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Case Report *Volume 4 Issue 1*

Tangled Tales of Twin Tumors: Harmonizing Salivary Gland Mysteries

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Abstract

Introduction: Synchronous parotid tumors with different histological types account for less than 5% of all salivary gland tumors and the most common combination is Warthin tumor with pleomorphic adenoma. Most lesions detected in salivary glands are benign and unifocal. Ultrasound scans and MRI imaging may not detect separate lesions that are in close proximity and this presents a challenge for radiologists and surgeons in the diagnosis of salivary gland lesions case.

Report: A 61-year-old male patient with right facial swelling since 5 years. Imaging revealed a parotid tumor. FNA shows features of pleomorphic adenoma. On HPE, surprisingly, the 2 tumors with histologically distinct and characteristic histomorphology were revealed. A diagnosis of mixed salivary gland tumor: Pleomorphic adenoma and Warthin›s tumor. Discussion: The incidence of salivary gland neoplasms is 1-2 per 100,000, which is relatively low. The WHO›s classification of salivary gland tumors includes over 30 different types of these tumors. Synchronous tumors of salivary gland are rare with combination of Pleomorphic adenoma and warthin›s tumor being the commonest twins. Surgical treatment with tumor free margins is the treatment method of choice.

Conclusion: Benign synchronic tumors of the accessory lobe and the proper parotid are observed rarely. Parotidectomy access is the treatment method of choice when treating large tumors of the accessory lobe.

Keywords: Warthin Tumor; Parotidectomy; Oncocytic Cells

Introduction

Pleomorphic adenomas (PAs) comprise 71% of benign lesions of salivary glands, making them the most prevalent type of neoplasm.1 Warthin's tumors are the second most common lesion which accounts for 22% of benign salivary gland tumours [1]. In 1.7-5% of patients with salivary gland tumors, there is a synchronous development of tumors with distinct histological characteristics [2,3]. We would like to present the case of a synchronous tumor of the right parotid gland in a 61-year-old male patient.

Case Report

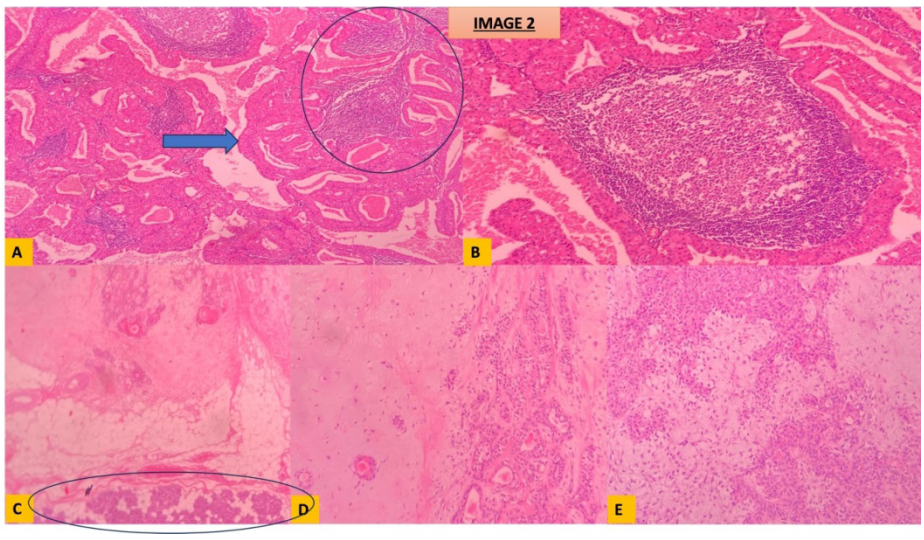
A 61-year-old male smoker came with a swelling on right side of face for 5 years which was gradually increasing in size. There is no history of trauma/facial nerve palsy/ aggravating or relieving factors. On examination, a swelling

in front of ear measuring approximately 5 x 5 cm is seen. Skin over the swelling in shiny, pinchable, and unremarkable. The swelling is non-tender having well defined margins. There were no palpable regional lymphnodes found. On imaging, MRI reveals a 4.2 x 3.8 x 4.5 cm heterogeneously enhancing, necrotic soft tissue lesion involving both superficial and deep lobe of right parotid. Fine needle aspiration cytology of the lesion rendered a diagnosis of MILAN category IV a favoring pleomorphic adenoma.

Grossly, (Figure 1) parotidectomy specimen received shows smooth external surface with partly covered by fibrofatty tissue. On serial slicing, a well demarcated tumor is seen with firm, gray-white tumor having mucoid gelatinous areas (red circle: pleomorphic adenoma) with compressed normal salivary gland at periphery (black circle). A single discrete nodule seen with cystic degeneration (blue circle-Warthin's tumor).

Figure 1: Gross photograph of parotidectomy specimen.

On histopathology, (Figure 2) sections from the discrete nodule showed a cystic tissue lined by bilayered benign oncocytic cells having abundant eosinophilic cytoplasm (A - arrow) with a lymphoid rich stroma (A - circle) along with lymphoid aggregate and germinal centre formation (B). In the same specimen, other areas encountered revealed a triphasic tumor comprising of epithelial (ducts and tubules), myoepithelial and stromal (myxoid/chondromyxoid) components (C, D & E). Normal compressed parotid gland is seen at the periphery (C - circle). Surgical resection margins were free of neoplastic cells.



A & B: Warthin's tumor; C, D & E: Pleomorphic adenoma.
Figure 2: H & E photomicrograph.

Discussion

The incidence of salivary gland neoplasms is 1-2 per 100,000, which is relatively low [4]. The WHO's classification of salivary gland tumors includes over 30 different types of these tumors [5]. It has been noted that smoking poses a significant risk for the development of Warthin's tumors [6]. When there are several simultaneous lesions in one salivary gland, they usually belong to the same histological type, with Warthin's tumors having the highest frequency [7]. After reviewing 341 individuals who had parotidectomy to remove salivary lesions, Zeebregts CJ, et al. [7] found that 14 of the cases included a sample that included two or more tumors. Only one instance of clearly different PSA/Warthin's lesions within the same gland was found by Gnepp DR, et al. [8] during their analysis of 680 patients with salivary gland malignancies. Alongside benign lesions, malignant lesions have also been found, therefore it's vital to be aware of this risk [8,9].

Ultrasound scans and MRI imaging may not detect separate lesions that are in proximity, and this presents a challenge for radiologists and surgeons in the diagnosis of salivary gland lesions [10]. Surgical treatment is the treatment method of choice. There are three ways of approaching the tumors located within the accessory lobe within the cheek: through the oral cavity, through an incision over the tumor, and with the use parotidectomy performed using extended preauricular-cervical incision [11].

Conclusion

Benign synchronic tumors of the accessory lobe and the proper parotid are observed rarely. Parotidectomy access is the treatment method of choice when treating large tumors of the accessory lobe.

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Conflict of Interest

None declared.

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None.

Data Availability Statement

The data will be available on request from the corresponding author.

Informed Consent and Ethics Statement

Adequate informed consent has been taken from the patient and this manuscript has been approved by the institutional review board.

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