

Case Report

A 42 year male presenting with swelling in both parotid regions

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Abstract

A 42 years old male smoker presented with swelling in both parotid regions, 3.5x2.5cm in left & and about 2.5x1.5 cm in right, for 8 months with no pain, fever, dysphagia, dyspnoea, epistaxis or any ear problem. After all necessary investigations, including MRI and FNA, it was diagnosed as Warthin tumor. Warthin's tumour is a benign tumour of salivary glands affecting mostly parotid gland. Smokers and older individuals are at greater risk of developing Warthin's tumour. FNA has good accuracy for diagnosing this type of tumour though some literatures show risk of developing sialocutaneous fistula. MRI possesses high specificity and sensitivity for warthin's tumour. From different available treatment options we chose local excision.

Key words: Parotid swelling, Warthin tumour, pleomorphic adenoma

Introduction

Warthin's tumor or Warthin tumour, also known as papillary cystadenoma lymphomatosum, monomorphic adenoma or adenolymphoma, is a type of benign tumor of the salivary glands. Its etiology is unknown, but there is a strong association with cigarette smoking. Smokers are at 8 times greater risk of developing Warthin's tumor than the general population. The gland most likely affected is the parotid gland. Though much less likely to occur than pleomorphic adenoma, Warthin's tumor is the second most common benign parotid tumor. Warthin's tumor primarily affects older individuals (age 60–70 years). There is a slight female predilection according to recent studies, but historically it has been associated with a strong male predilection. This change is possibly due to the tumor's association with cigarette smoking and the growing use of cigarettes by women. The tumor is slow growing, painless, and usually appears in the tail of the parotid gland near the angle of the mandible. In 5–14% of cases, Warthin's tumor is bilateral, but the two masses usually are at different times. Warthin's tumor is highly unlikely to become malignant.

Case report

A 42 years old male, small business, hailing from keranigonj, Dhaka admitted in to the Department of ENT & Head-Neck Surgery with the complaint of swelling in both parotid regions for 8 months. According to the statement of the patient, he was reasonably alright about 8 months back. Then he developed swelling in both parotid regions. The swelling increased in size slowly and he did not complaint of pain in the swelling. There is no history of fever, dysphagia, dyspnoea, epistaxis or any ear problem. Patient is smoker for last 20 years. On General examination, patient was co-operative with average body built and nutrition. He was not anaemic or icteric. Pulse, BP, respiration was normal. Neck vein was not engorged and neck glands were not enlarged. There was no ascites or oedema.

On Locoregional examination, there was swelling in both parotid regions; left swelling was 3.5x2.5cm and right swelling was about 2.5x1.5 cm in size, firm in consistency with smooth surface and well defined margins. The swellings were free from overlying skin and underlying structures; moves in all direction; deep lobe of both

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parotid glands were not enlarged. After all necessary investigations, including MRI and FNA, it was diagnosed as Warthin's tumor.

Discussion

Warthin tumor, also known as papillary cystadenoma lymphomatosum, is a fairly common tumor. It makes up 14% to 30% of parotid tumors and is well known among otolaryngologists.¹

The case described above is typical of Warthin tumor. The patient's age, smoking history, lack of symptoms, and delay in presentation are all typical. Warthin tumor almost always occurs in older adults. In men, the peak incidence is in the 7th decade, whereas in women it is in the 6th decade.² Because the tumor occasionally occurs in young patients, most studies have found an average age at diagnosis in the early 60's.¹ Smokers have 8 times the risk of developing Warthin tumor.³ This is hypothesized to be caused by retrograde flow of substances in tobacco smoke into salivary ducts or by excretion of substances from smoke into the ducts.⁴

The tumor is asymptomatic in 90% of patients.² Occasionally, patients may note pain, pressure, or rapid growth of the mass. If the mass ruptures, the contents can cause inflammation and acute parotitis.² Patients often delay seeking medical care for Warthin tumor. In a study of 278 cases, the average time between appearance of the mass and diagnosis was 21 months.³ The asymptomatic nature of this tumor probably explains much of this delay.

Although Warthin tumor can occur elsewhere, it is most commonly found within the parotid gland. In one series, essentially all were located in the parotid.³ Another series found 90% within the parotid, 7.6% in cervical lymph nodes, and 2.3% in the submandibular gland.¹ Before 1982, Warthin's tumor made up 6% to 16% of parotid tumors.¹

In the past decade, the incidence of the tumor has doubled. This is not surprising, because the population is aging, and many older patients have a history of smoking. At first, Warthin tumor was seen primarily in white men. It is becoming more prevalent in both African Americans and women. Indeed, the gender ratio now approaches 1:1. The increased prevalence in African Americans and women is thought to be caused by increased smoking among these groups.

On standard MRI, Warthin tumor has certain characteristic features, including multifocal lesions and well defined margins.⁵ However, these features are not

diagnostic. Several recent reports have examined the value of dynamic MRI in differentiating Warthin tumor from malignant neoplasms of the parotid. Dynamic MRI is reported to have a high specificity (91%) and sensitivity (91%) for Warthin tumor.⁶ These investigators correctly identified all Warthin tumors as benign. However, their diagnostic scheme was not able to differentiate all malignant parotid tumors from benign ones. With further study and advancement, MRI technology may one day be able to establish the diagnosis in such masses.

A definitive diagnosis therefore requires a tissue sample. In the past, most specimens were excised and the diagnosis was established after excision. Fine-needle aspiration (FNA) has played a larger role in recent years. In general, FNA has good overall accuracy for diagnosing salivary gland neoplasms (87% to 97%)⁷, and it has been widely used for the diagnosis of Warthin tumors. It is generally well tolerated, although inflammation and development of a sialocutaneous fistula have occurred after FNA of Warthin tumor. A positive cytological diagnosis requires the distinct histologic elements of oncocytic epithelial cells (i.e. acidophilic and granular) in a lymphoid stroma.⁸ One important limitation should be kept in mind when using FNA to assess a possible Warthin tumor. Whereas it is rare for a malignant lesion to be misclassified as Warthin tumor, as many as 26% of Warthin tumors may be misclassified as malignant on FNA.⁹

Optimal treatment of Warthin tumor remains somewhat controversial. According to Batsakis, who has written extensively about Warthin tumor, they are "generally regarded as among the most innocuous of salivary gland tumors." Malignant transformation is very rare and constitutes only 0.3% of all Warthin tumors. Despite this, Yoo et al recommend superficial parotidectomy but recognize that either local excision or simple observation would be appropriate in selected cases.¹ Their preference is based in part on a recurrence rate of 1.8% after local excision.¹⁰ These may not have represented true recurrences, however, because patients often have multiple Warthin tumors. Texts that are more recent do little to resolve the treatment controversy. One author states that "treatment requires complete excision of the affected portion of the gland with uninvolved margins."¹¹ Another states that fine-needle biopsy results allow "for a discussion of non-surgical options in a patient with a benign Warthin's tumor."¹³

Given this controversy, consultation with an otolaryngologist and individualization of treatment is recommended. In our case, we chose local excision.

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