



## Surgical excision of sialolipoma. Report of clinical case

### *Excisión quirúrgica de sialolipoma. Reporte de un caso clínico*

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#### ABSTRACT

Sialolipoma is a salivary gland lipoma variant first described in 2001 by Ngao. Presently, there are only 18 documented cases in scientific literature. Most of them were located in the parotid gland. The case here presented is that of a 57 year old male patient, presenting volume increase in the region of the left side of the lower lip. The lesion presented a 5 year evolution. It was treated with excision biopsy. Histopathological results rendered a sialolipoma diagnosis.

**Key words:** Sialolipoma, lipoma, ductal structures, glandular acini, salivary gland.

**Palabras clave:** Sialolipoma, lipoma, estructuras ductales, ácinos glandulares, glándula salival.

#### RESUMEN

El sialolipoma es una variante de un lipoma de glándulas salivales que fue descrito por vez primera en el 2001 por Nagao; actualmente se tienen publicados sólo 18 casos en la literatura, siendo la mayoría de ellos en la glándula parótida. El caso que se presenta es de un paciente masculino de 57 años de edad que presenta un aumento de volumen en la región de labio inferior de lado izquierdo de 5 años de evolución, tratado con una biopsia excisional, la cual como resultado histopatológico nos arroja un diagnóstico de sialolipoma.

#### INTRODUCTION

Sialolipoma is a rare tumor characterized by possessing salivary gland tissue. It contains ductal structures and glandular acini. Eighteen cases have been reported in scientific literature. It is a clinical entity and presents minimal clinical problems when compared to other salivary gland lipoma.<sup>1-3</sup>

#### CLINICAL CHARACTERISTICS

Sialolipoma clinically presents as a well-circumscribed volume increase, with a 3 cm maximum reported diameter. It presents soft consistency and can exhibit a yellowish hue. Nevertheless, it can display a yellowish-whitish surface if associated to any type of traumatic component. The surgical specimen floats when immersed in formalin. This fact proves presence of adipose content in its structure. Initially this tumor can be seen as a glandular alteration, as a pleomorphic adenoma. Histopathological study is the only tool providing accurate diagnosis of this lesion. In cases when it is associated to the parotid gland it can cause facial paralysis. Treatment consists on surgical excision of the lesion. Up to the present date no reports of relapse have been recorded.<sup>1,2,4</sup>

#### HISTOLOGY

From the histological perspective, these lesions are well circumscribed by fibrous tissue; characteristically, salivary gland epithelial elements can be noted in an adipose tissue matrix. Epithelial islands contain salivary gland parenchyma normal acini and ductal units, lacking atypia data. These are located all along the tumor periphery. Acini and ductal structures can be atrophic. There are lipoma histological variants which are present in the maxillofacial region, such as fibrolipoma, angioliipoma, pleomorphic lipoma, prickle cell lipoma and lipoadenoma.

Lipoadenoma is histologically very similar to sialolipoma. Its main difference lies in the fact that lipoadenoma is composed of adipose tissue and ductal components, whereas, sialolipoma, in addition to the aforementioned, contains glandular acini. Likewise, lipomatosis and pleomorphic adenoma can be a differential diagnosis. Presence of a fibrous tissue capsule constitutes the main difference between

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sialolipoma and lipomatosis. Presence of a normal salivary gland with its ductal dilation and fibrosis constitutes the difference with pleomorphic adenoma.

Acini are positive to PAS, mucosal glands are positive to musicarmine. Both ducts and acini are positive to silver pigments.<sup>1-7</sup>

Likewise, when assessing the immunohistochemical analysis, it can be noted that both ducts and acini are positive to cytokeratin (AE1/AE3 and 14) as well as to cytokeratin (34bE12), which is expressed in cell ducts but not in acini. Acini are positive to S100 protein, as is the case with adipocytes.<sup>1,8</sup>

Computed tomography (CT) and magnetic resonance (MR) can be used as diagnostic auxiliaries in these conditions, but they are only useful to assess extension and location of the lesion.<sup>1</sup>

