# Rapidly Growing Retroauricular Tumor

Carlos Palma Ducommun, MD; Perla Calderon Herschman, MD; Claudia Morales Huber, MD



A 72-year-old man with a history of hypertension presented with a rapidly growing left retroauricular tumor of 3 months' duration. When manipulated, whitish material with a foul-smelling odor was expressed from the lesion. Physical examination showed an erythematous  $3\times1$ -cm tumor on the left posterior ear with multiple 1- to 2-mm white-yellow papules on its surface. A biopsy of the lesion was performed.

### WHAT'S THE **DIAGNOSIS?**

- a. acneform reaction
- b. adnexal tumor
- c. milia en plaque
- d. nevus comedonicus
- e. postinflammatory milia

PLEASE TURN TO PAGE E18 FOR THE DIAGNOSIS

Dr. Ducommun is from the Dermatology Department, Universidad de Chile, Santiago. Drs. Herschman and Huber are from Clinical Hospital Universidad de Chile. Dr. Herschman is from the Dermatology Service, and Dr. Huber is from the Pathology Service. The authors report no conflict of interest.

Correspondence: Carlos Palma Ducommun, MD, Santos Dumont 999, Independencia, Santiago, Chile (cafrapa@gmail.com).

#### THE **DIAGNOSIS**:

## Milia En Plaque

iopsy results revealed a normal epidermis; the dermis showed multiple small cystic structures lined by a stratified squamous epithelium containing eosinophilic keratin surrounded by a mononuclear cell infiltrate and some melanophages (Figure).

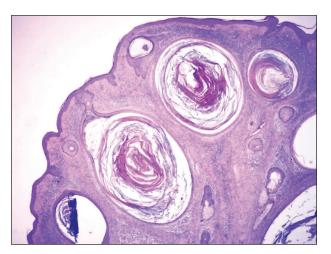
Milia en plaque was first described in 1903 by Balzer and Fouquet.<sup>1</sup> In 1978, Hubler et al<sup>2</sup> presented 2 cases with an asymptomatic, erythematous, and edematous plaque and white milialike lesions. On histopathology, they showed multiple cystic structures characterized by central laminated keratin and an intense polymorphic inflammatory reaction surrounding the cyst and epidermal appendages. Both patients were treated with topical tretinoin with complete response at 3 months. The authors suggested the term *milia en plaque* to describe this clinical entity.<sup>2</sup>

Milia en plaque is described as an infrequent condition that more often presents on the head, neck, and trunk, as well as the periocular, periauricular, and perinasal areas. It has been reported to occur at any age<sup>3</sup> but appears more frequently in middle-aged adults and females. A congenital case also has been reported. It has been associated with pseudoxanthoma elasticum, lichen planus, trauma, kidney transplant, and cyclosporine use, but it also can present in healthy individuals, as in our patient. No clear cause has been identified.

Pathology is characteristic, with multiple cysts filled with keratin and surrounded by 2 or 3 layers of epithelial cells, associated with a mononuclear, nonlichenoid, mononuclear infiltrate.<sup>5</sup> Structures similar to follicular infundibular tumors have been described, suggesting a common origin of follicular lesions as milia en plaque.<sup>6</sup>

Treatment includes surgical excision, cryosurgery, dermabrasion, electrodesiccation, trichloroacetic acid, photodynamic therapy,  $CO_2$  and erbium lasers, topical retinoids, minocycline, and etretinate.<sup>7</sup> We performed a complete surgical excision in our patient.

In acneform reactions, erythematous papules and pustules can be found on the cheeks and forehead. Nevus comedonicus appears during childhood and presents with multiple open comedones. Postinflammatory milia is present in chronic inflammatory pathologies such as



Histopathology revealed a normal epidermis; the dermis showed multiple small cystic structures lined by a stratified squamous epithelium containing eosinophilic keratin surrounded by a mononuclear cell infiltrate and some melanophages (H&E, original magnification ×40).

porphyria cutanea tarda. Histopathologic findings in adnexal tumors show a benign proliferation of any cellular type of a cutaneous annex.

Milia en plaque is an unusual but benign condition that is distinguished clinically by its characteristic presentation.

#### **REFERENCES**

- Balzer F, Fouquet C. Milium confluent retroauricularies bilateral. Bull Soc Fr Dermatol Syphiligr. 1903;14:361.
- Hubler WR, Rudolph AH, Kelleher RM. Milia en plaque. Cutis. 1978;22:67-70.
- Berk DR, Bayliss SJ. Milia: a review and classification. J Am Acad Dermatol. 2008;59:1050-1063.
- Wang AR, Bercovitch L. Congenital milia en plaque. Pediatr Dermatol. 2016;33:258-259.
- Muñoz-Martínez R, Santamarina-Albertos A, Sanz-Muñoz C, et al. Milia en plaque. Actas Dermosifiliogr. 2013;104:638-640.
- Terui H, Hashimoto A, Yamasaki K, et al. Milia en plaque as a distinct follicular hamartoma with cystic trichoepitheliomatous features. Am J Dermatopathol. 2016;38:212-217.
- Tenna S, Filoni A, Pagliarello C, et al. Eyelid milia en plaque: a treatment challenge with a new CO<sub>2</sub> fractional laser. *Dermatol Ther*. 2014;27:65-67.