



Case Report

Rare Synchronous Nasopharyngeal and Cervical Lymph Node Warthin's Tumors: First Report of a Case.

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Abstract

Warthin tumor (WT) occurs almost exclusively in the parotid gland and peri-parotid lymph nodes. Rare extra-parotid WT have been mainly localised in the submandibular gland, periparotid region and rarely in other sites, such as the oral cavity, tongue, lip, cheek, hard palate and nasopharynx. These tumours can be bilateral and multifocal and rarely synchronous in exceptional cases. A few cases of synchronous nasopharyngeal and parotid warthin tumors have been reported We report the first synchronous case of Nasopharyngeal and cervical lymph node WT in 63 year old female who presented with swelling left side neck and change in the quality of voice. Both FNA of the right cervical lymph node and biopsy of the nasopharyngeal mass revealed features of Warthin tumor.

Keywords: warthin tumor, parotid, nasopharynx, cervical lymph node, FNA.

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INTRODUCTION

Warthin tumor(WT) , second commonest tumor of salivary glands, occurs almost exclusively in the parotid gland and peri-parotideal lymph nodes which may be multicentric in up to 12-20% cases, and bilateral in 5-14% of cases.[1-4] Occurrence of extra-parotid WT is rare and have been mainly reported in the submandibular gland, periparotid region and in other sites, such as the oral cavity, tongue, lip, cheek, hard palate and nasopharynx.[5,6,7] Rare cases of synchronous intra and extra parotid Warthin tumor has been reported.[5,8] We report an exceptionally rare occurrence of synchronous Warthin tumor in cervical lymph node and nasopharynx without the involvement of Parotid. Such a synchronous occurrence of Warthins tumor in two extra parotid sites have not been reported so far.

CASE HISTORY

A 63years old female presented with swelling left side neck for one year and change in the quality of voice since six months. Nasopharyngoscopy showed mass in the nasopharynx. CECT showed soft tissue thickening in nasopharynx obliterating the fossa of rosenmuller on both sides. The growth was posteriorly reaching upto retropharyngeal space ,superiorly abutting clivus and body of sphenoid. However no erosion/destruction was seen. There was thickening of right paraglottic region and right false vocal cord. In addition there was evidence of enlarged heterogeneously enhancing lymph node seen in right side of neck measuring 14.5mm in size.

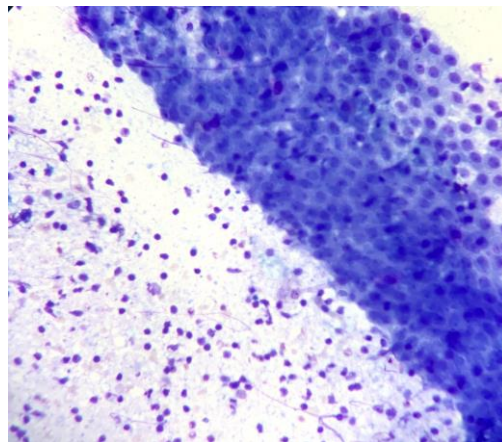


Figure 1: FNA smears from right cervical lymph node revealing sheets of oncocytes and lymphoid cells in an amorphous granular background (Giemsa, 40x)

Fine needle aspiration of the right cervical lymph node was performed. Microscopic examination revealed cohesive, monolayered sheets of bland oncocytic cells and many lymphoid cells in a background of amorphous and granular debris (figure 1). Biopsy from nasopharyngeal mass showed fragments lined by pseudostratified ciliated columnar epithelium beneath which there was dense lymphoid tissue, gland and papillae lined by double layered oncocytic cells (figure 2). Keeping in view these characteristic Cytological and histopathological findings, diagnosis of synchronous warthin's tumor of nasopharynx and cervical lymph node was made.

DISCUSSION

Warthin's tumour (WT) of the parotid gland is a common entity. However occurrence of this tumor in an extra-parotid location is rare and have been reported in submandibular gland, periparotid region, oral cavity, tongue, lip, cheek, hard palate and nasopharynx.[5,6,7] Furthermore, these lesions can be unilateral, bilateral, or multifocal and may occur synchronously or metachronously with greater frequency than other benign salivary lesions[9] Rare cases of synchronous intra and extra parotid Warthin tumor has been reported.[5,8] Only few isolated cases of nasopharyngeal WT involvement have been reported so far, and still rarer are nasopharyngeal WT with a simultaneous associated parotid tumour.[10] Synchronous WT of nasopharynx and cervical lymph node has not been reported so far. Ours is the first case in which there is synchronous WT in two extra parotid sites.