### CASE PRESENTATION

57 year old male patient, born and residing in the State of Mexico. Patient attended in the Oral and Maxillofacial Service of the Research and Graduate School, National School of Dentistry, National University of Mexico, referred by the Oral Pathology Department of the same institution. The patient presented a five-year asymptomatic evolution volume increase. The patient reported family, pathological and non-pathological history irrelevant to the present case. Intraoral physical exploration revealed an approximately 2 cm diameter volume increase located on the left side of the lower lip mucosa. The lesion did not adhere to deep planes and was of a sessile basis. It presented coloring similar to the adjacent mucosa, except for one portion which showed changes in coloration and texture due to its contact with teeth. The lesion exhibited soft consistency and the patient suffered severe periodontal disease (*Figure 1*). It was decided to perform an excision biopsy of the lesion with patient under local anesthesia (2% xylocaine

with 1:100000 epinephrine). Anesthesia infiltration was carried out, an incision was outlined and harvesting of surgical specimen was undertaken. It was decided to equally harvest oral mucosa covering the lesion. This was due to changes noted due to trauma caused by teeth. Blunt dissection was performed so as to preserve adjacent anatomical structures. An approximately 3 cm-diameter surgical specimen was harvested. The surgical wound was sutured with 3-0 silk. The surgical specimen was sent to the oral pathology service of the institution. The report was clinical diagnosis of lipoma. The patient experienced satisfactory evolution. Seven days after the operation suitable healing of the surgical wound was observed, lacking dehiscences or infection. Sutures were still in place fulfilling their role. Sutures were removed, no apparent alterations were observed (*Figure 2*).

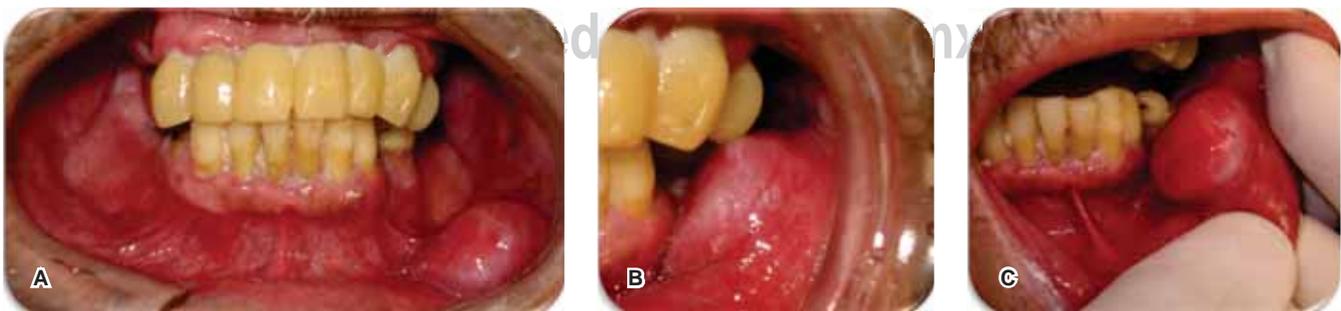
### HISTOPATHOLOGICAL STUDY

#### Microscopic description

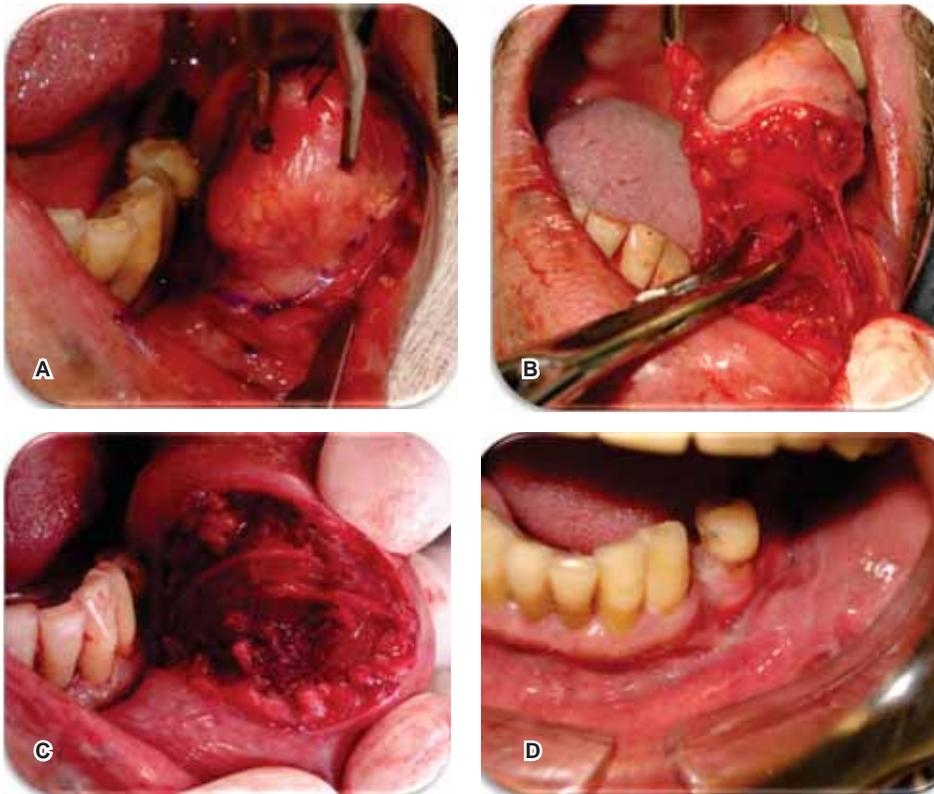
The lesion was composed of mature adipose tissue intermingled with fibrous conjunctive tissue and irregularly placed collagen fibers bands. The lesion was well vascularized. Mucous type glandular acini were present, as well as their conducts and lymphoid tissue areas. Towards the base of the lesion, striated muscle tissue was observed. The lesion was covered (coated) by parakeratinized stratified squamous tissue with acanthosis areas.

