non-
odontogenic, which has its controversial origin, being
the theories based on:
1) cyst originated from the invagination of ectodermal
debris among the processes nasal side and media being
for that reason, considered as fissural cyst (Klestadt
Theory, 1915) (1,5,6);
2) cyst derived from the epithelium of the nasolacrical
duct during the embryonic period (Bruggemann Theory,
1920) (5,7).

For reason of its poor symptomatology, this disease
is underdignosed (8), showing in the literature, an
incidence of 0.7% of all maxillofacial cysts and 2.5% of non-
odontogenic cysts. In the presented case, we observed a
mulatto patient, even being more common at black race,
according to the literature. Epidemiological data shows that
this cyst is more frequent in persons of feminine gender,
with the age group most affected includes the 4
decades (2,3,7). The cysts presentation is most
among them may recede with deformity of the nasal ala,
recurrent infections, which can be associated, and minimize
function (in case it is affected) and the prevention of
cyst by sclerosing substances or marsupialization (15), the
most indicated therapy found in the literature is surgical
removal. Enucleation can be performed with local anesthesia
general, being the best way to access the Denker
incision (intra-oral incision, sublabial next to the incisive
fossa) which offers an ample exposition. During the
surgery, should take in count the cyst intimate adherence
with the nasal floor (3,16), detail that, constantly, leads to
the laceration of the mucosa in this region of the nose. This
was possible to avoid in this case, in which we had chosen
to empty the cystic contents to obtain a better dissection
of the cyst in relation to this region of nasal floor. The
closing of the planes should be complete, in order to avoid
possible oronasal fistulas. By the reason the extension of
the cysts related did not affected the region of nasal wing,
it was not necessary apply any technique to avoid retraction.
The surgery aims the facial esthetic restoration, the nasal
function (in case it is affected) and the prevention of
recurrent infections, which can be associated, and minimize
the patient anxiety

**The diagnosis of nasoalveolar cyst is clinical and
topographic, with visual and palpation of the affected
area (6). The workup done by the imaging examination
confirms the suspicion and the clinical examination,
being the Computerized Tomography the examination
of choice, which may show, in some cases, jawbone
erosion (10,11, 12). The nasolabial cyst consists of lesion
in the soft parts, and for this reason, the x-ray being
considered an obsolete examination, capable to show
few details; except in the cases in which the cyst
presents gigantic dimensions leading to the significant
erosion of the jawbone.

The differential diagnosis which must be done with
the nasolabial cyst include the dermoid, nasopalatine,
median palatal, median alveolar, globulomaxilar cysts
(which origin in the interior of the bone), besides of
furuncles at nasal floor, which resembles to infected nasolabial
cyst (15).

in the literature, it has been reported Just one case
(Arnold, 1929) of nasolabial cyst which evolves to carcinoma
(9,14).

Although there are reports of treatment of nasolabial
cyst by sclerosing substances or marsupialization (15), the
most indicated therapy found in the literature is surgical
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The surgical treatment present few complications,
among them may recede with deformity of the nasal ala,
mainly in Blacks and still, oronasal fistula. Recurrence of the
cyst is rare and the prognosis is very good (5,7).

The description of the surgical technique in this
case, aims to provide a foundation to help similar cases in
order to obtain surgical success, without submit the patient
to complications and disease recurrence.
BIBLIOGRAPHICAL REFERENCES