

Upper lip retention cyst - Case report

Estevinho B

Corresponding author:

Bruna Estevinho
estevinho.bruna@mail.com

ABSTRACT

Purposes: The goal of the presente article is to help the clinican to establish a diferential diagnosis by presenting an uncommom lesion that affects the minor salivary glands.

Case report: A Caucasian female patient, 67 years old, ASA II, was referred by a colleague to assess the lesion located on the right side of the inner face of the upper lip.

Conclusions: The clinical findings of the lesion, presenting similar charateristics to tumors of the salivar glands shows the importance of the need of a biopsy with its respective pathology report.

KEYWORDS

Minor salivar glands, oral lesions, salivar duct cyst.

INTRODUCTION

Minor salivary glands are found in large numbers (between 600 and 1000) and are distributed in oral cavity, pharynx, nasal cavities, paranasal sinuses, larynx and tracheal mucosa.¹ These are preferably located at the level of the inner face of the lips, jugal mucosa and soft palate.²

The canal system is rudimentary and the excretory channels are relatively short. With the exception of Von Ebner's lingual glands that are serous, the remaining minor salivary glands are mixed with mucosal predominance.³

Phenomena of retention and extravasation of mucus occur frequently in these glands and often the common clinical manifestations lead to generic names that include mucocels and retention cysts as the same pathological entity. The mucocellum is actually a pseudocyst resulting from the rupture of a salivary gland channel and consequent extravasation of mucin into the adjacent soft tissues.^{4,5} It represents the most frequent pathology that occurs in the salivary glands.^{6,7}

Unlike mucocels that do not have epithelial lining, the cysts of the salivary gland channels or retention cysts are delimited by epithelium that is separated from the adjacent normal salivary channels and represent a true developmental cyst. The epithelial lining is variable and may represent cuboidal, columnar or atrophic pavement epithelium surrounding the lumen and containing a fluid or mucoid secretion.⁴

The pathogenesis of this lesion is not clear, some authors speak of etiologic factors such as sialolithiasis, periductal scars or invasive tumors.^{6,8}

These cysts can affect the major and minor salivary glands. In the larger salivary glands the parotid is the most affected gland and in the smaller salivary glands these cysts are more common in the floor of the mouth, the jugal mucosa and the upper lip.⁴

REPORT CASE

A caucasian female patient, 67 years old, ASA II, was referred by a colleague to assess the lesion located on the right side of the inner face of the upper lip.

The patient is a smoker and the clinical history includes the taking of the drugs simvastatin and alprazolam. Has a history of taking oral bisphosphonates.

According to information provided by the patient, the lesion had two years of evolution, always asymptomatic but with periods of increase and decrease of volume.

The patient can not relate the onset with any causal factor, namely trauma. It denies parafunctional habits and has no complaints that refer to xerostomia.

After clinical examination, the presence of a palpable nodule is observed intra- and extra-oral. It is a single lesion about 1 cm long, floating, soft to palpation, yellow coloration and no changes in mucosal texture (Figure 1, 2).

There is no trauma to the mouth from sharp edges or rough areas. The patient presented in the maxilla a total rehabilitation with implant-supported hybrid prostheses and in the mandible natural dentition with incidence of periodontal disease.

At the extra-oral level there is a well-defined volume increase without alterations of the skin that covers the lip and without causing facial asymmetry. Absence of palpable ganglionic chains.

After performing the conventional radiographic examinations that did not show alterations related to the lesion, an ultrasound examination was requested to the right superior hemi-lip.

The ectograms of the soft planes revealed at the level of the subcutaneous plane a nodular, mixed, regular, well delimited, liquid predominant cystic micrograph of smooth walls with a maximum diameter of 5mm.

