PAEDIATRIC FOLLICULAR MUCINOSIS WITHOUT PROGRESSION TO MYCOSIS FUNGOIDES: A LONG-TERM CLINICOPATHOLOGIC STUDY

A. Di Guardo[1], L. Ambrosio[1|2], M. Testa[1], D. Didona[1], F. Moro[1|2], A. Rallo[1], G. Di Lella[1], L. Colonna[1], S. Pallotta[1], A. Panebianco[1], L. Fania[1|3]

[1]IDI-IRCCS, Dermatological Research Hospital, Rome, Italy; [2]UOC of Dermatology, Department of Medical and Cardiovascular Sciences, "Sapienza" University of Rome, Italy; [3]Department of Life Science, Health, and Health Professions, Link University of Rome, Italy

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Background. Follicular mucinosis (FM), also known as alopecia mucinosa, is a rare clinicopathologic entity characterized by mucin deposition within the follicular epithelium, with or without sebaceous gland involvement [1,2]. Since its original description, the main concern has been its possible relationship with cutaneous T-cell lymphoma, particularly mycosis fungoides (MF) [3]. This study aimed to characterize the clinical, histopathologic, molecular, therapeutic, and follow-up features of pediatric FM in a large single-center cohort.

Materials and Methods. We performed a retrospective single-center study including patients aged <18 years diagnosed with FM at a tertiary dermatology referral center in Italy between 2003 and 2026. Demographic, clinical, histopathologic, molecular, treatment, and outcome data were collected from medical records. Histopathologic features, including folliculotropism and epidermotropism, were recorded.

Results. Twenty-three pediatric patients were included: 14 males (60.9%) and 9 females (39.1%), with a mean age at presentation of 12.6 ± 3.0 years. The head and neck region was involved in 21 cases (91.3%) and represented the only affected site in 16 patients (69.6%). Histopathology showed folliculotropism in 16/23 cases (69.6%) and epidermotropism in 13/23 (56.5%), with both features present in 8 patients (34.8%). TCR analysis was available in 12 cases: 8 were negative, 2 polyclonal, and 2 monoclonal. Treatment was mainly conservative and skin-directed, most frequently topical corticosteroids (14/23, 60.9%). At last follow-up, all 12 evaluable patients had achieved CR. No patient with available follow-up progressed to MF.

Conclusions. Pediatric FM in this cohort showed favorable long-term outcomes, frequent complete remission over time, and no progression to MF among evaluable patients in line with previous pediatric series supporting an indolent course [4,5]. Folliculotropism, epidermotropism, or TCR monoclonality should not be interpreted in isolation as evidence of lymphoma. Conservative management with structured clinicopathologic follow-up appears appropriate for most children, while repeat biopsy and closer surveillance should be reserved for persistent, recurrent, extensive, or clinically atypical disease.

References

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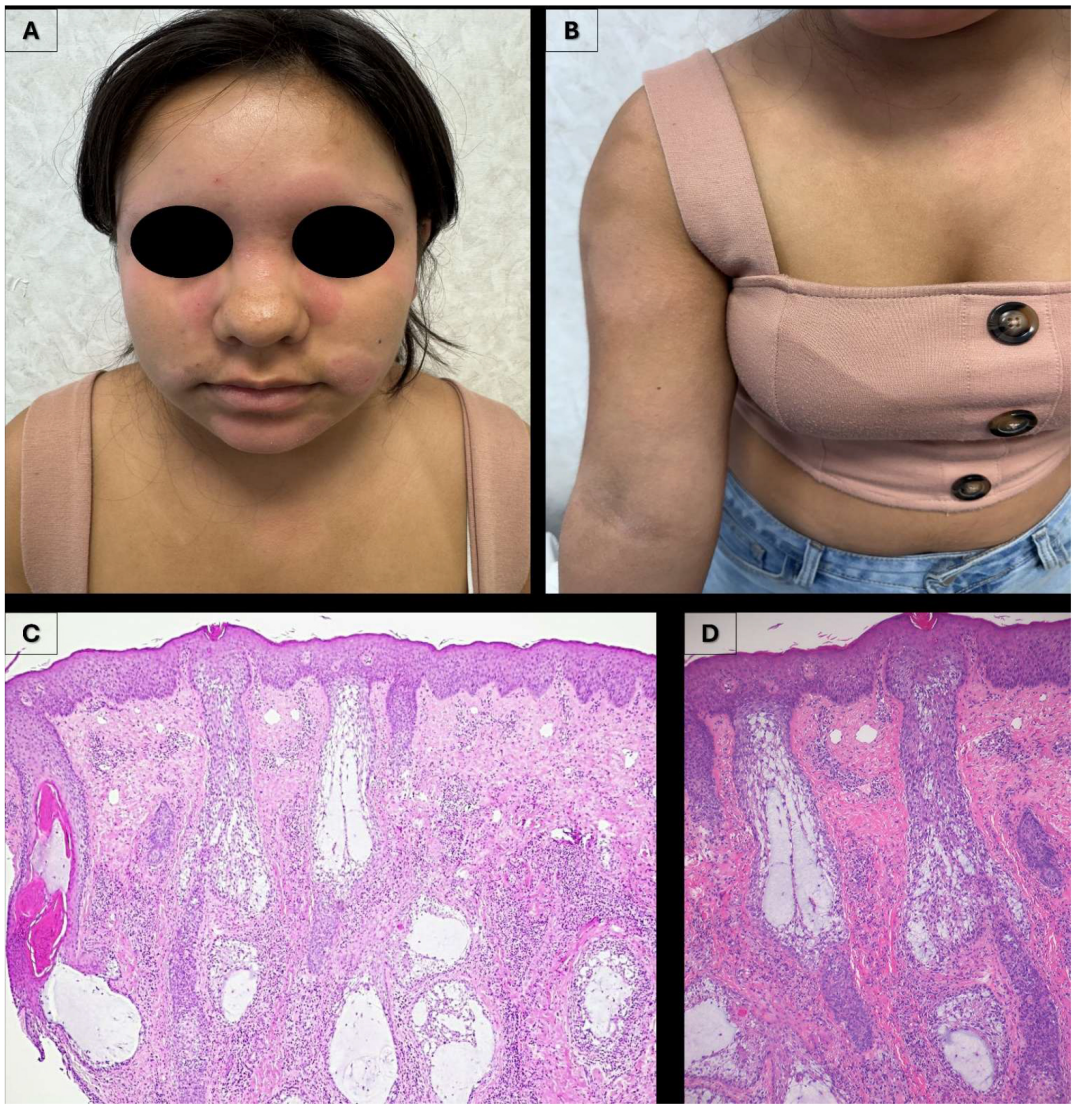

Figure 1. ***(a, b)*** Clinical presentation of pediatric follicular mucinosis in a patient with multifocal disease involving the face, including the eyebrows, nasolabial folds, cheeks, chin, and neck, with additional lesions on the trunk and extremities. ***(c)*** Hematoxylin and eosin staining (10×) showing mucinous degeneration of the follicular epithelium with prominent pale intrafollicular material, associated with a dense perifollicular lymphocytic infiltrate and folliculotropism. ***(d)*** Higher-power inset, hematoxylin and eosin staining (30×), highlighting intrafollicular mucin deposition and the perifollicular lymphocytic infiltrate in greater detail.