

Follicular Mucinosis in Hematologic Malignancies: A Review of Clinical and Pathological Features

Shamir Geller*

Department of Medicine, Memorial Sloan Kettering Cancer Center and Weill Cornell Medical College, New York, USA

Introduction

Follicular Mucinosis (FM) is a rare idiopathic skin condition that typically presents with infiltrated plaques, nodules, hypopigmented or erythematous patches, and flesh-colored follicular papules. Uncommon manifestations include alopecia areata-like symptoms, scarring alopecia, folliculitis, acneiform eruptions, linear lesions following Blaschko lines, and urticaria-like follicular mucinosis. In primary FM, lesions are most commonly found on the face, head, and neck, though the trunk and extremities may also show widespread involvement. However, the clinical features alone are often insufficient to distinguish between the primary, benign form and the secondary form associated with mycosis fungoides. As such, follow-up is essential for proper diagnosis and management. A 16-year-old girl presented with a slowly enlarging erythematous patch on the right side of her forehead, which had been present for the past two years and was mildly irritating. Her family and medical histories were unremarkable [1,2].

Description

Well-defined, alopecic, and erythematous patch measuring 1 by 2 cm with significant follicular plugs in the middle was discovered during a dermatological examination. Around the lesion, a small ring of mildly hypopigmented skin was seen. A general physical exam revealed nothing unusual. Complete blood count, erythrocyte sedimentation rate, liver and kidney function tests, and urinalysis were among the laboratory tests that all fell within the normal range for. There were no organomegaly, enlarged lymph nodes, or any abnormal signs on the chest x-ray or belly ultrasound. There was a skin punch biopsy done. A portion of the sample that underwent Hematoxylin and Eosin (H&E) staining exhibited a mixed inflammatory infiltration that was primarily made up of lymphocytes and included and surrounded the follicular epithelium as well as a minor focal follicular spongiosis. The mucinous character of the infiltration in the follicular epithelium was revealed by alcian blue staining. The histopathology analysis revealed FM characteristics. An accurate diagnosis of follicular mucinosis was obtained based on the results of the clinical and histological testing [3,4].

Pinkus first identified FM as alopecia mucinosa in 1957. It is a rare idiopathic disorder with an unknown aetiology that mimics folliculitis, alopecia areata, scarring alopecia, chronic eczema, acne, urticaria, and erythrodermic forms by causing mucin deposition within the hair follicles and sebaceous glands of the pilosebaceous unit in addition to a superficial and deep perivascular. There are two distinct clinical kinds of dermatosis. Idiopathic (primary or benign) FM is the most prevalent kind and typically affects children

***Address for Correspondence:** Shamir Geller, Department of Medicine, Memorial Sloan Kettering Cancer Center and Weill Cornell Medical College, New York, USA, E-mail: gellers@gmail.com

Copyright: © 2024 Geller S. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original author and source are credited.

Received: 03 December, 2024, Manuscript No. jfr-25-158061; **Editor assigned:** 05 December, 2024, PreQC No. P-158061; **Reviewed:** 16 December, 2024, QC No. Q-158061; **Revised:** 21 December, 2024, Manuscript No. R-158061; **Published:** 30 December, 2024, DOI: 10.37421/2157-7145.2024.15.632

and young people. Primary FM, which exhibits spontaneous resolution, is regarded as a temporary kind of disease that often clears up within a few years.

Secondary FM, which typically affects older patients and manifests as widespread lesions, is linked to underlying inflammatory and malignant processes, with mycosis fungoides (MF) being the most prevalent malignancy. Despite the fact that Hodgkin disease has been recorded in children and young adults with longer lengths of follow-up, MF is the lymphoma that is most frequently associated with it. The distinction between main and secondary variations must be made using clinical and histological criteria; however these criteria are not sufficiently precise, necessitating patient follow-up. Additionally, it has been suggested that a clonal T-cell receptor gene rearrangement may aid in differentiating FM from FM associated with malignancy. Additionally, it has been observed that there are no definitive criteria for separating idiopathic FM from FM associated with lymphoma, and idiopathic FM may be one of the variant forms of MF that have a protracted, nonaggressive clinical course. Patients with 'idiopathic FM' should be closely monitored over an extended period of time [5].

Conclusion

Since there is no established therapy for primary FM, a variety of anecdotal evidence-based approaches have been tried, including topical, intralesional, and systemic corticosteroids, topical and systemic retinoids, dapsone, methotrexate, cyclophosphamide, minocycline, hydroxychloroquine, interferons, indomethacin, topical pimecrolimus, ultraviolet A, superficial radiation. The lesion's appearance has improved while our patient is still being monitored clinically thanks to the topical corticosteroid treatment.

Acknowledgement

None.

Conflict of Interest

None.

References

1. Brown, Holly A., Lawrence E. Gibson, Ramon M. Pujol and John A. Lust, et al. "Primary follicular mucinosis: Long-term follow-up of patients younger than 40 years with and without clonal T-cell receptor gene rearrangement." *J Am Acad Dermatol* 47 (2002): 856-862.
2. Cerroni, Lorenzo, Regina Fink-Puches, Barbara Bäck and Helmut Kerl. "Follicular mucinosis: A critical reappraisal of clinicopathologic features and association with mycosis fungoides and Sezary syndrome." *Arch Dermatol* 138 (2002): 182-189.
3. Gibson, Lawrence E., Sigfrid A. Muller, Kristin M. Leiferman and Margot S. Peters. "Follicular mucinosis: Clinical and histopathologic study." *J Am Acad Dermatol* 20 (1989): 441-446.
4. Zvulunov, Alex, Vered Shkalim, Dan Ben-Amitai and Meora Feinmesser.

- "Clinical and histopathologic spectrum of alopecia mucinosa/follicular mucinosis and its natural history in children." *J Am Acad Dermatol* 67 (2012): 1174-1181.
5. Rongioletti, Franco, Simona De Lucchi, Dan Meyes and Marco Mora, et al. "Follicular mucinosis: A clinicopathologic, histochemical, immunohistochemical and molecular study comparing the primary benign form and the mycosis fungoides-associated follicular mucinosis." *J Cutan Pathol* 37 (2010): 15-19.

How to cite this article: Geller, Shamir. "Follicular Mucinosis in Hematologic Malignancies: A Review of Clinical and Pathological Features." *J Forensic Res* 15 (2024): 632.