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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Article received in 2009 November 26th. Article approved in 2010 April 25th.

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 rare, is a possible cause for the nasal obstruction, with good response to surgical therapy.

Keywords: not odontogenic cyst, nasal obstruction, cysts.

Resumo

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 à descrição de um caso incomum de cisto nasolabial bilateral com obstrução nasal, seu tratamento, aspectos anatomicopatológicos 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, KLESTADT 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 otorhinolaryngological 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 3.0cm (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 0.5cm.

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, 1913) (1,5,6);
2) cyst derived from the epithelium of the nasolacrimal duct during the embryonic period (Bruggemann Theory, 1920) (5,7).

For reason of its poor symptomatology, this disease is underdiagnosed (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, mainly in Blacks and still, oronasal fistula. Recurrence of the cysts related did not affected the region of nasal wing, occasionally, 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 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).

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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 carcino-