A Doppler study was performed using a Doppler, it



Figure 1. Extra-oral initial photograph. There is a small increase in nodular volume near the right side commissure



Figure 2. Intraoral photograph where a localized lesion is identified on the inner side of the upper lip

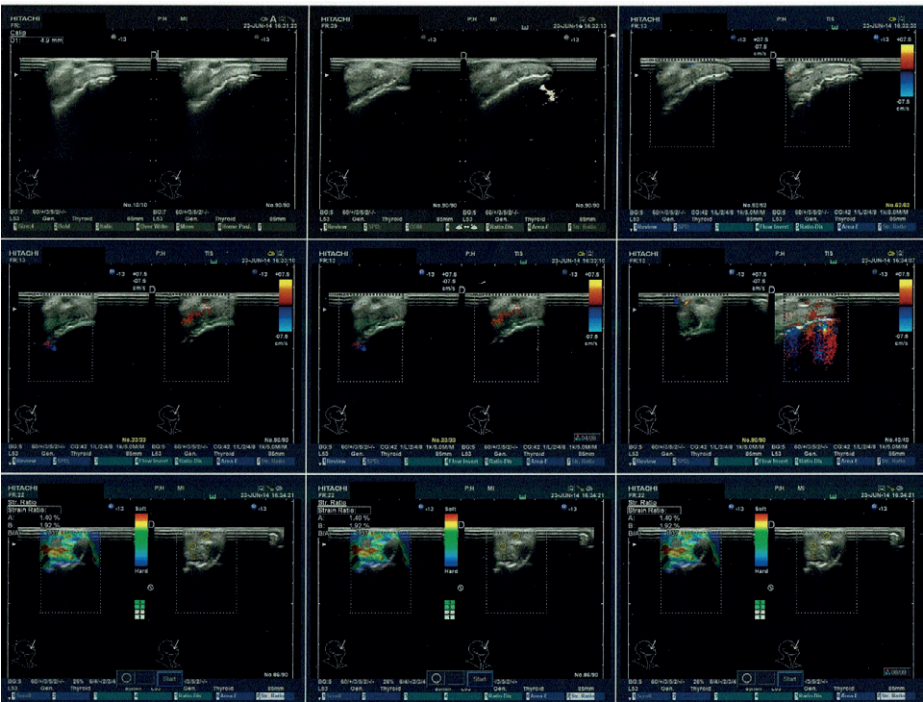


Figure 3. Ultrasound aspects of cyst in the subcutaneous plane of the upper lip

revealed a benign elastic coefficient and absence of peripheral and nodular vascularization suggesting pure, benign, simple cystic formation. According to the ultrasound, the nodule presents a good plan of superficial and deep superficial dissociation with the orbicularis permit. No other locoregional eco-structural changes are identified (Figure 3). After ultrasound exam, the patient reappears in the consultation and when the lesion is observed the presence of purulent drainage is verified by intra-oral palpation (Figure 4). The abundant amount allowed to harvest for a microbiological study that revealed the presence of streptococcus mitis. The susceptibility was evaluated by the prescription of amoxicillin 1gr of 12/12 hours (Figure 5). After the phase of acute infection, the patient underwent excisional biopsy through an elliptical incision with a scalpel on the inner side of the lip (Figure 6). The sample was fixed in 10% formalin solution and sent for histological analysis at the Institute of Pathology and Molecular Immunology of the University of Porto - IPATIMUP. Hemostasis was obtained from the biopsied site with non-resorbable 4/0 polyamide suture. The anatomo-pathological report revealed a collapsed cystic cavity and established as histological diagnosis "retention cyst (Figure 7). In the suture removal consultation, no complications were observed, although the patient reported slight loss of sensitivity practically imperceptible through the mapping and fully recovered after 3 months (Figure 8). The patient was submitted to control consultations and after a period of two years there was no recurrence of the lesion (Figure 9 and 10).

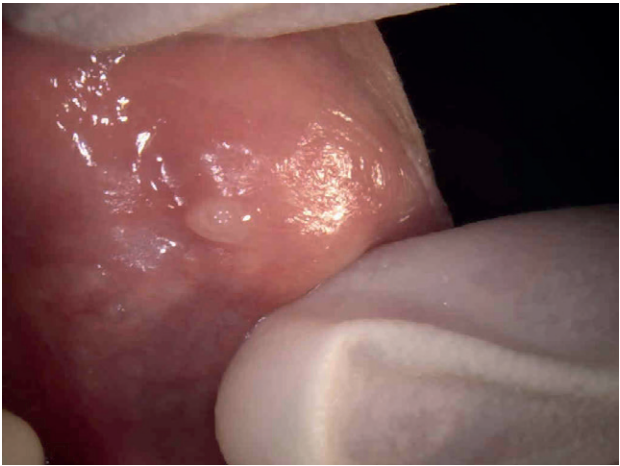


Figure 4. Intraoral photograph at the time of purulent drainage

Bacteriological examination of pus infection (syringe), with culture test reveal Streptococcus mitis	
Amoxicillin	S
Benzilpenicillin	R
Cefotaxime	S
Ceftriaxone	S
Erythromycine	R
Tetracycline	S
levofloxacin	S
Chloramphenicol	S
Bacteriological examination, with culture test in Anaerobiosis reveal some colony forms of Gram-negative bacteria like Cocci.	

