Acquired Speckled Acrofacial Hypomelanosis: A Novel Presentation of an Existing Dermatosis

Dear editor,

Acral speckled hypomelanosis is a recently described disease entity with only a few cases being reported. It is an acquired condition presenting with multiple hypopigmented macules in a speckled pattern over the acral areas.[1] Here, we present a case of acquired speckled hypomelanosis with acral as well as facial involvement.

A 20-year-old male born of nonconsanguineous marriage presented with numerous asymptomatic white spots on the dorsa of both hands and feet and face since 10 years of age and were progressively increasing in number. There was no history of similar illness in the past and family history was negative for similar pigmentary disorder.

Cutaneous examination showed multiple, symmetrically distributed well-defined hypopigmented macules of size 1–3 mm on a background of normal skin over dorsum of both feet and hands with extension to forearms and also over the face in perioral distribution. There was no atrophy, hyperpigmented macules, or palmar pits [Figure 1a-c]. There was no pigment accentuation on Wood's lamp examination and on dermoscopy, 1-2 mm sized hypopigmented macules with irregular margins were present [Figure 2a, b]. Histopathological examination of the hypopigmented lesion showed epidermis with a normal number of melanocytes and a mild increase in basal layer pigmentation [Figure 2c]. A diagnosis of acquired speckled acrofacial hypomelanosis was made and was started on tacrolimus 0.1% ointment once a day application, and mesotherapy with 5-fluorouracil. Follow-up after 2 months of treatment did not show any improvement.

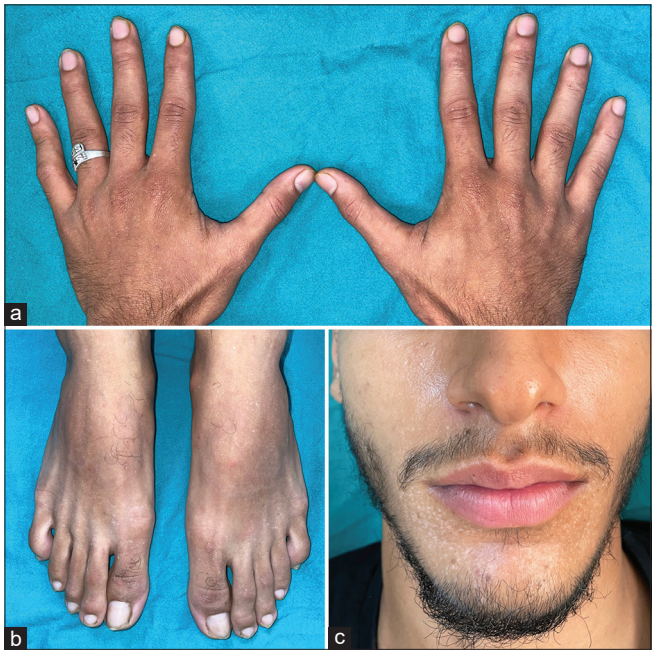

Figure 1: Speckled hypopigmentation over dorsa of both hands (a), feet (b), and over the face in perioral distribution (c)

Multiple hypopigmented macules in a reticulate, speckled, guttate, or confetti-like pattern are present in various disorders like idiopathic guttate hypomelanosis, confetti-like leukoderma, familial white lentiginosis, Darier disease, Cole disease, tuberous sclerosis complex (TSC), congenital symmetric acroleukopathy, reticulate, Dowling–Degos disease, and acropigmentation of dohi [Table 1].[1,2]

Idiopathic guttate hypomelanosis (IGH) is an acquired disorder presenting as multiple, round-to-oval white macules distributed mainly over sun-exposed extensor surfaces mostly in elderly individuals.[4] Margins of lesions are round to oval in IGH in contrast to the feathery margins in the present case. Confetti-like hypomelanotic lesions in TSC appear as multiple, hypopigmented macules symmetrically distributed over the distal extremities but they manifest at a very young age and other features of TSC are also present.[5] Congenital symmetric acroleukopathy has been described in a Japanese family as depigmented macules in periungual

