Dermoscopic and Cytological Findings in Scleromyxedema

Tuğba Tehçi1, Elif Burcu Şenyurt2, Murat Durdu3, Enzo Errichetti4

1 Department of Dermatology, University of Health Sciences -Adana Health Practice and Research Center, Adana, Turkey
2 Department of Pathology, University of Health Sciences -Adana Health Practice and Research Center, Adana, Turkey
3 Department of Dermatology, Başkent University Faculty of Medicine, Adana Dr. Turgut Noyan Application and Research Center, Adana, Turkey
4 Department of Dermatology, University Hospital “Santa Maria della Misericordia”, Udine, Italy

Citation: Tehçi T, Şenyurt EB, Durdu M, Errichetti E. Dermoscopic and Cytological Findings in Scleromyxedema. Derma tol Pract Concept. 2023;13(3):e2023147. DOI: https://doi.org/10.5826/dpc.1303a147

Accepted: December 4, 2022; Published: July 2023

Copyright: ©2023 Tehçi et al. This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial License (BY-NC-4.0), https://creativecommons.org/licenses/by-nc/4.0/, which permits unrestricted noncommercial use, distribution, and reproduction in any medium, provided the original authors and source are credited.

Funding: None.

Competing interests: None.

Authorship: All authors have contributed significantly to this publication.

Corresponding author: Murat Durdu, Department of Dermatology, Başkent University Faculty of Medicine, Adana Dr. Turgut Noyan Application and Research Center, Adana, Turkey. Tel: +90 2422406710 Fax: +90 2422496040 Email: sivandr@hotmail.com

Case Presentation

A 63-year-old male presented with pruritic, firm, dome-shaped, skin-colored/whitish papules mainly located over the forehead, neck, elbows, hands and feet (Figure 1A) that had progressively increased in number over the last year; skin induration of the trunk without papular lesions was also evident on palpation. Dermoscopic examination of the papules showed round/oval, homogenous, white-ivory structureless areas similar to “rice grains” with no vessels (Figure 1B), while cytological assessment of slit-skin smear taken from the lesions revealed round fibrotic collagen structures and mucinous materials (Figures 1, C and D). Based on clinical, dermoscopic and cytological findings, a possible diagnosis of sclero-myxedema was made, and a biopsy was taken for histological examination, that confirmed this hypothesis by revealing fibroblast proliferation, collagen deposition, perivascular lympho-plasmocytic infiltration, and mucin deposition in the dermis (Figures 1, E and F). Laboratory tests showed monoclonal gammopathy, while no systemic involvement was detected on further examination. Intravenous immunoglobulin therapy (2 g/kg dose for 5 consecutive day per month) was started, with significant improvement after three cycles of treatment.

Teaching Point

Scleromyxedema is a form skin mucinosis with possible extra-cutaneous involvement, including neurological, renal, hematological, and rheumatological, that may carry a poor prognosis if not treated timely [1]. Diagnosis is generally clinical, yet in initial phases/incomplete instances it may be challenging to differentiate from similar conditions (eg lichen planus, lichen amyloidosis, papular lichen simplex chronicus, papular granuloma annulare, multiple follicular adnexal tumors) that, however, show a different dermoscopic and
Figure 1. (A) Dome-shaped, firm, small papules on the nape are similar as seen on clinical examination. (B) Dermoscopy reveals round and oval-shaped white-ivory homogenous areas similar to rice grains (magnification x10). (C,D) Cytology shows round fibrotic collagen structures and mucinous materials (May-Grünwald Giemsa x1000). (E) Histopathological examination displays increased mucin deposition in the superficial dermis and stellated fibroblasts between collagen fibers (H&E x200). (F) Fragmented elastic fibers are also evident (Alcian blue stain x200).
cytological pattern [2]. Therefore, the use of such techniques may increase the index of suspicion for sclero-myxedema with consequent prompt treatment.

References
