

Acquired Dermal Melanocytosis Naevus of Ota-like Macules on the Face and Extremities Lesions in a Young Japanese Woman

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Sir,

Acquired dermal melanocytosis (ADM)/acquired bilateral naevus of Ota-like macules is most frequently seen in Asian women. The condition generally presents symmetrically on the face and is characterized by blue-brown or slate-grey macules. Histopathological examination generally reveals irregularly-shaped, bipolar melanocytes in the upper and middle dermis without disturbance of the normal skin architecture (1, 2). The facial lesions involve the forehead, temples, eyelids, malar areas, nasal alae, and nasal root. Unlike the naevus of Ota, these pigmented lesions are not observed in the conjunctiva or mucous membranes of the mouth or nose (1, 3). Although ADM affects mainly the face, there are also reports of extrafacial involvement (4). We report here a rare case of a Japanese patient with ADM on her face and extremities.

CASE REPORT

A 22-year-old Japanese woman presented with non-palpable pigmented patches with interspersed discrete brown macules on her face, dorsal surface of her hands and feet, and extremities. She had noted bilateral hyperpigmentation of the dorsal surface of both feet at the age of 20 years. The pigmented macules had gradually increased in intensity and extent and, at the age of 22 years, slight pigmentation also appeared on her face, dorsum of her hands, left arm, and left leg. Physical examination revealed multiple, discrete, coalescing macules distributed on the malar areas, root of the nose, ala nasi, on the dorsa of the hands and feet, as well as the extensor surface of her left forearm and left leg (Fig. 1). There were a number of symmetrical small grey-brown spots and groupings of faint brown macules. There was no pigmentation of the mucosa of the eye or mouth. The patient was otherwise healthy. She was taking no medication and reported no preceding inflammation, trauma, or significant sun exposure. There was no family history of abnormal cutaneous pigmentation. Histopathological examination of the two grey-brown macules showed scattered, darkly pigmented, spindle-shaped dendritic cells in the upper and mid-dermis. They were unevenly distributed between the collagen bundles and were particularly evident around the small blood vessels. Immunohistochemical analysis using S100 antibody was performed according to the manufacturer's protocol (LSAB+ System Alkaline Phosphatase; Dako Corp., Carpinteria, CA, USA). Immunostaining for S100 protein revealed positivity of the spindle cells.

DISCUSSION

A review of the literature on patients with ADM on both their face and other body areas revealed only six cases reported in the English literature to date, inclu-