Figure 5. Microbiological results obtained from IPATIMUP, Instituto de Patologia e Imunologia Molecular da Universidade do Porto, 29 October 2015

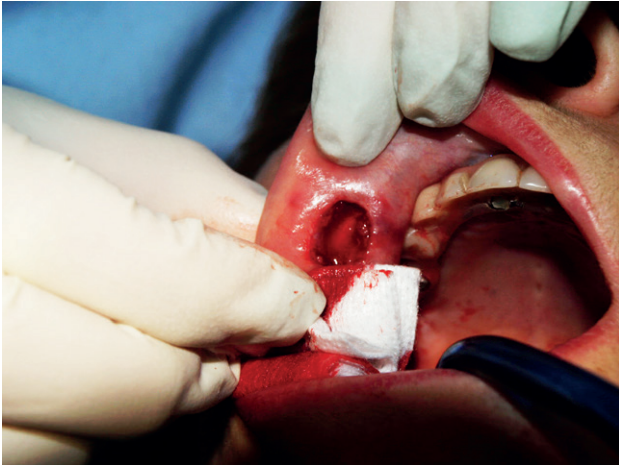


Figure 6. Clinical image of lesion location after excisional biopsy

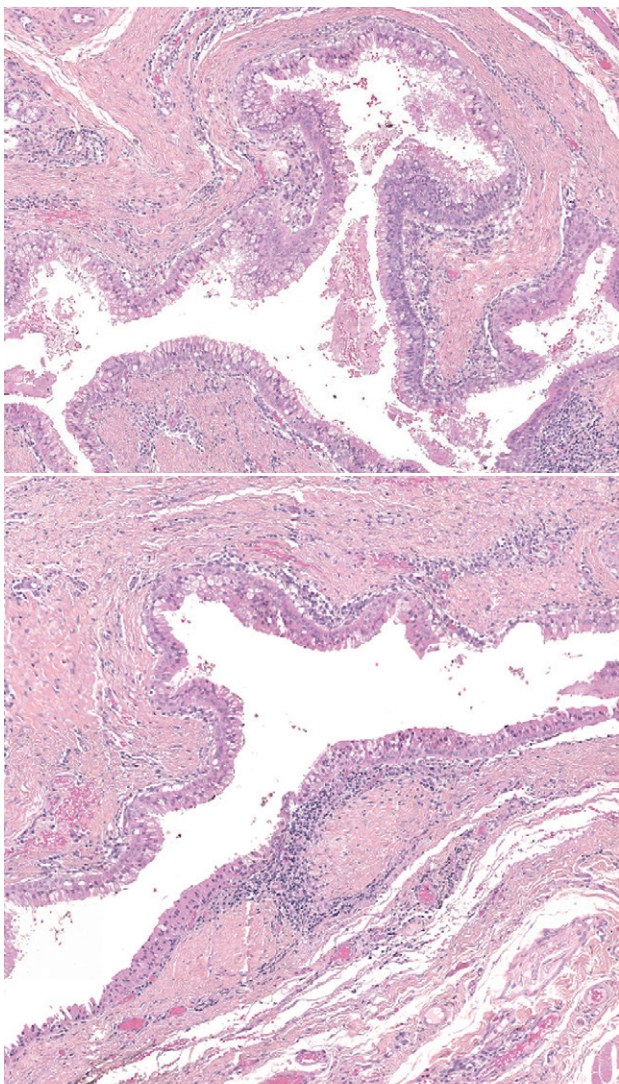


Figure 7. Anatomo-pathological report revealed a collapsed cystic cavity and established as histological diagnosis "retention cyst"