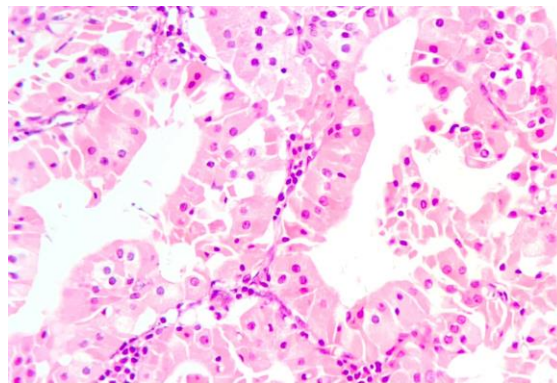


Figure 2: Biopsy from nasopharyngeal growth showing glands and papillae lined by oncocytic cells with intervening lymphoid stroma (H&E, 40x)

The pathogenesis of “extra-parotid” WT remains controversial. One hypothesis proposes that the tumor originates from heterotopic salivary parenchyma or ductal inclusions in the intra- and peri-glandular lymph nodes during the embryonic development of the parotid gland.[9] Late encapsulation of the parotid in the embryo allows the intermingling of undifferentiated lymphoid stroma with branching salivary ducts. After encapsulation, salivary ducts and acini may be trapped heterotopically within lymph nodes.[11] Heterotopic salivary gland tissue in the neck may arise sporadically via failed closure of the pre-cervical sinus of his within the branchial apparatus.[12] Genetic and environmental factors may then impact these inclusions giving rise to Warthin’s tumor.

Extraparotideal WT may then arise from components of the minor salivary glands that are engaged in a preexisting lymphoid stroma, and chronic inflammation in the nasopharynx could induce the formation of oncocytic metaplasia of glandular tissues in the stroma.[13] Other authors postulate that multiple systemic factors such as nutritional or metabolic deficiencies, genetic factors, environmental influences, duct obstruction or chronic inflammation may concur to generate oncocytic metaplasia that could be the initial stage of a synchronous development of WT [14]

The synchronic presentation of WT in na- sopharynx and parotid gland is exceptional. The first case was reported by Low *et al.* in 2002.[10] the patient was a 53 year-old Chinese woman with a 3 cm nodule in the right side of the neck behind the mandibular angle, and a naso-endoscopy showed a 1 cm nodule located in the postnasal space. The histological examination rendered the diagnosis of WT in both locations. Hilton *et al.* reported in 2008 the case of a 55 year-old man with multifocal WT that affected both parotid glands, post- nasal space, base of the tongue and tonsils.[15] Yáñez-Barraza KL *et al*[16] reported the third case of synchronic nasopharyngeal and intraparotid warthin tumors. Only 3 such cases are reported in literature. But our case is first of its kind as synchronous WT was detected in nasopharynx and cervical lymph node without involvement of parotid.

Although the presence of synchronic tumors in the same patient may be coincidental, it is important to try to establish a link between them. In our case cervical lymph node WT could be a metastasis from the nasopharyngeal WT, a dubious explanation because both tumors were histologically benign. However, some tumors with bland histology, such as ameloblastoma and pleomorphic adenoma are found to produce metastasis after many recurrences, which can still preserve benign histomorphological features.[17] Local excision and close follow-up are recommended treatment for the synchronous WTs. Nasopharyngeal and cervical lymph node involvement of WT may be the first apparent tumor focus for the patients. Therefore, these patients should be closely followed both parotid glands and other extraparotid fields for possible disease in post- operative routine examinations.

In conclusion, we report the first case of synchronous WT in the nasopharynx and cervical lymph node and although this occurrence may be coincidental, a common pathogenesis or a metastatic mechanism have to be considered. Even though the number of cases of extra- parotideal WT is small and synchronous WT cases are still lesser, further investigation is required to establish if there are clinical, demographic and patho- logical differences among patients with intraparotideal, extraparotideal and synchronic WT.

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Conflicts of interest

There are no conflicts of interest

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