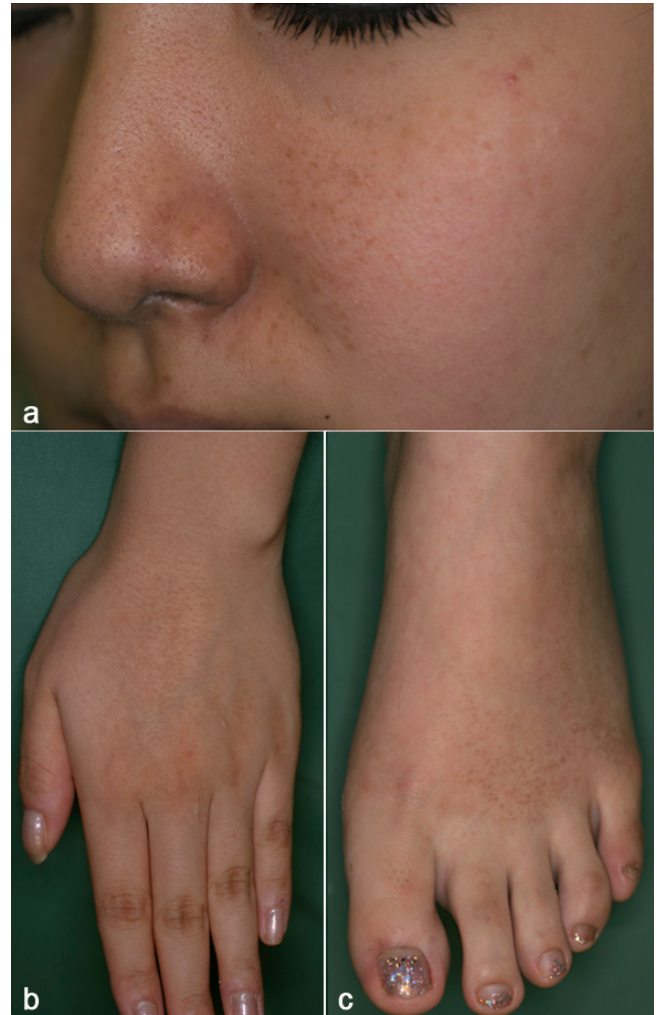


Fig. 1. Diffuse grey-brown pigmentation on (a) malar areas, root of the nose, ala nasi, (b) dorsa of the hands, and (c) feet.

ding the present report (5, 6) (Table I). All six patients were Asian; three Japanese and three Koreans. Five of the six patients were young woman and the other was a Japanese man (case 4). The age of onset ranged from 17 to 25 years, with a mean of 19.5 years. The age at examination varied from 17 to 33 years, with a mean age of 25 years. Facial and extrafacial patches occurred simultaneously within several years. The extrafacial lesions in all cases involved upper and lower extremities, and/or the dorsal aspects of the hands and feet. In our series, the cutaneous manifestations and histopathological findings were consistent with facial and extrafacial lesions. There is debate as to whether the extrafacial

type should be better classified as part of the normal type (facial type). Some authors have classified ADM into two groups, facial type and extrafacial type (4). The pathogenesis is unknown, but some common mechanisms and triggers regardless of site could cause dermal melanocytes and ADM based on our series. Therefore, we suggest that the facial type and extrafacial type are better interpreted as the same disorder.

REFERENCES

1. Hori Y, Kawashima M, Oohara K, Kukita A. Acquired, bilateral nevus of Ota-like macules. *J Am Acad Dermatol* 1984; 10: 961–964.

2. Hori Y, Takayama O. Circumscribed dermal melanoses: classification and histologic features. *Dermatol Clin* 1988; 6: 315–326.
3. Manuskiatti W, Eimpunth S, Wanitphakdeedecha R. Effect of cold air cooling on the incidence of postinflammatory hyperpigmentation after Q-switched Nd: YAG laser treatment of acquired bilateral nevus of Ota like macules. *Arch Dermatol* 2007; 143: 1139–1143.
4. Mataix J, López N, Haro R, González E, Angulo J, Requena L. Late-onset Ito's nevus: an uncommon acquired dermal melanocytosis. *J Cutan Pathol* 2007; 34: 640–643.
5. Hidano A, Kaneko K. Acquired dermal melanocytosis of the face and extremities. *Br J Dermatol* 1991; 124: 96–99.
6. Mizushima J, Nogita T, Higaki Y, Horikoshi T, Kawashima M. Dormant melanocytes in the dermis: do dermal melanocytes of acquired dermal melanocytosis exist from birth? *Br J Dermatol* 1998; 139: 349–350.

Table I. *Clinical findings of acquired dermal melanocytosis with both facial and extrafacial lesions. No associated diseases in any of the patients*

Case (Ref.)	Sex	Age at onset (years)	Age at examination (years)	Ethnic group	Location
1 (5)	F	25	33	Korean	Face, dorsal surface of hands, extensor forearms and arms
2 (5)	F	20	31	Korean	Face, dorsal surface of hands, palms
3 (5)	F	18	26	Japanese	Face, dorsal surface of hands and feet, extensor arms, palms
4 (5)	M	17	21	Japanese	Face, palms, volar fingers, plantar arches
5 (6)	F	17	17	Korean	Face, arms
6 This report	F	20	22	Japanese	Face, dorsal surface of hands and feet, extensor forearm and leg