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Pathology

Warthin Tumor - Diagnostic Dilemma- Case Report

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Abstract **Case Report**

Warthin Tumor is also known as Papillary Cystadenoma lymphomatosum, is a fairly common tumor. Cytologically, it simulates many other lesions of salivary glands like chronic sialadenitis, low grade mucoepidermoid carcinoma, acinic cell carcinoma, squamous cell carcinoma, oncocytic carcinoma, lymphoepithelial cyst etc which poses a diagnostic dilemma.

Keywords: Warthin Tumor, Papillary Cystadenoma lymphomatosum, chronic sialadenitis, Diagnostic Dilemma.

INTRODUCTION

Warthin's tumor is the second most frequent benign salivary gland neoplasm and represents 10-15 % of the total [1]. It was first described in the american literature, by Aldred Warthin, in 1929 who named it as papillary cystadenoma lymphomatosum [2]. As there can be presence or absence of main features of warthin tumor i.e.with or without presence of squamous like cells, vacoulated cytoplasmic cells and inflammatory reaction may cause diagnostic dilemma. The characterstic features of warthin tumor in FNAC are lymphocytes and amorphous granular debris containing double rows of oncocytic cells. Various problems may cause misinterpretations of this tumor in FNAC. Sometimes, the presence of inflammation, debris and atypical metaplastic features may obscure cellularity and causes misinterpretation [6]. So, Here we intend to report 2 cases to understand difficulties in findings of warthin tumor on FNAC in cytology.

CASE REPORT

Ist Case:

A 50 year old male presented with the history of swelling in the parotid region since 1 year. He reported that size of swelling increased suddenly in 20 days back. There was no history of difficulty in swallowing, breathing, ear pain, dysphagia and weight loss. He was chronic smoker for 20 years. On examination, swelling was measured 2.5X1cm on left parotid region which was soft, non tender and adherent to skin and overlying skin and temperature was normal.

IInd Case:

A 66 years male presented with swelling below ear on left side of neck since 2-3 years. Size of swelling increased gradually. There was no history of difficulty in swallowing and breathing. He was chronic smoker and alcoholic for 10-12 years. On examination, swelling was measured 1.5X1cm on the left side of neck below ear pinna which was soft in consistency, mobile, non tender and overlying skin and temperature was normal.

Routine Complete Blood Investigations were with in normal limits for both of the cases. CECT Neck of Ist Case- Findings are suggested possibility of? Multiple pleomorphic adenoma/ Warthins tumor.

FNAC yielded blood mixed aspirate from which MGG, PAP and H& E stained slides were prepared in both cases. On microscopic examination in both cases, blood mixed cellular smears shows epithelial cells arranged in clusters, groups and

papillaroid structures. Oncocytic change of epithelial cells is noted. There are seen numerous lymphoid cells seen in the background. Intraepithelial lymphocytes also noted. The cytological diagnosis are those of Benign Salivary Gland Neoplasm- Warthin Tumor (Milan System for Reporting Salivary Gland Patholohy-4A).

