A Challenging Mimicker: Uncovering Hypopigmented Mycosis Fungoides from Common Benign Dermatoses

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Introduction

Mycosis Fungoides (MF) is the most common form of cutaneous T-cell lymphoma (CTCL). It has an incidence rate of 0.41 per 100,000 persons with a median age of 50-60 years old and an excellent prognosis if caught early. MF has various morphological variants (1). Less frequently, MF may present as hypopigmented macules and patches. This unusual variant is commonly seen in children as well as in skin of color patients (1). It is also associated with a slower progression and benign clinical course. Although described in literature, a strong suspicion is necessary to diagnose hypopigmented MF as its presentation may closely mimic other common benign cutaneous dermatoses (2). We report a case of hypopigmented MF in a 59-year-old Hispanic female.

Case

A 59-year-old Hispanic female presented with a one-year history of persistent mildly pruritic white patches throughout her body. The patches began on her extremities and progressed diffusely. She works as a hair stylist and denies occupational exposure to hair dyes or chemicals. She was diagnosed with pityriasis versicolor by her primary care provider and prescribed selenium sulfide shampoo. While she experienced improvement of pruritus, the lesions remained persistent. On examination, there were diffuse, ill-defined hypopigmented macules. Fine scale was present on some lesions. No nail or scalp involvement present. No lymphadenopathy was appreciated. Body surface involvement was approximately 15%. Two shave biopsies were performed and consistent with CTCL. Laboratory workup ordered consisted of blood, electrolyte, renal, hepatic, and lipid panel which were all within adequate levels. Based on body surface area and negative lymphadenopathy, she was diagnosed as stage IB MF and treated with a high potency topical steroid, clobetasol 0.05% cream. She was also recommended to spend 30 to 40 minutes on under direct sunlight as phototherapy has been known to improve condition.

Case Kodachromes

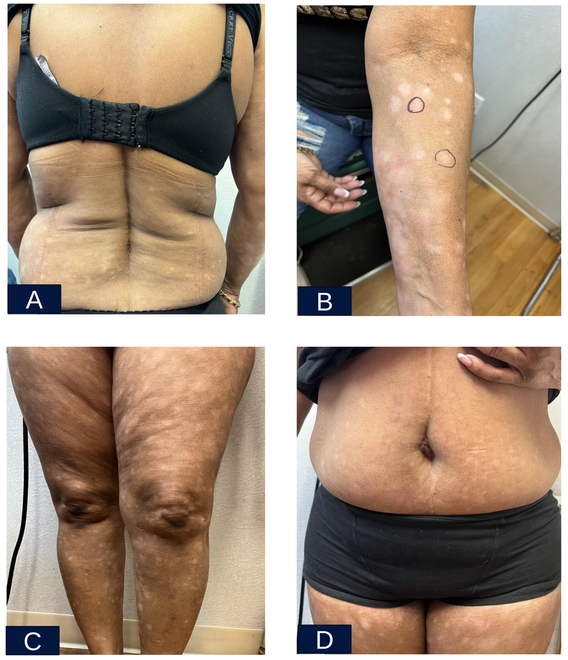

Figure 1.

A) Multiple well circumscribed hypopigmented macules of varying size on the middle and lower back.

B) Diffuse well circumscribed depigmented and some hypopigmented macules and patches, some with an erythematous rim on patient's left ventral forearm.

C) Diffuse hypopigmented macules coalescing into patches involving bilateral anterior thighs. Smaller well circumscribed hypopigmented and depigmented macules on bilateral shins.

D) Multiple well circumscribed hypopigmented macules on abdomen as well as anterior thighs bilaterally.

Discussion

Hypopigmented MF is a challenging diagnosis due to the low prevalence and non-pathognomonic presentation. The pathogenesis of the hypopigmentation is still unclear, though it is thought to be due to direct cytotoxicity of $CD8^+$ T cells against melanocytes. Most patients have lesions for several years prior to the correct diagnosis. Diagnosis may also be delayed because of the prolonged, non-aggressive course of the disease. Common mimickers include benign hypopigmented dermatoses such as vitiligo, atopic dermatitis, pityriasis lichenoides chronica, pityriasis versicolor, pityriasis alba, or post-inflammatory hypopigmentation, amongst others.

Clinical clues for guidance are the patient's age, anatomic distribution, and failure of previous therapies (1). For example, pityriasis versicolor most commonly occurs on the upper trunk in comparison to our patient which her lesions are predominantly on her extremities. Vitiligo commonly affects areas accessible to mechanical trauma, such as the extremities, however, fine scale will not be present. Utilizing these subtle clues can guide the clinician to differentiate from these similar phenotypes. Primary care recognition of this variant may correctly guide the patient to dermatology for prompt diagnosis and management of this complex condition.

Conclusion

CTCL has an excellent prognosis if caught in its early stages. We present this case to review unique clinical features of MF. Additionally, it is important for primary care physicians to include this condition in their differential diagnosis of hypopigmented lesions to aid in timely treatment and management of this complex disease.

References

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