

Nasolabial Cyst: A Rare Case Report

Gustavo Corrêa de Carvalho¹, Bruna Voss¹, Rauf Antonio Dalla Santa¹, Stéfani Bordin¹, Taíse de Freitas Marcelino², and Carlos Eduardo Monteiro Zappelini^{3*}

¹Academics of the Medical Course of the University of Southern Santa Catarina at UNISUL, Brazil

²Professor of the Medicine Course at University of Southern Santa Catarina, Brazil

³Professor of the Medicine Course at University of Southern Santa Catarina, Brazil

*Corresponding author: Monteiro Zappelini CE, Doctorate in Otorhinolaryngology, Professor of the Medicine Course at University of Southern Santa Catarina, Brazil; +55-48-3621-3000; E-mail: [czappelini2\[at\]hotmail.com](mailto:czappelini2[at]hotmail.com)

Received: April 06, 2020; Accepted: April 18, 2020; Published: April 25, 2020



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Abstract

Introduction: The nasolabial cyst is a rare soft tissue lesion, located close to the alar cartilage of the nose. Most are unilateral, prevailing in the female sex, blacks, in the fourth and fifth decades of life. The most common sign is increased area and facial asymmetry. **Objective:** Report the clinical picture, the findings in imaging exams, diagnosis and surgical treatment of a female patient with nasolabial cyst. **Case report:** A 35-year-old female patient complained of chronic nasal obstruction on the right. Examination of anterior rhinoscopy and video flexible nasofibroscope showed bulging of the nasal floor on the right. Computed tomography evidenced the presence of a lesion measuring 1.7 x 1.0 x 1.6 cm, with attenuation of soft parts, with regular contours and defined limits, with slight enhancement to the intravenous contrast medium, located in the right nasolabial recess, associated with discrete bone erosion extending to the corresponding nasal cavity. Surgical excision was performed and the anatomopathological result corresponded to the nasolabial cyst. **Final comments:** Although it is a rare condition, in cases of unilateral increase in the nasolabial region, with chronic nasal obstruction and facial asymmetry, attention should be paid to the possibility of nasolabial cysts. If the hypothesis is hinted at, imaging tests become essential to establish a diagnosis and subsequently perform surgical treatment.

Keywords: Cyst; Nasolabial; Nasal obstruction

1. Introduction

The nasolabial cyst is characterized by being a rare soft tissue lesion, located close to the alar cartilage of the nose; it has extension to the inferior nasal meatus, superior labial gingival sulcus and the floor of the nasal vestibule [1].

This injury was first described by Zuckerkandl in 1882. The first case was reported by McBride in 1892 and in 1989 Brown-Kelly described it in more detail [2,3]. Although the most common name for this condition is “nasolabial cyst”

Citation: Corrêa de Carvalho G, Voss B, Antonio Dalla Santa R, et al. Nasolabial Cyst: A Rare Case Report. Case Rep Rev Open Access. 2020;1(1):106.

according to the name by Rao (1951); it's also known as nasoalveolar cyst, nasal vestibule cyst, nasal wing cyst, mucoid nose cyst and Klestadt cyst [4].

The pathogenesis of the nasolabial cyst is still undefined; however, the most accepted theory is that it originates from the lower and anterior portion of the nasolacrimal duct, between the fourth and eighth week of intrauterine life [5-8]. What reinforces this principle is the fact that the nasolacrimal duct is lined with pseudo-stratified columnar epithelium, which is found in the cavities of nasolabial cysts [9].

These cysts are mostly unilateral (90%), their predominance is female sex (75%), blacks, in the fourth and fifth decades of life [40-13]. The most common sign is an increased area, causing facial asymmetry, displacement of the upper lip, elevation of the nasal wing and erasure of the nasolabial fold. Local pain, nasal obstruction and infection may be present.9 Due to its presentation and location, its diagnosis is absolutely clinical [14]. Its treatment is surgical, and marsupialization or enucleation of the cyst is usually performed [10-13].

2. Case Report

A 35-year-old female patient complained of chronic nasal obstruction on the right. Examination of anterior rhinoscopy and video flexible nasofibroscope showed only bulging of the nasal floor on the right. Thus, computed tomography was requested, which evidenced the presence of a lesion with attenuation of soft parts, with regular contours and defined limits, with slight enhancement to the intravenous contrast medium, located in the right nasolabial recess, associated with discrete bone erosion extending to the corresponding nasal cavity, measuring 1.7 x 1.0 x 1.6 cm.

Injury excision in the operating room under general anesthesia (Fig. 1). The anatomopathological examination showed a coated uniloculated cystic structure, sometimes by respiratory epithelium, sometimes by squamous epithelium. Surrounding connective tissue with a hyalinization band and scarce mono morphonuclear inflammatory infiltrate, corresponding to nasolabial cyst. The patient is undergoing postoperative follow-up, without recurrence.



Fig. 1. Upper left image: Cystic aspect at its location. Upper right image: Aspect after removal of the cystic lesion. Bottom left image: Final aspect after removal of the cystic lesion. Bottom right image: CT scans of the cystic lesion.

3. Discussion

In this case report, clinical history, as well as epidemiology, corroborated with the present studies. The predominance in females and the highest incidence of diagnoses made, in the fourth and fifth decades of life, in the current report the patient in question was female and was 35 years old. The difference in the literature was in the race of the patient, being mostly black, while the patient in this report is white. In addition, 90% of cases of nasolabial cysts are unilateral, as seen in this report, where the cyst was located in the right nasobial recess. The patient's clinic, in general, was similar to the literature, she complained of chronic nasal obstruction, swelling and slight facial asymmetry [10-12].

Due to its presentation and location, its diagnosis is absolutely clinical [14]. The differential diagnosis of nasolabial cysts includes formations of odontogenic origin - mainly follicular and periodontal [10], developmental and neoplastic lesions [15]. Initially, the examination of the region adjacent to the teeth may contribute to differentiate the odontogenic lesion whose main characteristic is to have an inflammatory character and periapical localization. In addition, the dentigerous cyst must be excluded, and it can easily be differentiated by radiological characteristics such as good delimitation, area of radiolucent lesion connected to an erupted tooth since the nasolabial cyst appears to be separated from the bone structure and teeth on the radiograph [15]. Therefore, requesting an anatomopathological examination is extremely important.

Regarding histopathology, the analysis of the patient's cyst shows a unilocular structure covered either by respiratory epithelium or by stratified squamous epithelium with little inflammatory infiltrate. This description is similar to that of Brown Kelly in 1989 [3] and contributes to final diagnosis of nasolabial cyst. The eventual presence of squamous metaplasia in infected cysts does not suggest a change in diagnosis [16].

After clinical investigation is completed, treatment is surgical, with marsupialization or enucleation of the cyst usually performed under local or general anesthesia [10,13]. The most common complications are oronasal fistula - which highlights the importance of complete closure of the planes and nasal wing retraction, usually seen in blacks. Postoperative follow-up indicates little chance of recurrence [17].

4. Conclusion

The reported case aimed to expose a rare otorhinolaryngological lesion to the scientific community, with pathology still somewhat undefined, several differential diagnoses due to its symptomatology marked by chronic unilateral nasal obstruction, and the need for additional tests to confirm the diagnosis. In addition, it seeks to contribute to its accuracy, and to provide the best treatment for the affection of an unusual anatomical site, which mainly affects the female sex, between the fourth and fifth decade of life.

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