A young woman with multiple hypopigmented patches

Iran J Dermatol 2011; 14: 117-118

Reza Robati, MD
Atyeh Ebadi, MD
Sajjad Nazari, MD
Zahra Saffarian, MD

Skin Research Center, Shohada-e-Tajrish Hospital, Shahid Beheshti University of Medical Science, Tehran, Iran.

Corresponding Author:
Zahra Saffarian, MD
Skin Research Center, Shohada-e-Tajrish Hospital, Shahid Beheshti University of Medical Science, Tehran, Iran.
Email:dr.aty.ebadi@gmail.com

Conflict of interest: none to declare

Received: January 15, 2011
Accepted: August 1, 2011

A 33–year-old woman was visited at the dermatological clinic of Loghman-e-Hakim Hospital with multiple hypopigmented patches on her right arm, buttocks and flanks. Her lesions developed over the past year with no regression. Lesions were resistant to multiple antifungal therapies. Clinical examination revealed multiple circular or oval patches on the right arm, flank and sacral area. There was no erythema but fine scales were observed on the lesions (Figure1). No cutaneous sensory deficit was detected and no abnormality was found on physical examination. Also, there was no family history of similar problems. Abdominal ultrasonography and chest x-ray were normal. We performed biopsy from one of the lesions.

What is your diagnosis?

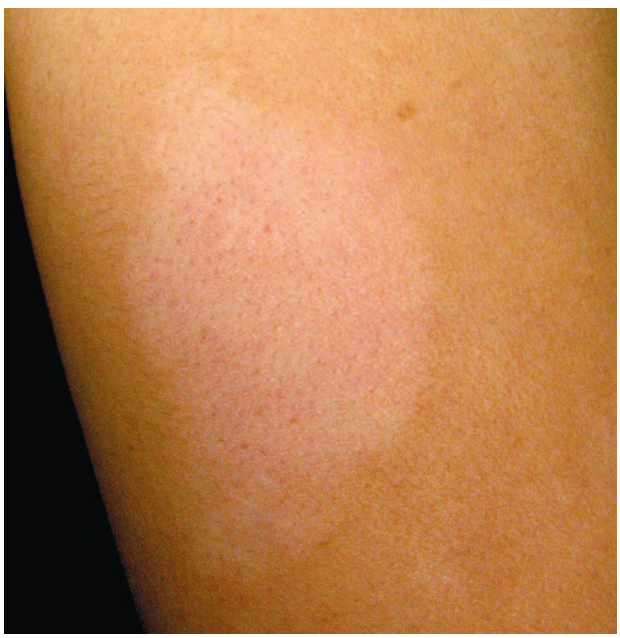

Figure 1. Hypopigmented patch on lower extremity of the patient

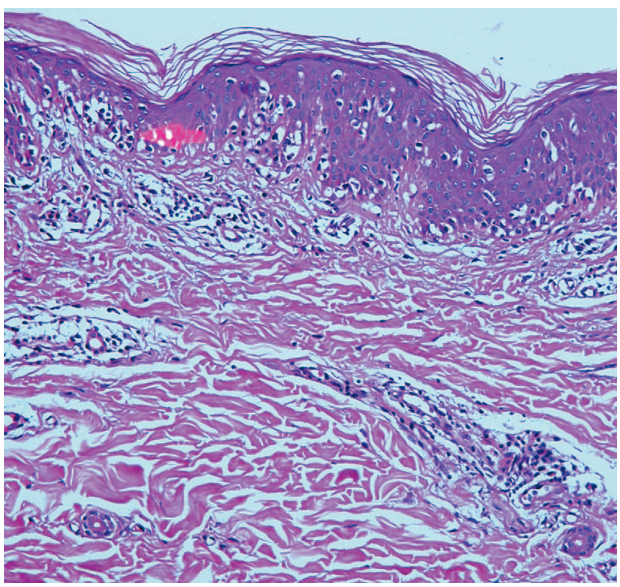

Figure 2. Exocytosis of atypical lymphocytes in lower part of the epidermis with large and irregular hyperchrome nucleus. (H&E*20)

Histopathology finding

Histopathological examination showed hyperkeratosis and irregular acanthosis accompanied by exocytosis of atypical lymphocytes in lower part of the epidermis, some of them with large and irregular hyperchromatic nuclei. There was no spongiosis. Pautrier's microabscesses were observed within epidermis. Infiltration of lymphocytes and shedding of pigment with mild RBC extravasation was detected within papillary dermis (Figure 2).

