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# CASE REPORT WARTHIN TUMOR OF THE PAROTID GLAND

***Afonso dos Santos Bunga***
Instituto Superior de Ciências da Saúde Carlos Chagas
https://Orcid.org/0009-0008-8994-6236

***Flávio António de Sá Ribeiro***
Instituto Superior de Ciências da Saúde Carlos Chagas

***Arturo Manuel Concepción Collado***
Instituto Superior de Ciências da Saúde Carlos Chagas
https://Orcid.org/0000-0002-6074-9318

***Valeryn Lachapell Rodriguez***
Instituto Superior de Ciências da Saúde Carlos Chagas
https://Orcid.org/0009-0005-3740-1830

***Vallelyn Lachapell Rodriguez***
Instituto Superior de Ciências da Saúde Carlos Chagas

***Manuel Emilio Castillo Cortorreal***
Instituto Superior de Ciências da Saúde Carlos Chagas
https://Orcid.org/0009-0006-8053-5292

***Andreina Alicia Uscocovich Alcivar***
Instituto Superior de Ciências da Saúde Carlos Chagas
https://Orcid.org/0009-0009-8632-5220

**Abstract:** Warthin's tumor is the second most frequent benign neoplasm of the salivary glands, accounting for 15% of all parotid gland tumors. It is most frequently diagnosed in middle-aged or elderly patients, especially those who smoke. **Aim:** To report a rare case of a 72-year-old patient with a Warthin tumor of the parotid gland. **Methodology:** Case report. **Case Report:** A 72-year-old male patient who smoked was referred to the General Surgery department for an increase in volume in the left submandibular region that had been going on for +/- 1 year. He underwent USG of the left parotid gland, the results of which showed a predominantly hypoechoic, slightly heterogeneous nodule measuring 1.9 x 0.8 x 2.0 cm with regular contours. He was subsequently submitted to total parotidectomy, the histopathological result of which revealed that it was a Warthin tumor (lymphomatous papillary cystadenoma). **Discussion/Concluding remarks:** Previous studies have suggested that Warthin's tumors occur more commonly in men over the age of 60. There is clear evidence of an association with smoking, which is an important etiological factor. Ultrasound is usually the first imaging test requested and in most cases it is sufficient to delimit the lesion. Warthin's tumor can be safely diagnosed using FNAB, which has a sensitivity of 90.4% and a specificity of 98.1%. This procedure is not essential for the therapeutic plan. The ideal treatment is parotidectomy with a safety margin, in order to prevent potential recurrences, although the incidence is low. The main complication of surgical treatment is facial nerve damage.

**Keywords:** Case Report, Parotid Gland Tumor, Warthin's Tumor.

## INDTRODUCTION

Salivary gland neoplasms account for less than 3% of all head and neck neoplasms. *Warthin*'s tumor is the second most frequent benign neoplasm of the salivary glands, accounting for 15% of all parotid gland tumors.[1,2] It is most frequently diagnosed in middle-aged or elderly patients, especially those who smoke (>50 years), with a preponderance of males. The increased risk of developing *Warthin*'s tumor in smokers may be related to the retrograde flow of tobacco components into the salivary ducts, causing metaplastic changes in the ductal epithelial cells.[2] It is usually located in the lower pole of the parotid gland, level II in the European Classification of Salivary Glands.[3,4]

The lesion manifests clinically as a slow-growing, painless increase in volume, consistent or fluctuating on palpation. This tumor can be bilateral in 10% of cases and is found in the superficial lobe of the parotid gland in more than 80% of cases. It can evolve rapidly, after years of insidious behavior, presenting pain, facial nerve paralysis and skin ulceration.[1]

The accuracy of the diagnosis is based on the agreement of the three modalities: clinical, imaging and cytological evaluation. If the diagnosis of WT is not feasible, surgery should be indicated to ensure a definitive diagnosis by histopathological examination of the resected specimen.[1,2,4]

This pathology has a low potential for recurrence, which allows it to be treated more conservatively, through extra capsular dissection or enucleation, in order to avoid more morbid approaches such as partial and total parotidectomies.[1]

This case report is pertinent due to the rarity of the pathology in question.

