### **Letter to Editor**

# Verrucous Carcinoma on the Helix of Pinna

Dear Editor.

Verrucous carcinoma is a variant of well differentiated squamous cell carcinoma with specific clinical, pathological, and behavioral peculiarities to justify its being regarded as specific tumor entity. [1-3] Various names are used in the literature to describe this entity, including Ackerman's tumor, Buschke-Loewemstein tumor, fibrid oral papillomatosis, epithelioma cuniculatum, and carcinoma cuniculatom.[4] It develops most frequently in the mucous membranes of the oral cavity and larynx. The development of this tumor in the ear is particularly rare. It presents as slow growing fungating mass or irregular elevated plaque. It is locally invasive and nonmetastasizing. Usually, verrucous carcinomas develop without sex-related predominance in the individuals aged 50-80 years. A full thickness biopsy is necessary to ensure the correct diagnosis. Treatment of choice is surgical excision because verrucous carcinomas are less radiosensitive than typical squamous cell carcinoma. A diagnosis of verrucous carcinoma should be considered in any patient with an auricular mass.<sup>[5]</sup> In this report, we describe a patient with a verrucous carcinoma of the auricula.

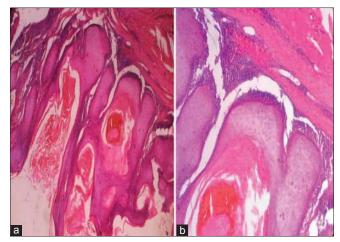
A 35-year-old male presented with an enlarging mass on left pinna. Physical examination revealed a round, lobulated mass approximated  $1 \times 1$  cm on helix. The results of otologic examination, audiologic test, general blood test, liver function test, and chest X-ray findings were within normal limit. Oropharyngeal findings were unremarkable and the patient exhibited neither cranial nerves deficits nor lymphadenopathy but he had history of burn at same site 5 years back. As the lesion was small, the entire mass was surgically removed and histological examination confirmed the diagnosis of verrucous carcinoma [Figure 1a and b]. The patient has no postsurgical complications and at the time of this writing, he has been disease-free for more than 14 months.

Risk factors for verrucous carcinoma are smoking, human papilloma virus 6, 11, 16, and 18, infections, trauma, poor hygiene, minor emissions of irradiations, immunodeficiency, exposure to sunlight, and old scars, etc., [4] Because of their anatomic location auriculae are often exposed to excessive sun and extremes

of temperature. [6] No previous report of verrucous carcinoma of the ear has mentioned about cigarette smoking tobacco use in patients described, but chewing tobacco seems to be strongly associated with verrucous carcinoma at other sites. [7]

In this case, patient had history of burn scar on pinna, which was likely to be reason for verrucous carcinoma at younger age in this patient. The microscopic diagnosis of verrucous carcinoma may be difficult because of its well differentiated character. A superficial biopsy will show only hyperkeratosis, acanthosis, and benign appearing papillomatosis. Sections of an adequate biopsy show swollen and voluminous rete pegs that extend into the deeper tissues, where their pattern becomes quite complex. [8] Surgical excision was done in this case and histopathology confirms the diagnosis. Use of radiotherapy is controversial. According to some reports, it may alter the nature of the tumor to a highly malignant, rapidly metastasizing, poorly differentiated squamous cell carcinoma. [9]

Verrucous carcinoma of the ear is unusual, and the accurate diagnosis of that tumor depends on the results of full-thickness biopsy. Surgery is the treatment of choice; the role of radiotherapy remains controversial. A diagnosis of verrucous carcinoma should be considered in all patients with an auricular mass.



**Figure 1:** (a) Photomicrograph is showing hyperkeratosis, parakeratosis, acanthosis, and keratin field cyst. There were large bulbous, downward proliferations that compress the collage bundles and push them aside. Dense chronic inflammatory cells were seen in dermis (H and E, ×40). (b) High power view showing well differentiated squamous epithelial cells and intact basement membrane. Atypical features were not shown (H and E, ×400)

#### Letter to Editor

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