

## Rare Lymph Node Localization of Whartin Tumor (A Case Report and Literature Review)

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### Abstract

### Case Report

**Introduction:** Warthin's tumor, otherwise known as papillary cystadenolymphoma, is a benign epithelial tumor of the salivary glands. It has characteristic oncocytic glandular structures and lymphoid stroma. It is found almost exclusively in the parotid gland and periparotid lymph nodes. **Observation:** We report the case of a 50-year-old patient who consulted for a bilateral parotid cervical swelling that had been evolving for 6 years, painless, superficially mobile, without any notion of facial paralysis and without inflammatory signs. The patient received cervicofacial CT with a well-limited bilateral parotid mass with a separation border with parotid parenchyma. Treatment consisted of a cervical surgical removal of the 2 masses whose histological examination returned in favour of a lymph node localized whartin tumor. **Discussion:** The whartin tumor is a benign tumor with mainly parotid development, nevertheless periparotid ganglionic involvement is relatively rare but possible. The reference radiological exam is cervicoparotidian MRI and the treatment is surgical.

**Keywords:** Parotid, benign tumor, whartin, lymph node tumor.

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## INTRODUCTION

Warthin's tumor (TW), otherwise known as papillary cystadenolymphoma, is a benign epithelial tumor of the salivary glands. It has characteristic oncocytic glandular structures and lymphoid stroma. It is found almost exclusively in the parotid gland and periparotid lymph nodes.

## OBSERVATION

We are reporting the case of a 50-year-old patient, a smoker who has been undergoing a bilateral parotid cervical swelling for 6 years, painless, superficially mobile without facial paralysis and without inflammatory signs.

The patient benefited from cervicofacial CT scan with a well-limited bilateral parotid mass with a separation border with parotid parenchyma.

Treatment consisted of a cervical surgical removal of the 2 masses whose histological examination returned in favour of a lymph node localized whartin tumor.



Fig-1: Preoperative image objecting bilateral cervical swelling



Fig-2: Post-operative image after tumor removal

## DISCUSSION

Warthin's tumor represents the second etiology of parotid benign tumours after pleomorphic adenoma (AP) [2]. Extra-parotid localizations (sub-mandibular gland, accessory glands) are exceptional [1].

It occurs in the 5th and 6th decade of life. It is rare before the age of 40 years [3]. A clear male predominance has been noted in the majority of series with a sex ratio ranging from 2.6/1 to 10/1 [2, 3].

An overall increase in the incidence of this tumour in the female population has been reported since 1950; this would be explained by the increase smoking rate among women [5]. Yu gy [4] also showed that smoking frequency was higher in patients with WT than in those with AP.

Several etiopathogenic hypotheses have been evoked but the one most retained is that which incriminates the development of epithelial inclusions within the quota intra-parotid lymphoid not isolated by a capsule.

This theory could explain the frequent localization of the tumor in the parotid gland, bilaterality and the multiplicity of these tumours [5]. For some authors, the high incidence of TW in humans suggests a possible hormonal dependence because of receptors sex hormones have been identified in TW cells [3]. The exact role of sex hormones and their impact on the salivary glands, remain unclear [3]. On the other hand, the incidence of WT in the black race is extremely rare, probably involving genetic factors [6]. Clinically, WT takes the form of a tumor rounded, mobile, smooth, fluctuating, growth slow [2].

At IRM, the WT are characterised by an intermediate signal in T1 and T2, without enhancement after injection; there may be focal zones in T1 hypersignal and T2 hyposignal (corresponding then to cystic portions rich in cholesterol crystals and/or haemorrhagic redrafts) and still others that are in T2 hypersignal (corresponding to pure liquid components).

Histologically, this tumour has a characteristic of oncocytic glandular structures and lymphoid stroma [7]. Malignant transformation is exceptional and can be done at the expense of epithelial (carcinoma) and lymphoid components (lymphoma) [7]. Nagao and al reported a frequency of malignant transformation of 0.1% [8]. There is little work on fine needle cytopuncture (Caf) that would have a diagnostic sensitivity ranging from 75% to 89.2% including false

positives between the diagnosis of WT and squamous cell carcinoma [2, 9].

The majority of the authors advocate a surgical treatment that consists of the complete removal of the mass to avoid recidives and post-operative complications.

In the literature, the rate of recidivism is of the order of 2 to 5% (7), if the removal is incomplete.

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