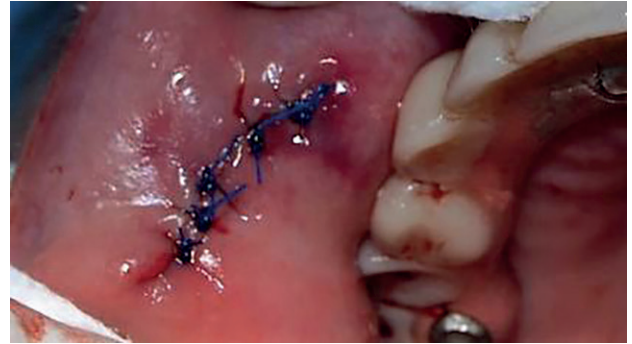


Figure 8. Suture of the surgical wound



Figure 9. Extra-oral photograph 3 months after removal of the lesion



Figure 10. Intraoral photograph 3 months after removal of the lesion

DISCUSSIONS

The lip is composed of connective tissue, adipose tissue, blood vessels, nerves and glands and therefore can be affected by a variety of pathologies.^{5,8}

Among those that can cause volume increases, the mucocellular, fibroma, lipoma, retention cysts, sialolites and tumors stand out.

Of the tumors of the salivary glands special attention must be paid to the canalicular adenoma; basal cell adenoma; mucoepidermoid carcinoma; adenocarcinoma of acinar cells and pleomorphic adenoma.^{5,8,9}

In relation to the clinical case presented the canalicular adenoma constitutes the main differential diagnosis.

It represents a tumor that occurs almost exclusively in the minor salivary glands particularly in the upper lip and is clinically characterized by a painless increase in volume, slow, firm or fluctuating growth on palpation. The mucosa may have normal coloration or may mimic a mucocellus with its characteristic bluish coloration.⁴

CONCLUSIONS

The pathology of the salivary glands is characterized by the wide variety of biological behaviors and histopathological pleomorphism. Adequate knowledge of the first clinical manifestations, an accurate history, a methodical clinical examination and a correct use of the means of diagnosis are fundamental for approaching the lesions in order to establish an early and correct diagnosis.

The histological diagnosis is crucial to confirm the clinical diagnosis.

CONFLICT OF INTEREST

The authors declares that there is no conflict of interest regarding the publication of this article.

REFERENCES

1. Arenas MG, Cagical BP, Otero RA. Patología de las glándulas salivares. In: López, R.M.G. et al. Manual de Cirugía oral y Maxilofacial. 2ª edición. GlaxoSmithkline; 2004.
2. Strick M.J. et al. Malignant tumours of the minor salivary glands – a review, The British Association of Plastic Surgeons. 2004;57:624-631.
3. Gómez de Ferraris, ME, Muñoz, AC. Glándulas salivales. Histología y Embriología bucodental. Espanha, Editorial Medical Panamericana, 1999.
4. Neville BW, Damm DD, Allen CM, Bouquot JE. Patología oral e Maxilofacial. 3ª ed. Rio de Janeiro: Elsevier, 2009.
5. Mustapha IZ, Boucree SA. Mucocèle of the upper lip: case report of an uncommon presentation and its differential diagnosis. Journal of the Canadian Dental Association. 2004;70(5): 318-321.
6. Bezerra TMM, Monteiro BVB, Henriques ACG, Carvalho MV, Nonaka CFW, Miguel MCC. Epidemiological survey of mucus extravasation phenomenon at an oral pathology referral center during a 43 year period. Brazilian Journal of Otorhinolaryngology. 2016;82(5):536-542.
7. Mendez M, Carrard VC, Haas NA, Lauxen IS, Barbachan JJD, Rados PV, Sant'Ana Filho M. A 10-year study of specimens submitted to oral pathology laboratory analysis: lesion occurrence and demographic features. Braz Oral Res. 2010;26(3):235-241.
8. Tandon A, Sircar K, Chowdhry A, Bablani D. Salivary duct cysts on the lower lip: a rare entity and literature review. J Oral Maxillofac Pathol. 2014;18(suppl1):151-156.
9. Chaves FN, Carvalho FSR, Pereira KMA, Costa FWG. Salivary duct cyst in the upper lip: case report and review of the literature. Indian J Pathol Microbiol. 2013;56:163-165.