Hypopigmented Mycosis Fungoides

Hypopigmented Mycosis Fungoides (MF) is a rare variant of cutaneous T-cell lymphoma, first described in 1978. Since then, only a hundred cases have been reported. Hypopigmented MF is typically observed in dark-skinned individuals of Asian or African descent, especially children [1,2].

The pathogenesis of hypopigmented MF remains to be clarified. It is suggested that the hypopigmentation is due to the cytotoxic effect of T-suppressor lymphocytes on the adjacent melanocytes. Ultrastructural studies show focal invasion of the epidermis by mycosis cells admixed with degenerative changes in neighboring melanocytes and keratinocytes. The majority of melanocytes exhibit disorganized melanogenesis with production of spherical partly melanized melanosomes [3]. The precise incidence of hypopigmented MF is yet unknown, probably because of under or misdiagnosis [1,4,5].

Mycosis fungoides can manifest with distinct various clinical patterns. In addition to the well-known plaque and poikiloderma forms, atypical features include pustular, bullous and verrucous forms. Hypopigmented patches are an uncommon manifestation of MF and belong to the group of CD8+ cutaneous T-cell lymphomas in the majority of cases [6].

In hypopigmented MF, the predominant location of the hypopigmented lesions is on non-photodistributed areas of the body and their persistent nature can be a clue to diagnosis [7]. The differential diagnosis of hypopigmented macules includes leprosy, pityriasis lichenoides chronica and most commonly, post inflammatory hypopigmentation, vitiligo, atopic dermatitis, tinea versicolor, pityriasis alba, parapsoriasis and sarcoidosis [2,8]. Histopathologic examination is still the best method for the diagnosis of hypopigmented MF. The gold standard for treatment appears to be PUVA, but repigmentation has been reported following treatment with Carmustine (BCNU) and Mechlorethamine. Hypopigmented MF usually responds well to therapy and has a biologically benign course, but recurrences after therapy are common [3,7].

In conclusion, persistent or odd hypopigmented lesions should be evaluated through biopsy to avoid delay in the diagnosis of MF, especially in young people.

REFERENCES

1. Qari MS, Li N, Demierre MF. Hypopigmented mycosis fungoides and literature review. J Cutan Med Surg 2000;4:142-8.
2. Cordel N, Duval-Modeste AB, Courville P, Joly P. Hypopigmented mycosis fungoides. Ann Dermatol Venereol 2005;132:455-7.
3. Breathnach SM, McKee PH, Smith NP. Hypopigmented mycosis fungoides: report of five cases with ultrastructural observations. Br J Dermatol 1982;106:643-9.
4. Dalle S, Balme B, Berger F, Hayett S, Thomas L. Mycosis Fungoides- associated follicular mucinosis under adalimumab. Br J Dermatol 2005;153:207-8.
5. Chuang GS, Wasserman DI, Byers HR, Demierre MF. Hypopigmented T-cell dyscrasia evolving to hypopigmented mycosis fungoides during etanercept therapy. J Am Acad Dermatol 2008;59:S121-2.
6. El-Shabrawi-Caelen L, Cerroni L, Medeiros LJ, McCalmont TH. Hypopigmented mycosis fungoides: frequent expression of a CD8+ T-cell phenotype. Am J Surg Pathol 2002;26:450-7.
7. Hsiao PF, Hsiao CH, Tsai TF, Jee SH. Minimal residual disease in hypopigmented mycosis fungoides. J Am Acad Dermatol 2006;54:S198-201.
8. Werner B, Brown S, Ackerman AB. "Hypopigmented mycosis fungoides" is not always mycosis fungoides! Am J Dermatopathol 2005;27:56–67.