A rare case of retroauricular Warthin’s tumor in a 46-year-old man

Dear Editor,

A 46-year-old Taiwanese man presented with a 4-month history of a slow-growing mass in the right retroauricular area (Figure 1). The asymptomatic, ill-defined, movable, soft, skin-colored subcutaneous nodule had a mild central depression. Apart from a 20-year habit of smoking 20 cigarettes/day, his medical history was unremarkable. An incisional biopsy under the clinical impression of an epidermal cyst was performed to confirm tumor diagnosis because of the large size of the mass.

Results of a histopathological examination revealed hyperkeratosis, acanthosis with marked dermal and subcutaneous fibrosis with a small upper portion of a cystic tumor at the deep surgical margin. The cystic tumor was lined by oncocytic epithelial cells with lymphoid and plasma cells in the stroma (Figure 2). The epithelial wall was composed partly of squamous epithelial cells and partly of columnar epithelial cells with mucinous cells. The patient was then referred to the Otolaryngology department where a computed tomography scan without contrast was arranged. A 28-mm solitary mass lesion with interior cystic changes and mild heterogeneous enhancement was found in the inferior, superficial portion of the right parotid gland (Figure 3, arrow). A right partial parotidectomy with facial nerve dissection was performed. The cut surface of the 2.5-cm well-circumscribed nodule showed white firm cystic change. No recurrence was noted at 3-year follow-up.

The histopathological findings confirmed the diagnosis of a Warthin’s tumor (WT, which is descriptively referred to as papillary cystadenoma lymphomatosum).

The WT was first described by Aldred Scott Warthin in 1929.1 The descriptive term for WT is papillary cystadenoma lymphomatosum. The WT is the second most common benign salivary gland tumor representing approximately 2–15% of all parotid tumors after pleomorphic adenomas. A WT is usually unilateral and almost exclusively originates in the parotid gland, which is wrapped around the mandibular ramus. Only approximately 10% of such tumors are bilateral.2 Although cases of WT arising outside the ordinary region of parotid gland are rare, there have been reports of WT originating in the submandibular gland, larynx, lower lip, palate, and even in the buccal fold.3 Most of these tumors occur in patients between the 5th and 7th decades of life, and there appears to be a predilection in males. Smoking has been strongly associated with the tumor with smokers having eight times more risk of developing the tumor than non-smokers. Although its pathogenesis remains unknown, many scholars favor the hypothesis that WT arises from salivary gland tissue entrapped within regional lymph nodes during embryogenesis.1

Clinically, WT usually presents as a solitary well-defined, slow growing, spherical to ovoid painless mass in the mandibular area, although some patients experience mild to severe pain. The mass usually measures 2–4 cm in diameter, but a giant one has been previously reported with a diameter of 10 cm.4 While most cases were described as lateral neck swelling or masses,5 periauricular infra-parotid masses have also been reported.6 In our case, WT originated from the lower pole of superficial lobe in the retroauricular area. Three cases of WT associated with skin have been reported in English literature, and they were all presented as ulcerated tumors.6–8

A histopathological examination of WT may show cysts that are lined by epithelial cells with oncocytic features extending as papillary structures. The presence of prominent lymphocytic infiltrates in addition to the papillary-proliferating, bilayered epithelial lining epithelium is the most distinguishing feature. The characteristic epithelium can help clinicians differentiate WT from mucoepidermoid carcinoma, acinic cell adenocarcinoma, and cystadenocarcinoma. Prior to the operation, complete bilateral screening of the head and neck is suggested because the tumor can be bilateral. Excision remains the best way to cure the tumor, but recurrence has been reported. Long-term follow-up is recommended in view of possible further occurrences of salivary and extrasalivary tumors.9 This reinforces the importance

Figure 1 A flesh-colored subcutaneous nodule in the right retroauricular area.
of accurate diagnoses of WT, especially in the retroauricular areas. We herein presented a case of exceptional WT in a middle-aged man as a pitfall for the differential diagnosis of a retroauricular subcutaneous mass.

**Figure 2** (A) A cystic tumor lined by oncocytic epithelial cells with lymphoid and plasma cells infiltrating the stroma. (B) Epithelial cells with oncocytic features extending as papillary structures.

**Figure 3** A noncontrast computed tomography in transverse section revealed the solitary mass lesion in the inferior, superficial portion of the right parotid gland, with interior cystic change and mildly heterogeneous enhancement.

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**References**


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