## **QUIZ SECTION**

# White Papules Around the Ears: A Quiz

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A 67-year-old patient presented multiple grouped and disseminated small whitish cystic papules, varying in diameter between 0.5 and 3 mm. They occurred first on both eyelids, followed by the neck and anterior neckline and, finally, on both ears over a period of 7 years. On both ears they appeared on a yellowish-brown plaque, mimicking a nevus sebaceous, at the peri- and intra-auricular areas, including the crus of helix and the complete concha (Fig. 1). The patient complained of painful ears and a burning sensation. Apart from a slight increase in total cholesterol and lowdensity lipoprotein (LDL)-cholesterol levels, paraclinical tests were normal. There was no history of trauma, blistering disease or systemic medication, and no relatives known to have similar skin lesions. The patient denied using cosmetic creams or oils. The patient did not wear glasses but did wear earrings; however, the ear lobes were not affected. The auricular skin lesions were treated unsuccessfully with clobetasol solution.

What is your diagnosis? See page XXX for answer.

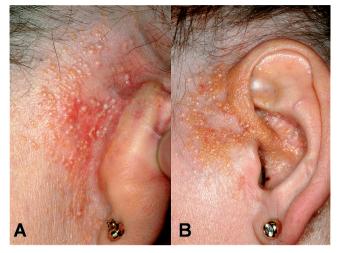


Fig. 1. Grouped and disseminated small whitish cysts observed on both ears at the pre- (A) and retro-auricular (B) areas as well as the crus of helix and the complete concha.

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## White Papules Around the Ears: Comment

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## Diagnosis: Milia en plaque

Milia en plaque (MEP) are tiny (<0.5 cm) whitish or yellowish grouped cysts (milia) that arise eruptively on an erythematous plaque. MEP are mostly found in unilateral, periauricular, periorbital, submandibular or supraclavicular regions, with a predisposition to affect female and middleaged subjects (1, 2). Two forms can be distinguished: primary and secondary MEP. Whereas the pathomechanism for primary MEP is unknown, secondary MEP occur after trauma (wearing glasses or earrings), dermabrasion, seconddegree burns, radiotherapy, or after the use of cosmetic preparations, topical steroids, 5-flurouracil therapy or systemic drug therapy, including non-steroidal-anti-inflammatory drugs, cyclosporine or tricyclic antidepressants. Secondary MEP are also associated with blistering diseases, such as epidermolysis bullosa, porphyria cutanea tarda, bullous lichen ruber planus, bullous pemphigoid, pseudoxanthoma elasticum, cutaneous lupus erythematodes or renal transplant recipients (1-3). In this case, MEP occurred bilaterally with similar intensity, mainly pre-auricular and intra-auricular, including the crus of helix and the total concha. Untypically, lesions were grouped on a yellowish-brown plaque mimicking a nevus sebaceous and occurred at several locations sequentially: the evelids, followed by the neck and neckline, then peri- and intra-auricular regions. MEP can mimic xanthelasma palpebrarum when localized infra-orbitally (1). Skin biopsies from the retroauricular area (Fig. 2) showed multiple, aggregated, thin-walled micro- and macro-cysts filled with keratin in the upper dermis. The cysts were immunohistochemically positive to cytokeratin 5, 6 and pancytokeratin, as well as negative to cytokeratin 18, 20 and epithelial membrane antigen. Skin biopsy from the upper eyelid, the region of primary manifestation, presented some vellus hair follicles, which were absent at the auricular and the neck region. Although some vellus hair follicles were observed, eruptive vellus hair follicles could be excluded (4). Considering the histological and clinical findings, the missing aetiology for secondary MEP and excluding nodular

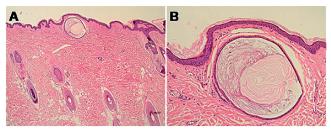


Fig. 2. Histology from a biopsy of the retroauricular area (haematoxylin and eosin stain). In the upper dermis (A) there is a thin-walled cyst (B) but no vellus hair follicles.

elastosis Favre-Racouchot, epithelioma adenoides cysticum, lichen planus tumidus folliculans, follicular mucinosis and localized steatocystoma multiplex, primary MEP is the correct diagnosis (1–5). MEP are mainly considered a cosmetic problem, and despite occasional spontaneous regression, carbon dioxide laser therapy seems to be the therapy of choice. Other options include minocycline for inflamed lesions, topical or systemic retinoids, dermabrasion, electrodessication, cryotherapy or opening the cysts surgically (5–7).

## REFERENCES

- Ergin S, Basak P, Sari A. Milia en plaque. J Eur Acad Dermatol Venereol 2000; 14: 47–49.
- 2. Combesale P, Faisant M, Dupin M. 'Milia en plaque' in the supraclavicular area. Dermatology 1995; 191: 262–263.
- 3. Sandhu K, Gupta S, Handa S. CO2 laser therapy for Milia en plaque. J Dermatolog Treat 2003; 14: 253–255.
- Kaya TI, Tataroglu C, Tursen U, Ikizoglu G. Eruptive vellus hair cysts: an effective extraction technique for treatment and diagnosis. J Eur Acad Dermatol Venereol 2006; 20: 264–268.
- Stork J. Retroauricular bilateral 'milia en plaque'. Dermatology 1995; 191: 260–261.
- Ishuira N, Komine M, Kadono T, Kikuchi K. A case of milia en plaque successfully treated with oral etretinate. Br J Dermatol 2007; 157: 1287–1289.
- Al-Mutairi N, Joshi A. Bilateral extensive periorbital milia en plaque treated with electrodesiccation. J Cutan Med Surg 2006; 10: 193–196.