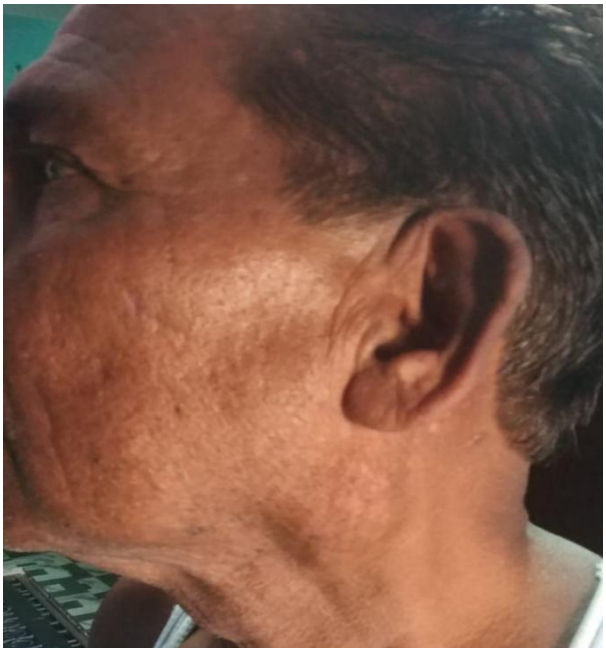

Figure 1: Submandibular swelling measuring 1.5X1cms below the left ear pinna

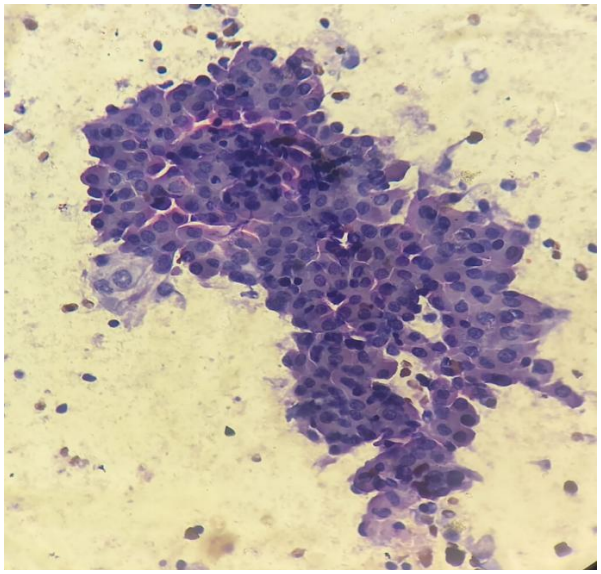

Figure 2: MGG stained slide shows oncocytic change of epithelium (40x)

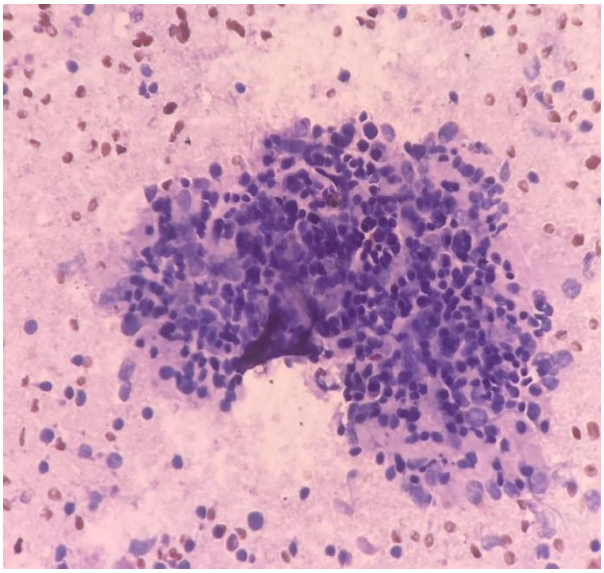

Figure 3: H and E stained slide shows Lymphocytes and granular debris (40X)

DISCUSSION

Warthin tumor is almost exclusively limited to the parotid gland and its extra-parotid locations are considered to be very rare. There is an apparent male predilection for its occurrence, although with the recent reports the difference in ratio is declining [1]. This tumor is asymptomatic, but it may presents with pain because of pressure exerted by rapid growth and inflammation [7]. It is second only to the pleomorphic adenoma and usually affects people in their fifties and sixties. The parotid is the one most frequently affected by this type of tumor (84%) [5]. Many clinical features are associated with this tumor are advanced age, smoking and male sex. It is also seen as multifocal, bilateral and located in the inferior pole of parotid gland [6]. In addition, it can be found in certain sites like neck, palate, upper lip, nasopharynx, submadibular gland, sinuses and lacrimal gland [9]. The risk of this tumor is eight times in smokers than in non smokers [10]. It has incomprehensible histogenesis of lymphoidstroma. According to the 2005 World Health Organization classification of tumors, Warthin's tumor can be defined as a tumor composed of glandular and often cystic structures, sometimes with a papillary cystic arrangement, lined with characteristic bilayered epithelium, comprising inner columnar eosinophilic or oncocytic cells surrounded by smaller basal cells. Currently, this tumor is known as adenolymphoma, Warthin tumor and cystic papillary adenoma [4]. This tumor may be misnterpreted with other salivary gland lesions but the most common misinterpretation is squamous metaplasia which may be misinterpreted as squamous cell carcinoma. So, a warthin tumor can be diagnosed on cytology with high degree of certainity if diagnostic triad of oncocytes, lymphoid cells and a "dirty" background present. However in considerable number of smears only 2 components are present which makes diagnosis difficult [8].

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