## CLINICAL CASE DESCRIPTION

A 72-year-old male patient, smoker, with a 22-year history of hypertension, medicated with losartan 50 mg, furosemide 40 mg, bisoprolol 5 mg, amiodarone 100 mg, rosuvastatin 10 mg and aspirin 100 mg; diabetes mellitus for 3 years, medicated with empagliflozin + linagliptin 25 mg/5 mg; chronic renal failure for 22 years, without treatment (CIS). Referred by his Nephrologist to a General Surgery consultation for an increase in volume in the left submandibular region that had been going on for +/- 1 year.

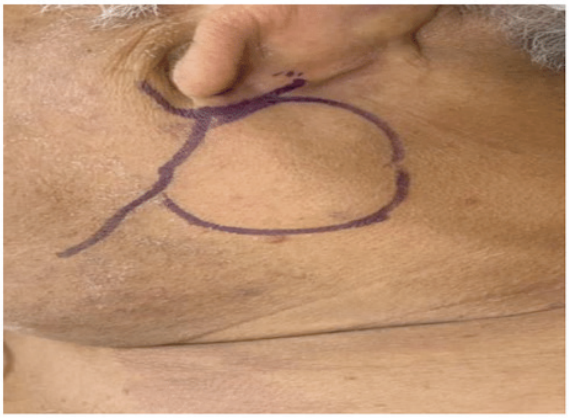

Fig:1- Mass in the left submandibular region

Physical examination revealed a left submandibular mass, hardened, not very mobile and painless. He underwent USG of the left parotid gland, the enhancement result of which showed a predominantly hypoechoic, slightly heterogeneous nodule measuring 1.9 x 0.8 x 2.0 cm with regular contours and no appreciable vascularization on Doppler study.

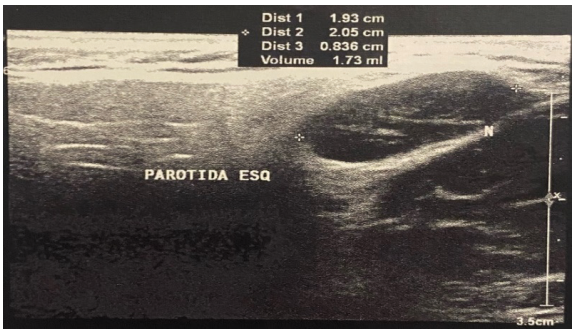


Fig: 2-USG - Hypoechoic nodule, slightly heterogeneous, measuring 1.9 x 0.8 x 2.0 cm with regular contours.

On August 11, 2013, the patient was admitted to hospital and preoperative tests were requested, after which she underwent a total parotidectomy without complications.

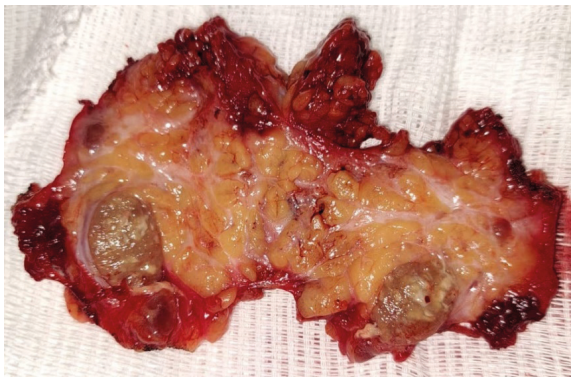

Fig: 3- Product of total parotidectomy

The material was sent to the Pathology Department, where the results showed a submandibular gland measuring 7.0 x 5.0 x 2.0 cm, with an irregular, brown and raw surface. The sections showed a 2.0 x 1.4 cm nodule, light brown and firm-elastic. There was also a smaller nodule measuring 0.6 x 0.4 cm, with a brown, yellowish, lobulated and elastic parenchyma, suggestive of Warthin's tumor (lymphomatous papillary cystadenoma), a small lymph node free of neoplastic involvement and no criteria for malignancy in the material.

