



A giant milia en plaque on the ankle as a rare localization

Nadir bir lokalizasyon; ayak bileğinde dev milia en plak

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Anahtar Kelimeler: Milia en plak, topikal steroidler, tretinoin

To Editor,

"Milia" is the term used to describe benign, superficial keratin cysts that appear as small white papules. These cysts can occur as a primary condition or secondary to other underlying skin disorders. Milia en plaque (MEP) is a rare condition characterized by multiple grouped milia located on erythematous, infiltrating plaques¹. In this case report, we present a case of giant MEP on the ankle.

Case History

A 71-year-old woman presented to our dermatology outpatient clinic with a painless mass on the posterior aspect of her right ankle, which had developed 3.5 months prior and progressively increased in size. The patient had a known history of arrhythmia, hypertension, and cellulitis of the right leg four months earlier. She had been using 2.5 mg of apixaban daily, 50 mg of metoprolol daily, and

betamethasone valerate ointment on her right leg for the past four months. General physical examination findings were unremarkable. Dermatological examination revealed numerous white, grouped cystic lesions of varying sizes on an approximately 8×10 cm erythematous, infiltrated plaque on the posterior aspect of the right ankle (Figure 1). Dermoscopy revealed white, homogeneous, lobulated, unstructured areas surrounded by an erythematous halo (Figure 2). A punch biopsy was performed with a preliminary diagnosis of MEP, postinflammatory milia, and lichen planus follicularis tumidus. Histopathological examination revealed small cystic structures lined with keratinized squamous epithelium in the subepidermal and superficial dermal layers (Figure 3). Based on the clinical and histopathological findings, a diagnosis of MEP was made. Topical tretinoin 0.1% was initiated once daily as treatment. The lesions were manually extracted during monthly follow-up visits (Figure 4).

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Figure 1. Clinical photograph before treatment

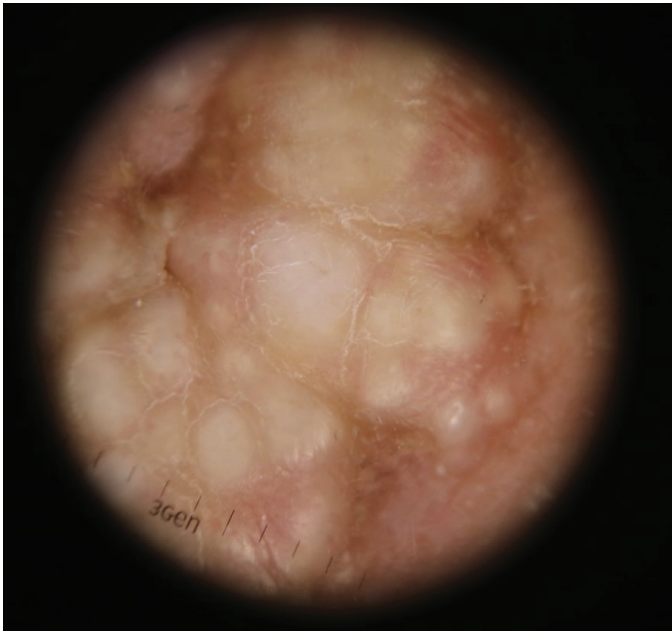


Figure 2. Dermoscopic image of the lesion before treatment

Discussion

MEP is a rare variant of milia characterized by clustered keratin-filled cysts arising from erythematous plaques. MEP was first reported in the retroauricular region, and lesions are typically observed in the head and neck, particularly in the periauricular area. It can also occur in the periorbital, nasal bridge, and trunk regions². Our case is notable for its unusual anatomical localization and relatively large size, both of which are rarely reported in the literature.

In addition to MEP, milia can present in other clinical forms. Primary milia occur spontaneously, particularly in neonates, whereas secondary milia may arise due to skin trauma, inflammatory dermatoses such as

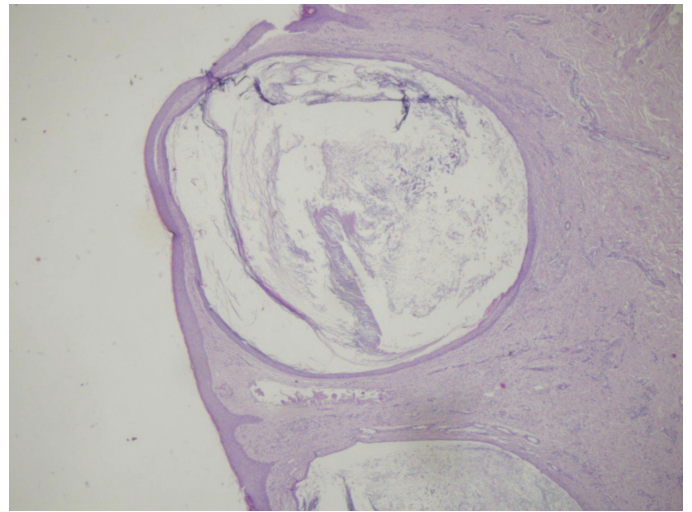


Figure 3. Histopathological findings



Figure 4. Clinical photograph after treatment

bullous pemphigoid or lupus erythematosus, or medications including topical corticosteroids, 5-fluorouracil, and cyclosporine. Furthermore, eruptive and syndromic variants have been described, highlighting the clinical heterogeneity of milia presentation³. MEP has been associated with pseudoxanthoma elasticum, discoid lupus erythematosus, lichen planus, trauma, and drugs such as cyclosporine, particularly in patients who have undergone kidney transplantation; however, it can also occur in healthy individuals². In our patient, the lesion developed following cellulitis and the application of topical corticosteroids. Topical corticosteroids may have played a role in both the initiation and progression of lesions.

Histological examination may be required to exclude other differential diagnoses, such as follicular hamartoma, comedo nevus, follicular mucinosis, and Favre-Racouchot disease. MEP typically occurs between the fourth and seventh decades of life and is more prevalent in women. Milia are thought to originate from or mimic the infundibular portion of vellus hair follicles³. The age and gender of our patient were consistent with those reported in the literature⁴.

Due to the rarity of MEP standardized treatment protocols are lacking, and therapeutic approaches are primarily based on individual case reports and small case series. Treatment modalities for MEP include

topical retinoids, manual extraction, systemic retinoids, oral minocycline, cryotherapy, electrodesiccation, laser therapies such as CO₂ and erbium: yttrium-aluminum-garnet, and photodynamic therapy⁵.

Similarly, we believe that despite the prior use of topical steroids in our patient, they may have contributed to the formation of MEP. Our patient was completely healed with topical tretinoin and manual extraction.

Ethics

Informed Consent: Informed consent form was obtained from patient for publication.

Footnotes

Authorship Contributions

Surgical and Medical Practices: A.Ş.S., Z.D.E., G.A., N.K., Concept: A.Ş.S., Z.D.E., G.A., Design: A.Ş.S., G.A., Data Collection or Processing: A.Ş.S., G.G., Analysis or Interpretation: A.Ş.S., Z.D.E., G.G., G.A., N.K., Literature Search: A.Ş.S., G.G., Writing: A.Ş.S., Z.D.E., G.G., G.A., N.K.

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