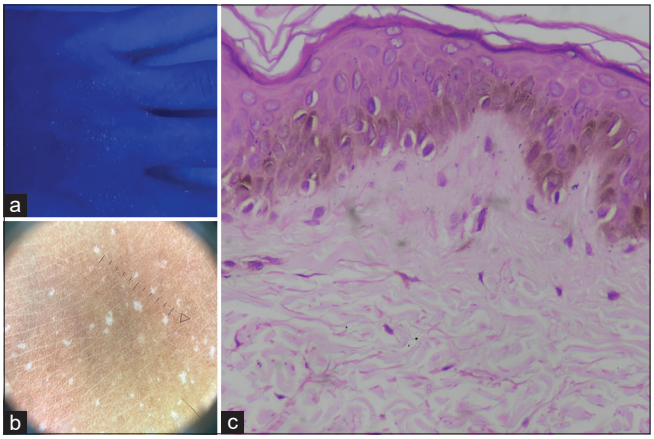

Figure 2: (a) Accentuation on Wood's lamp; (b) dermoscopy showing hypopigmented macules with feathery margins; (c) Histopathology showing epidermis with a normal number of melanocytes and a mild increase in basal layer pigmentation (H&E, 40×)

Table 1: Clinical and histopathological features of various differentials of acquired speckled acrofacial hypomelanosis

Disease	Clinical features	Histopathological features[3]
Idiopathic guttate hypomelanosis	Elderly individuals. Multiple, round-to-oval white macules distributed mainly over sun-exposed extensor surfaces.	Decrease in melanin pigment in the basal layer of the epidermis and a reduction in the number of dopa-positive melanocytes. Epidermis: some atrophy, with flattening of the rete pegs.
Confetti-like hypomelanosis of tuberous sclerosis complex	Very young age. Multiple, hypopigmented macules are symmetrically distributed over the distal extremities. Other features of TSC: angiofibromas, Koenen tumors, enamel pits, etc., are present.	Epidermal melanin-reduced but not absent Normal number of melanocytes and a reduction in the number, size, and melanization of the melanosomes.
Acropigmentation of Kitamura	Hyperpigmented atrophic macules present initially over acral sites, spread centripetally with age along with palmar pitting. Hypo/depigmented macules may be present.	Club-shaped elongations of the rete ridges but with intervening epidermal atrophy.
Reticulate acropigmentation of Dohi	Both hypopigmented and hyperpigmented macules over the acral areas.	Reduced pigmentation, sometimes accompanied by a reduction in the number of melanocytes.
Dowling-Degos disease	Multiple, symmetrical, progressive hyperpigmented macules mainly over flexures (axillae, groin, face, and neck), arms, and trunk. Comedo-like hyperkeratotic follicular papules, perioral pitted acneiform scars, and epidermal cysts. Hypopigmented macules may be present	Filiform down growth of the epidermis. Pigmentation is limited to the tips of rete ridges, with loss of pigment in the remainder of the basilar layer.

location occurring soon after birth or early years of life with no new lesions occurring over time.[6]

Acropigmentation of Dohi has both hypopigmented and hyperpigmented macules over the dorsal and ventral acral surfaces. Acromelanosis albo-punctata is a rarely described entity presenting with generalized hyperpigmentation and confetti-like hypopigmented macules over dorsal surface of the hands and feet, spreading to the palms and soles.[7]

The clinical profile of our patient does not fit into any of the above-described disorders and after clinicohistopathological evaluation, a diagnosis of speckled hypomelanosis was made. To our knowledge, none of the patients in the previous reports of speckled hypomelanosis had facial involvement, so we have labeled the present case as "Acquired Speckled Acro-Facial Hypomelanosis." The histopathology in most of the previous reports had decreased number of melanocytes although our findings were similar to the one described by Singh *et al*.[2] where the melanocytes were normal in number. Aldhalaan *et al*.[1] have shown significant improvement after narrow-band Ultraviolet B (UVB) therapy in their case. Further studies are required to understand the exact etiopathogenesis of this recently described entity.

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Conflicts of interest

There are no conflicts of interest.

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