#### Macroscopic Description

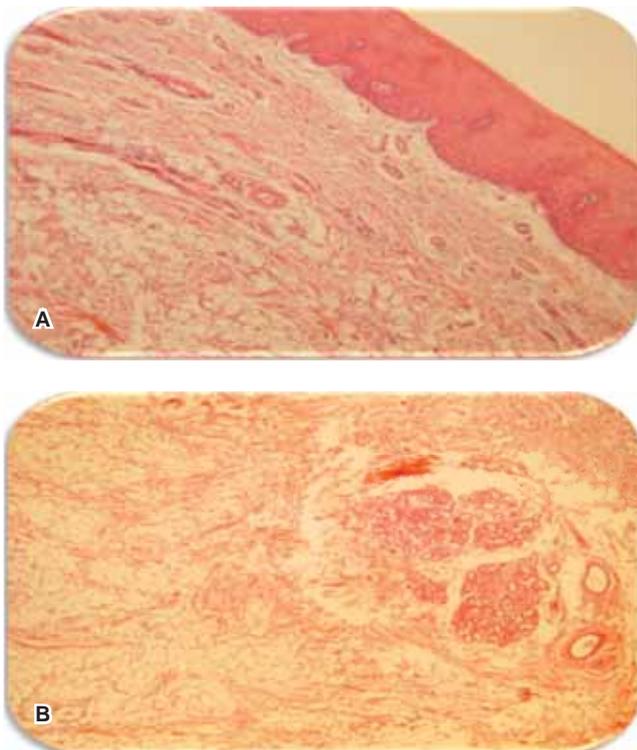
The following was received: 2 soft tissue fragments with ovoid shape, lobulated surface, firm consistency, yellowish color with light brownish areas on the periphery. The fragments exhibited overall measurement of 3.4 x 2.1 x 1.1 cm (*Figure 3*).



**Figure 1. A, B, C.** Clinical characteristics of lesion.



**Figure 2.** A) incision, B) dissection, C) surgical bed, D) post-operative view.



**Figure 3.** Histopathological study.

**Histopathological diagnosis**

Sialolipoma.

**DISCUSSION**

The sialolipoma here presented would be case number 19 reported in scientific literature. We found it corresponded to a long evolution, asymptomatic lesion, which measured approximately 3 cm in diameter, and was consistent with other reports. The lesion presented a whitish-yellowish hue due to trauma elicited in the area by adjacent teeth. It was decided to perform an excision biopsy. Excision was performed on the mucosa covering the lesion. Histopathological results were: parakeratinized stratified squamous tissue as well as fibrous tissue coating the whole of the lesion. Microscopic description of this lesion allowed us to confirm diagnosis with the presence of glandular acini and their ductal structures. These constituted the basis of the diagnosis. We could therefore note the fact that clinical and histopathological characteristics presented by our lesion corresponded to data already published by several authors (Nagao 2001, Naomi 2007) as well as correlation with clinical

characteristics. Of utmost importance in this case was the fact that histopathological findings led the way for the final diagnosis of sialipoma.<sup>1-4</sup>

### CONCLUSIONS

Sialolipoma is an infrequent entity, which is asymptomatic unless related to the parotid gland.

The yellowish hue is characteristic of the lesion, but it can present changes in the coating mucosa due to local irritation factors.

Surgical excision is the choice final treatment for this type of lesions.

Presence of glandular ductal structures and acini were the factors which confirmed the lesion's histopathological result.

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