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Folliculotropic mycosis fungoides associated with myelodysplastic syndrome: a rare association

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ABSTRACT

We report a rare case of Folliculotropic Mycosis Fungoides (FMF) associated with Myelodysplastic Syndrome (MDS) in a 68-year-old male presenting with persistent erythematous, acneiform papules on multiple body areas. While the patient was otherwise asymptomatic, routine laboratory tests revealed MDS. A skin biopsy confirmed FMF. FMF is a distinct and more aggressive variant of Mycosis Fungoides, characterized by deep follicular infiltration, often associated with poor prognostic factors. MDS is a clonal hematologic disorder that may share immunologic and environmental risk factors with cutaneous T-cell lymphomas. Although the coexistence of lymphoid neoplasms and MDS has been described, reports specifically highlighting FMF in this context are exceedingly rare. This case underscores the importance of vigilance for hematologic malignancies in patients with cutaneous lymphomas and supports further investigation into the underlying mechanisms linking FMF and MDS.

KEYWORDS

Folliculotropic Mycosis Fungoides, Myelodysplastic Syndrome, Cutaneous T-cell lymphoma



MAIN ARTICLE

Introduction

We report an uncommon case of Folliculotropic Mycosis Fungoides (FMF) associated with Myelodysplastic Syndrome (MDS), a rare coexistence that has not been widely reported in previous data.

Observation

A 68-year-old male presented with erythematous, acneiform papules localized on the face, axillae, pubic region, scalp, trunk, and limbs (Figs. 1-3). Despite symptomatic treatments, the lesions persisted. The patient was in good health, with no signs of fever or fatigue. A laboratory workup incidentally revealed a myelodysplastic syndrome. We performed a skin biopsy on one of the papules that confirmed the diagnosis of FMF.



Figure 1: follicular papules of folliculotropic mycosis fungoides on the axillae



Figure 2: follicular papules on the face



Figure 3: follicular papules on the trunk



Discussion

MF is the most common subtype of primary cutaneous T-cell lymphoma. Its clinical presentation varies widely, often complicating diagnosis [1]. Among the variants of MF, FMF stands out due to its distinct clinical and histological features, setting it apart from classic MF. FMF is characterized by deep follicular involvement and a more aggressive course. Several poor prognostic factors in MF include male gender, age >60 years, large cell transformation, elevated lactate dehydrogenase (LDH), blood eosinophilia, and notably, folliculotropism, a key feature discussed in this observation [2].

MDS, on the other hand, is a clonal disorder of hematopoietic stem cells with a high potential for progression to acute leukemia. MDS presents with no specific symptoms, and around 50% of patients are asymptomatic at the time of diagnosis. In most cases, its cause remains unknown [3].

According to the literature, this association may be explained by a shared etiology—such as exposure to solvents, chemical agents, or HTLV-1—and a common pathophysiological mechanism involving immunological abnormalities caused by the dysplastic process affecting the lymphoid cell line. The coexistence of MDS and other lymphoid neoplasms appears to be relatively common, with both conditions often diagnosed simultaneously [4].

Conclusion

The co-occurrence of both pathologies has been described previously, but this case report specifically highlights the association between the folliculotropic variant of MF and MDS. Further studies are required to examine the possible causes and underlying mechanisms of this association. Healthcare professionals managing patients with cutaneous lymphomas should remain alert to the heightened risk of secondary malignancies.

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