Sudden Onset of Photodistributed Milia - an Unusual Presentation of Cutaneous Connective Tissue Disease?

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Background

- Discoid lupus erythematosus (DLE) is a subtype of cutaneous lupus erythematosus.
- A rare presentation of DLE includes facial milia cysts and inflammatory plaques^{1.}
- Milia en plaque (MEP) is characterized by aggregated milia on an erythematous base, commonly appearing on the face, neck, and retroauricular area^{2,3}.
- A previous study suggested that milia may form due to damage to adnexal structures in the setting of existing DLE².

Case Presentation

- We describe a 69-year-old female who presented with a 5-month history of facial rash. She reports developing widespread milia cysts in a malar distribution across the cheeks and forehead, which then spread to her neck and postauricular area.
- Physical exam was notable for hundreds of small uniform white milium on the face and neck. (Figure 1A, 1B).
- The patient had no other cutaneous of systemic evidence of systemic lupus or other autoimmune disease.
- Pathology revealed a dilated superficial epidermoid cyst with surrounding lymphocytic inflammation and a vacuolar interface dermatitis around the cyst, as well as increased dermal mucin (Figures 2, 3,4 & 5).
- Immunofluorescence showed fibrinogen deposition at the dermoepidermal junction. PAS staining was negative for fungal forms.



Fig. 1A, 1B
Clinical photograph of widespread milia cysts in a malar distribution across the cheeks, forehead and postauricular area.

Histologic Findings

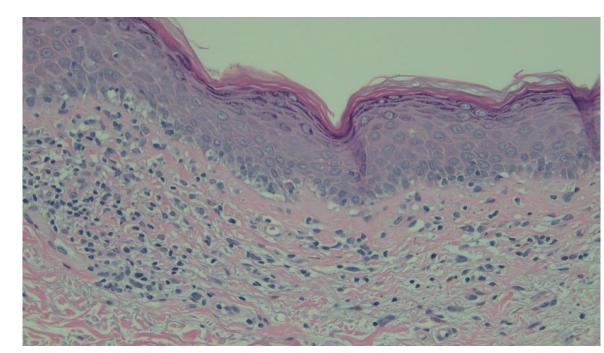


Fig. 2 H&E x40 shows vacuolar interface dermatitis along the dermoepidermal junction

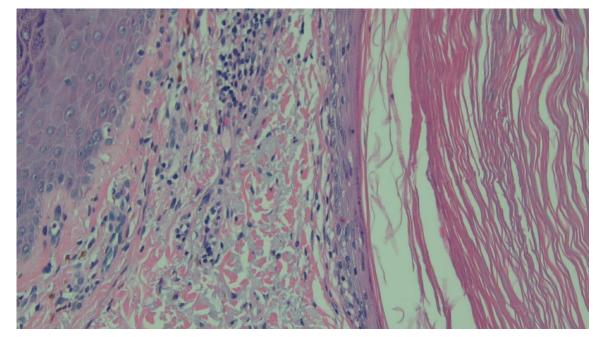


Fig. 3 Higher power photo of vacuolar interface dermatitis at the dermoepidermal junction and along milia with dyskeratotic keratinocytes (H&E 200X)

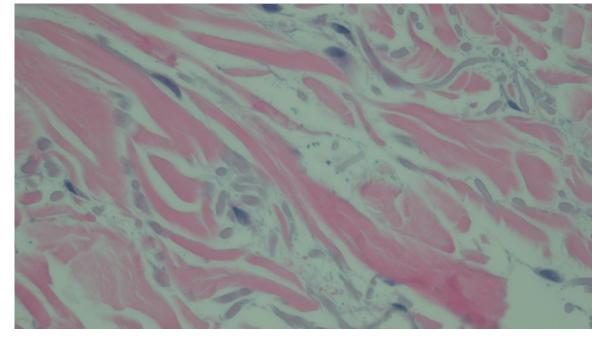


Fig. 4 H&E x600 shows increased dermal mucin

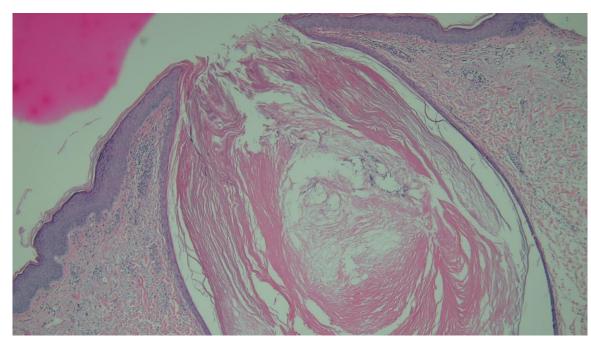


Fig. 5 H&E x40 shows milia and interface changes

Clinical Course

- A 69-year old female presented with a 5-month history of discoid lupus on the face. She reported developing widespread milia cysts in a malar distribution across the cheeks and forehead, which then spread to her neck and behind her ears.
- Patchy inflammatory plaques of dilated cystic follicles and follicular cysts with surrounding inflammation were present, mostly chronic in nature.
- Biopsies revealed dilated keratin follicular cysts with surrounding lymphocytic inflammation. Immunofluorescence showed fibrinogen positive deposition at the dermoepidermal junction (Figures 2 and 3).
- The remainder of her body showed no ulcers, alopecia, or other signs of systemic lupus.
- Patient was advised to continue hydroxychloroquine 200mg BID and use of topical tretinoin 1%.

Discussion

- Discoid lupus erythematosus (DLE) is a subtype of cutaneous lupus erythematosus which has a variety of presentations. Rare presentations of DLE have been described, including DLE with widespread facial milia cysts and inflammatory plaques, mimicking acneiform eruptions¹.
- A similar entity of milia en plaque (MEP) is characterized by aggregated milia on an erythematous base, commonly appearing on the face, neck, and retroauricular area^{2,3}.
- The underlying mechanism of MEP and the milia-variant of DLE remain unclear, however Boehm et al. suggested that milia may form due to damage to adnexal structures in the setting of existing DLE².
- Only one similar presentation of DLE has been reported previously, this case broadens our knowledge of a rare manifestation of this cutaneous connective tissue disease.

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