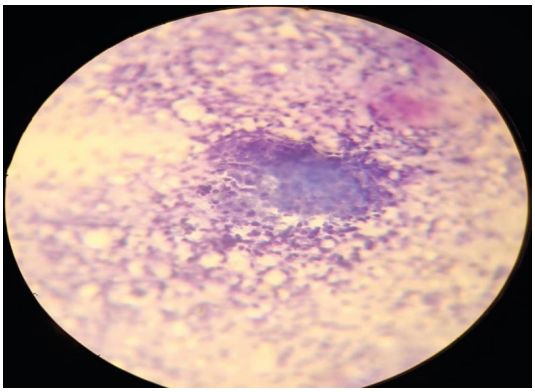

Fig: 4- Histopathology of submandibular gland measuring 7.0 x 5.0 x 2.0 cm, irregular surface, brown and raw, nodule measuring 2.0 x 1.4 cm, light brown and firm-elastic, There is also a smaller nodule measuring 0.6 x 0.4 cm, brown, yellowish, lobulated and elastic parenchyma, suggestive of Warthin's tumor (lymphomatous papillary cystadenoma).

The patient's post-operative complication was paralysis of the left hemi-face. Two days after surgery, he was discharged and referred to the speech therapy service where he underwent six (6) sessions, with good progression of his paralysis.

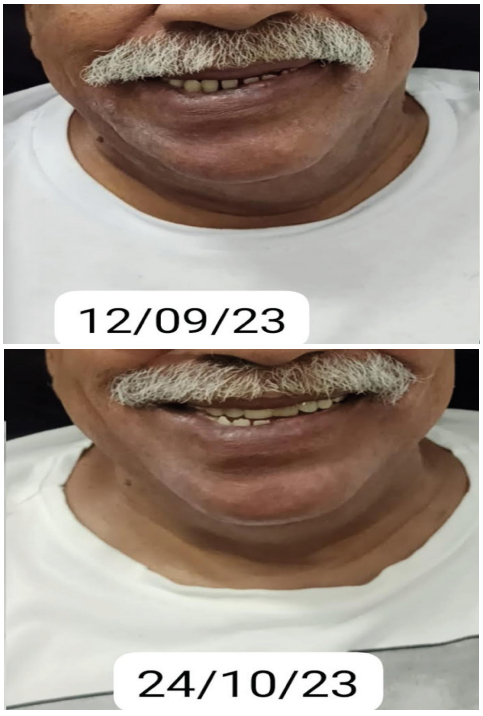


Fig: 5- Before and after speech therapy.

## DISCUSSION

Warthin's tumor (WT) has been identified as the second most frequent benign tumor of the parotid gland, after pleomorphic adenoma[2-4] .

Previous studies have suggested that Warthin's tumors occur more commonly in men over 60[3] . Our case report corroborates the literature.

The etiology of *Warthin*'s tumor is not well established, nor is its potential for malignancy[2].

There is clear evidence of an association with smoking, which is an important etiological factor[2] . The increased risk of developing *Warthin*'s tumor in smokers may be related to the retrograde flow of tobacco components into the salivary ducts, causing metaplastic changes in the ductal epithelial cells[2-3] .

Similar to previous reports, an asymptomatic slow-growing mass in the parotid gland was the symptom presented in this report[3] .

Ultrasound is usually the first imaging test requested and in most cases it is sufficient to delimit the lesion[2] .

*Warthin*'s tumor can be safely diagnosed using FNAB, with a sensitivity of 90.4% and specificity of 98.1%. This procedure is not essential for the therapeutic plan[1-2-3-4] .

The ideal treatment is parotidectomy with a safety margin, in order to prevent potential recurrences, although the incidence is low[2-3] .

The main complications of surgical treatment are facial nerve damage, Frey's syndrome, surgical wound infections and dehiscence[1-3-4] .

This case report used the total parotidectomy technique, with facial paralysis as a post-surgical complication.

## FINAL CONSIDERATIONS

Any mass in the neck should be rigorously evaluated in the search for a malignant tumor, with great importance in imaging studies.

Ultrasound is an excellent first choice, but CT or MRI should also be requested to better define the limits of the tumor and other adjacent structures such as facial nerve involvement.

FNAB is imperative for surgical planning and patient counseling.

In large tumors, most authors prefer more extensive resections, including superficial parotidectomies or even total parotidectomies when the deep lobe is involved.

In this case report, we saw the role of speech therapy as a therapy for one of the most frequent complications of parotidectomy, facial nerve damage, and it is a good tool for recovering facial nerve function.

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