Multiple Hypopigmented Patches over Trunk
in a 17-year-old Girl
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CASE REPORT
A healthy 17-year-old Taiwanese girl had a 10-year history of hypopigmented patches on trunk, and was previously diagnosed as non-specific dermatitis at clinics for years. She had no symptoms of atopy or other medical problems. Physical examination revealed multiple hypopigmented, well-demarcated, non-scaly macules and patches over the trunk, buttock and proximal limbs (Fig. 1). sparing her face, hands, palms and soles. No lymphadenopathy was found. No contact history, drug history, previous infection history or family history was noted.

Biopsy was taken from the trunk. Histologic examination showed some scattered and grouped atypical lymphocytes among epidermal keratinocytes (Fig. 2A&B). Immunohistochemical analysis showed positive for CD3.

Fig 1
Multiple hypopigmented macules and patches over the back.

Fig 2
(A) Lymphocytic infiltrate in epidermis, dermal-epidermal junction, and perivascular areas (H&E, 100x)
(B) Epidermotropism with atypical lymphocytes in the epidermis (H&E, 600x)
**DIAGNOSIS: Hypopigmented Mycosis Fungoides**

**DISCUSSION**

Hypopigmented MF is a rare variant of MF. It is first described by Ryan *et al.* in 1973.1 Yu-Wen Huang *et al.* ever described one case report in 1996.2 The pathophysiology of hypopigmented MF remains unknown. It usually affected dark-skinned individuals. The age of onset is usually in childhood and adolescence (age 2-19 years).3, 4 Asymptomatic, nonscaly, nonatrophic, hypopigmented macules or plaques over clothed areas are usual presentations. The lesions may persist for several years without progression to tumor stage. They are easily misdiagnosed as vitiligo, pityriasis versicolor, postinflammatory hypopigmentation, and pityriasis lichenoides chronica.5 Histopathologic features in hypopigmented MF reveal intense epidermotropism with abnormal lymphocytes, sometimes Pautrier microabscess and moderate dermal lymphocytic infiltrate.6 Histologic features may be non-specific in early stages. Repeat skin biopsies will help in diagnosis. Other findings include abnormal nuclear contour and shape, abnormal nuclear DNA content and chromosome complement, elevated CD4/CD8 ratio(≥6), pan T-cell marker loss ≥2, epidermal HLA-DR expression and the presence of a clonal T-cell population as measured by T-cell gene rearrangement (TCR-GR) studies.7 The hypopigmented macules/patches might result from decreased transfer of melanosomes from melanocytes to keratinocytes and melanocytes degeneration as evidenced by electron microscopic studies.8

The initial treatment for hypopigmented MF include topical or intralesional steroid or phototherapy with PUVA or UVB.9 The second line therapy for early stage disease includes topical chemotherapy using mechlorethamine (nitrogen mustard), carmustine (BCNU).

There are differences between hypopigmented MF and classic MF. First, the patients were younger than observed in classical MF. Second, females seem to be affected more than male in hypopigmented MF. Third, hypopigmented MF has the predilection for dark-skinned individuals. Fourth, immunophenotype in hypopigmented MF showed CD8 predominant where classic MF showed CD4 predominant. Fifth, hypopigmented MF has a better prognosis than classic MF.

**REFERENCE**