

CASE REPORT

Oncocytoma of an Intraoral Minor Salivary Gland: Case Report and Review of Literature

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ABSTRACT

Oncocytoma is a rare benign tumor of the salivary gland representing not more than 1% of salivary tumors. It is composed of large epithelial cells, the oncocytes, which are predominantly found, in senior adults, being more prevalent in the eighth decade of life. It is located mainly in larger salivary glands especially in parotid glands. The tumor usually presents as a solid mass, painless, of slow growth, and rarely it is larger than 4 cm of diameter. There are few reports in literature on minor salivary glands neoplasias. This work aims to present and discuss a clinical case of a 71-year-old male patient with a 20 X 10 mm asymptomatic nodular lesion, of approximately 14 years duration, located in the oral mucosa on the left side of the mouth, with clinical and surgical diagnosis of fibroma. An excisional biopsy of the lesion was made and the specimen was embedded in 10% formaldehyde solution and delivered to the Oral Pathology Laboratory of the Federal University of Pernambuco for analysis. The histopathological examination was carried out by hematoxylin/eosin and PAS staining with and without diastase. The specimen was diagnosed as a minor salivary gland oncocytoma.

Key words: Salivary Gland, Minor. Adenoma, Oxyphilic/pathology. Salivary Gland Neoplasms Oncocytoma.

INTRODUCTION

Salivary gland tumors constitute a heterogeneous group of lesions of a great morphological variation. Although uncommon, they are not so rare. The most common location of the salivary glands tumors is in the parotid

gland, occurring in 64% to 80% of the cases.^{1,2} Oncocytoma is an extremely rare benign parotid gland tumor, well circumscribed, of slow growth and composed of large polyhedral epithelial cells: the oncocytes. Oncocytes have an eosinophilic cytoplasm and central nucleus and it is also known as Oxyphilic Adenoma and Acidophilic Adenoma.³ It is more common in elderly, with great prevalence in the eighth decade of life. There are few reports in the literature on minor salivary glands neoplasias, being the palate the most common location of those tumors.⁴ A clinical case report on Oncocytoma of the jugal membrane mucous in minor salivary gland, diagnosed at Oral Pathology Laboratory of Federal University of Pernambuco, is here described.

CASE REPORT

A 71-years-old man, assisted at the General Hospital of Areias, in Recife, Pernambuco, presented with an asymptomatic 20mmx10mm nodular lesion located in the left jugal mucous membrane, with for nearly 14 years duration. The lesion was first clinically diagnosed as Fibroma. Lesion excisional biopsy was done, and

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the specimen fixed in 10% formaldehyde solution was delivered to the Oral Pathology Laboratory of Federal University of Pernambuco, where the histopathological analysis was carried out. This have shown a parenchyma composed of large cells (Figure 1), exhibiting a compact lobular pattern (Figure 2). Those cells have shown an eosinophilic cytoplasm and sustained by scarce stroma. Included in the histological framework, there was lymphocytes, histiocytes, hyperemic blood vessel and hemorrhagic areas. Staining techniques used were Hematoxylin/Eosin and PAS with and without diastase, both resulting

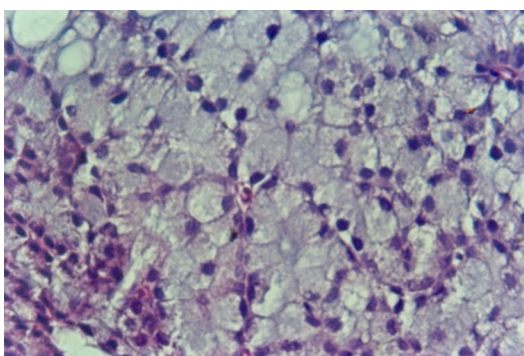


Figure 1 - Microscopic view of the oncocytic cells (staining HE -40X)

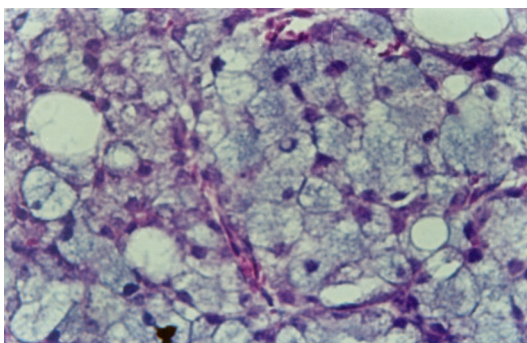


Figure 2 - Microscopic view of the cells exhibiting lobular pattern (staining HE -40X)

