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Trichelemmoma Affecting Ear- Case Report

Aristimuño Torres M[1]*, Mendez Flores R[2], Gaytan Cantu K[3] and Arenas R[4]

[1]Dermatologist and Dermatoncologist, Dermatological Clinic 'Maria Linda Satélite, México
[2]Dermatologist and Dermatopathologist, Dermatological Clinic 'Maria Linda Patriotismo, México
[3]General Practicioner, Dermatological Clinic 'Maria Linda Satélite, Mexico
[4]Head of the Mycology Department, General Hospital 'Dr. Manuel Gea González, México

***Corresponding author:** Maritza Aristimuño Torres, Dermatologist and Dermatoncologist, Dermatological Clinic 'Maria Linda Satélite, México, Zip code 53100, Email: maristimuno34@gmail.com

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Abstract

Trichilemmoma is a rare follicular tumour that develops from the outer root sheath of the hair. Usually affecting face and neck. These lesions are generally misdiagnosed as another type of tumour, due to an atypical aspect. We present the case of a 32-year-old male with a neoplasm affecting the right ear, confirmed by histopathology.

Keywords: Trichilemmoma; Follicular Neoplasm

Clinical Case

We present the case of a 32-year-old patient who presented a dermatosis of 1 month of development, which rapidly increased in size, located on the right auricle at the level of the concha. It consisted of 3 filiform lesions of mm, the largest of 0.5cm, well demarcated, keratotic and with erythematous-violaceous characteristics, resembling an angiokeratoma (Figure 1).

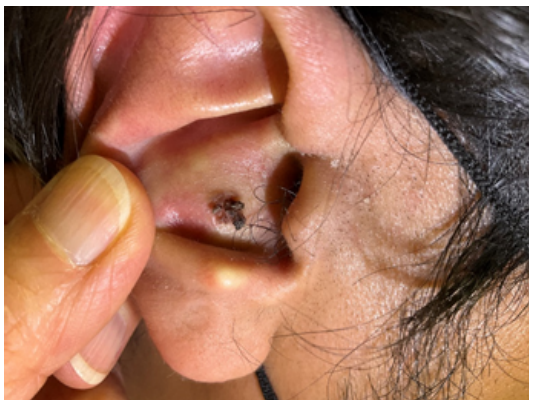

Figure 1: Clinical image of the lesion at the level of the concha.

Dermoscopy showed the 3 keratotic lesions, with a punctiform erythematous base, surrounded by bright white areas and areas of keratosis, yellowish-white and greyish, surrounded by bright white areas (Figure 2).

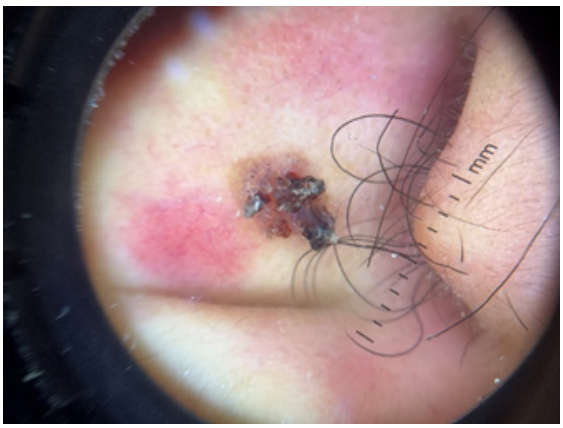

Figure 2: Dermoscopy of the lesion-Hyperkeratosis and radial vessels can be seen at the periphery.

Histopathology reported a hyperplastic central epidermis with papillomatosis, parakeratosis and central exocerosis.

It is arranged in lobules and it's composed of squamous keratinocytes of regular size, ample eosinophilic cytoplasm, with oval nuclei without atypia; in the more superficial layers these cells show ample clear cytoplasm; discrete peripheal palisading. Surrounding the neoplasm, in the superficial reticular dermis, there is dilation of blood vessels, a discrete inflammatory infiltrate of lymphocytes and histocytes. PAS stainign was performed and it highlighted the glycogen of the neoplasm (Figure 3). With these characteristics, the diagnosis of trichilemmoma was established.

