Cytological diagnosis of warthin's tumor: a case report

Kuladeepa Ananda Vaidya¹, Doddikoppad²

¹Department of Pathology, SIMS & RC, Surathkal, Karnataka, India.

Abstract

Warthin's tumor is a benign salivary gland neoplasm occurring principally in parotid glands. It is also designated as papillary cystadenoma lymphomatosum (or adenolymphoma). It accounts for about 15% of all benign and malignant epithelial neoplasms of the parotid gland. Here we are presenting a case of worrisome jaw mass that proved to be a benign Warthin's tumor by fine needle aspiration cytological examination.

Key Words: Warthin's tumor, Neoplasms, Salivary gland, Papillary cystadenoma lymphomatosum.

INTRODUCTION

Warthin tumor, also known as papillary cystadenoma lymphomatosum, it makes up 14% to 30% of parotid tumors. Fine-needle aspiration

(FNA) has played a larger role in recent years. In general,

FNA has good overall accuracy for diagnosing salivary gland neoplasms (8/% to 9/%), and it has been widely used for the diagnosis of Warthin tumors. [1]

CASE REPORT

A 66yrs old male patient presented with a swelling over the angle of right jaw since 3 month, which is gradually progressing in size and associated with dull aching pain. Patient is a chronic smoker since 30yrs. Swelling measuring 5x6cm, smooth surface, [Fig 1,2] firm in consistency. No other masses were noted in the head and neck. Clinically in view of patient's age and duration of the swelling, possibilities of sialadenitis and malignant parotid tumor were considered. FNAC was performed under aseptic precaution; aspirate was scanty mucoid grey white in color. Smears stained with H&E, PAP and Giemsa stains showed moderate cellularity, epithelial cells were arranged in cohesive monolayer sheets and singly. Cells were oncocytic in nature with abundant pink granular cytoplasm and round uniform nucleus without atypia or abnormal mitosis [Fig3,4]. Background showed lymphocytes, amorphous mucoid material & granular debris. Cytological impression of

Warthin's tumor was rendered. The patient chose no

Address for correspondence* Kuladeepa Ananda Vaidya

Department of Pathology, SIMS & RC, Surathkal, Karnataka, India.

Email:

further treatment. Six months after FNAC, the mass remained asymptomatic and essentially unchanged.

DISCUSSION

Although Warthin's tumor can occur elsewhere,

it is most commonly found within the parotid gland. In one series, essentially all were located in the parotid [1].

Another series found 90% within the parotid, 7.6% in cervical lymph nodes, and 2.3% in the submandibular gland^[2]. About 10% of Warthin's tumors are multifocal and another 10% bilateral, this tumor is more common in males, smokers have eight times the risk of nonsmokers for developing these tumors.^[3,4] It is the second most common salivary gland neoplasm. The tumor is asymptomatic in 90% of patients. Occasionally, patients may note pain, pressure, or rapid growth of the Mass.^[5]



Figure 1 and 2 Swelling measuring 5x6cm was situated at the angle of right jaw

Pre-operative FNAC diagnosis of warthin's tumor poses diagnosic dilemma, since cytologically it simulates other malignant lesions like oncocytoma, acinic cell carcinoma to certain extent, and smears containing metaplastic squamous cells with regenerative atypia may

²Department of Pathology, JJM Medical college, Davangere, Karnataka, India.

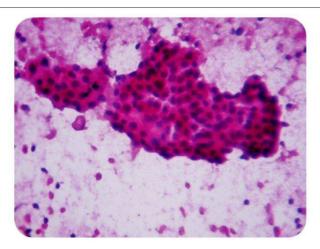


Figure 3: Monolayered sheets of cohesive cells; background lymphocytes; and cystic debris

tumor poses diagnosic dilemma, sincecytologically it simulates other malignant lesions like oncocytoma, acinic cell carcinoma to certain extent, and smears containing metaplastic squamous cells with regenerative atypia may produce false diagnosis of squamous cell produce false diagnosis of squamous cell carcinoma. [6]

In general, FNA has good overall accuracy for diagnosing salivary gland neoplasms (87% to 97%).^[7]

CONCLUSION

Warthin's tumour is found almost exclusively in the parotid gland. It is the second most common salivary gland neoplasm, and exhibits male predilection. FNA has good overall accuracy for diagnosing salivary gland neoplasms. A better understanding of this tumor could help family physicians maintain a broader initial differential diagnosis

REFERENCES

1. EvesonJ, CawsonR. Warthin's tumor (cystadenolymphoma) of salivary glands. A clinicopathologic investigation of 278 cases. *Oral*

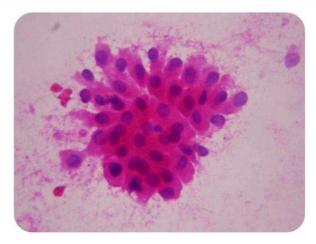


Figure 4: Group of oncocytic cells

Surg Oral Med Oral Pathol 1986;61:256 -2

- 2. Yoo GH, Eisele DW, Askin FB, Driben JS, Johns ME. Warthin's tumor: A 40-year experience at The Johns Hopkins Hospital. Laryngoscope 1994;104: 799–803.
- 3. Robbins & Cotran Pathologic Basis of diseases; Kumar.V, Abbas A, Fausto N; 7th ed; philadelphia; 2004
- 4. Major and minor salivary glands. Rosai & Ackerman's surgical pathology, 9th edn, vol 1, mosby, Missouri; 2004, p 873-916
- 5. Hatch RL, Shah S, Warthin Tumor: A Common, Benign Tumor presenting as a highly suspicious mass. *JABFP* July–August 2005;18(4):320-2
- Klijanienko J . Head and neck; salivary glands, OrellSR, Sterrett GF, Whitaker D, Fine needle aspiration cytology, 4th ed, Churchill Livingstone, New Delhi; 2005
- 7. Stewart CJ, MacKenzie K, McGarry GW, Mowat A. Fine-needle aspiration cytology of salivary gland: a review of 341 cases. *Diagn Cytopathol* 2000; 22:139–46.