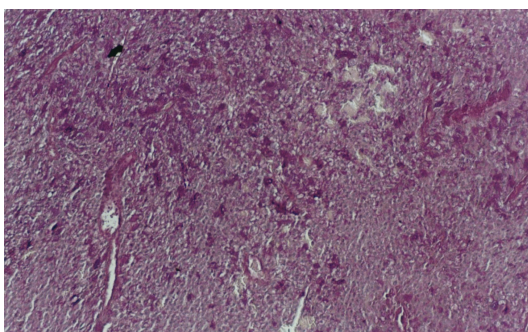


Figure 3 - PAS positive staining -10X

positive. The histopathological findings are compatible with the diagnosis of oncocytoma. The patient remained stable without presenting recurrent signs.

DISCUSSION

Hamperl has designated “oncocyte” (from Greek *onkothai* = swollen and *cytos* = cell) as a special type of epithelial cell characterized by a larger than the original cell, with a mitochondria-rich considerably dense cytoplasm containing acidophilic granules. Oncocytes can be found in normal organs as in tumors. The term “oncocytoma” was first introduced by Jaffe in 1932, referring to the lesion currently called of adenolymphoma (or Warthin’s tumor).⁴

According to the World Health Organization histological classification of Salivary Glands Tumors (1992), the oncocytoma is in the Adenomas group⁵ and, in agreement with the AFIP classification (1990), is considered a benign neoplasia of epithelial origin.⁶ However, two other oncocytic lesions make differential diagnoses with typical oncocytoma: the multifocal nodular oncocytic hyperplasia and the diffuse oncocytosis.⁵ The term oncocytoma would be used to designate a salivary gland solid neoplasm composed predominantly or exclusively by oncocytes.⁷ Usually, in the Anglo-American literature, these names have been substituted by oxyphilic granular cell adenoma, a more descriptive but slightly confused one.^{1,8} Evidences have shown that those cells can be found in other locations:⁴ including adrenal glands, uterus, liver, kidney, lungs, thyroid, pancreas, parathyroids, pituitary, testicles, Fallopian tubes, stomach, pharynx, trachea, esophagus, ovaries, lachrymal caruncle, breasts, thymus,⁹ being predominant in the covering of the ducts of senior people’s glands.¹⁰ Therefore, all those organs can develop this type of tumor.

Oncocytoma is a rare tumor that can undertake in salivary glands, with about 80% of the cases in the parotid gland,¹ or almost exclusively,^{11,12} representing approximately 1% of all tumors of this gland^{7,11} varying from 0.5% to 1.2%,¹³ and 1.5% of all of the salivary gland tumors,⁹ or 3% according to Kanazawa.³ In this reported clinical case, oncocytoma was diagnosed in minor salivary glands located in

jugal mucous membrane, the second prevalence place for oncocytoma, according to the literature on minor salivary glands.² In a revision of 14 minor salivary glands oncocytoma cases made by Kanazawa, in 2000, the palate was the commonest place (57% of the cases), followed by the oral mucous membrane (36% of the cases).³

It is usual the accidental finding of those tumors through histopathology, since this doesn't differ, in their clinical characteristics, from other benign salivary glands tumors, except by the fact that does not reach great sizes.¹⁰ According to the literature, the tumor usually presents as a solid mass, painless, of slow growth, rarely over 4cm of diameter.^{1,13} These are the same characteristics presented by the reported case, in which was observed slow growth, duration of approximately 14 years and dimensions of 20mm X 10mm.

Although the present study has involved a male patient, gender prevalence reported by some authors^{1,4,10,15} has indicated that this tumor occurs mostly in female, while others refer no gender predilection.⁹ As for age, oncocytoma occurs in persons older than 50 years,^{2,6,7,12} being more prevalent in the eighth decade of life,¹ corroborating with the clinical discovery presented.

Malignant oncocytomas are rare.^{7,12,14} It is estimated it represents 5% of all of the oncocytomas,¹² however, if more knowledge on tumor type aggregates, more diagnoses will frequently be carried out.⁴

In some oncocytomas great size and growth pattern and the existence of malignant forms suggest they are mostly neoplasias than hyperplasias.⁹ However, it is likely that the majority of those cell clusters correspond to hyperplasias instead of neoplasias.⁶

The most of diagnosed cases is of benign biological behavior, considered a rare lesion and being for the first time described in national literature.

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