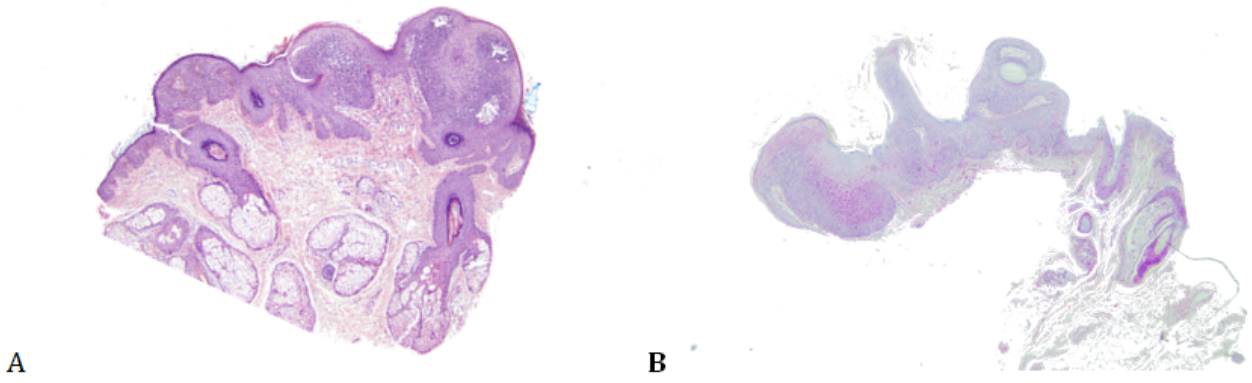

Figure 3: A: Hyperplastic central epidermis with papillomatosis, parakeratosis and central exoserosis; discrete peripheral palisading (HE.40x). B: PAS stain highlighting the glycogen of the neoplasm (40x).

Discussion

In 1962 Headington and French first described the clinical and histological features of thrichilemomma [1.2]. Trichilemmoma is a rare neoformation of follicular origin arising from the outer root sheath of the hair. They are mainly located on the face and neck [2]. They can occur in any race, have no gender predominance, and although they have been observed with a slight predominance in middle-aged adult men [3,4]. They can also occur in children [5,6].

These lesions are generally misdiagnosed as another typo of tumor, as in the case of the presented patient, they do not have their own characteristics. The clinical diagnoses they most frequently resemble include basal cell carcinoma, intradermal nevus, seborrhoeic keratoses, papilloma, sebaceous carcinoma and other adnexal tumors [7,8].

Trichilemmomas can be classified into a solitary, mutiple and desmoplastic form.

Solitary Form: They are presented as an exophytic, papular or nodular, skin-coloured of yellowish neoformation from 1-8 mm, with a smooth or keratotic surface, suggesting a viral wart of cutaneous horn [3,4,9,10].

Multiple Form: associated with Cowden's syndrome, also called ''multiple hamartoma syndrome'' [11].

Desmoplastic Trichilemomma: was described in 1990 by Hunt and co-workers as a pseudomalignant variant, due to the presence of a central or more rarely peripheral desmoplastic (sclerotic) stoma, in which the epithelial lobules get progressively thinned and formed angular cords with a pseudoinvasive appearance simulating spinous or basal cell carcinomas [3,12,13].

Dermoscopically there are no characteristic patterns of trichilemmomas. Horcadas et al, looked for dermoscopic patterns in facial thrichilemommas and observed that in most lesions there were radiating red striae, surrounded by bright white areas (14). Other authors have described forked vessels, a central crusted area and hyperkeratosis, as in this case, and even pigmented áreas [3,4,14,15]. Diagnosis is made by histopathological examination. Trichilemommas are very circumscribed tumors, composed of lobules that extending into the superficial dermis and in continuity with the epidermis or follicular epithelium. The tumor is composed of cells with a large and clear cytoplasm due to the high glycogen content. The histological specimen from this patient underwent PAS staining, which highlighted the collagen of the neoplasm. The surface is usually hyperkeratotic and papillomatosis may be present. A thickened basement membrane surrounds part of the tumor (PAS +) [8].

In the inmunohistochemical panel, the epithelial membrane antigen (EMA), is indicative of adnexal neoplasms [16]. Trichilemmomas are CD34 positive [17,18]. This marker

has been useful in the differential diagnosis of desmoplastic thrichilemmoma from another malignant skin tumor with dense collagenous stroma [19,20]. No histochemical study was performed in this case. Trichilemomma is a benign lesion and therefore does not warrant medical treatment. However, for cosmetic or diagnostic reasons, it can be removed surgically or with carbon dioxide laser, with favorable cosmetic results [18,19,21]. Treatment with micrographic surgery has also been described for desmoplastic trichilemmoma [22].

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