Journal of Cosmetology & Trichology

Sonthalia, J Cosmo Trichol 2017, 3:3
DOI: 10.4172/2471-9323.1000e106

Editorial Open Access

Maturational Hyperpigmentation-A Novel Cutaneous Marker of Metabolic Syndrome

Sidharth Sonthalia*

Skinnocence: The Skin Clinic and Research centre, Sushant Lok-1, Gurgaon-122009, Haryana, India

***Corresponding author:** Sidharth Sonthalia, Skinnocence: The Skin Clinic and Research centre, Sushant Lok-1, Gurgaon-122009, Haryana, India, E-mail: sidharth.sonthalia@gmail.com

Received date: November 28, 2017; **Accepted date:** December 10, 2017; **Published date:** December 12, 2017

Keywords: Maturational hyperpigmentation; Acanthosis nigricans; Metabolic syndrome; Dermoscopy

Editorial

It is often said that the skin is a window to the internal systems of the human body. This aphorism has gained credence with recent discovery of various skin disorders serving as surrogate markers of an internal or systemic abnormality. For example, recurrent tinea infections may be the first and the only cutaneous signature of impending or established diabetes. Hair loss in women often leads to the diagnosis of iron deficiency and/or thyroid disorder.

Off late, various dermatoses have proven to be robust markers of the metabolic syndrome (MS), the most common being acanthosis nigricans (AN) [1]. Metabolic syndrome is characterized of a host of systemic abnormalities with insulin resistance being the central pathology. Recently, a condition morphologically similar to AN, called Maturational Hyperpigmentation (MH) is gaining attention as a related marker of MS [2]. Although some consider AN and MH to be synonymous, there are subtle clinical, histological and dermoscopic differences between the two.

The condition MH was first described by Dr Alexander Malvin in a set of patients of African origin [3]. The lesions were dusky brown to hyperpigmented, present over the zygomatic area, imperceptibly merging with the surrounding skin. The surface was mildly rough (Figure 1), but no symptoms were associated. Aggravation with sun exposure was not apparent, although prominence of the lesion on the sleeping side of the individual was a common finding, suggesting some contribution of friction. In most of Dr. Alexander's patients, there were significant abnormalities associated with MS.

My co-workers then actively looked for the presence of typical lesions of MH in dermatology outpatient patients and detected 53 Indian patients with MH. On detailed history, family history and detailed work-up for MS, more than 75% of the 53 patients qualified for MS.

The contention that few authors have put forth, stating that MH is only a variant of AN, is regrettably based on superfluous evaluation and possibly a lacunae in the understanding of dermoscopic differences between AN and MH [4]. Notwithstanding the possibility of these two entities representing a spectrum, MH may be differentiated from facial AN on the basis of the following parameters: a) texture of MH lesions being rough but smoother than facial AN, b) paucity of AN lesions at typical sites in MH patients, c) histopathology of MH revealing minimal to nil hyperkeratosis and papillomatosis and moderate to dense basal layer hypermelanization, and d) dermoscopy of MH revealing a peculiar pattern of perifollicular rings of hyperpigmentation [5].

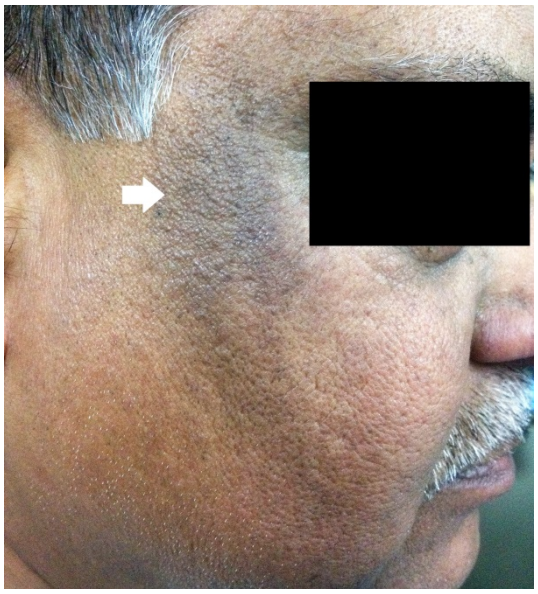

Figure 1: Maturational Hyperpigmentation.

I do not refute the spectral concept of MH and facial AN, but pending further research to delineate these two closely related entities, it is important for every dermatologist to be aware of this novel cutaneous marker of MS and investigate any patient with this peculiar patterned pigmentation to rule out MS.

Apart from screening and management of a patient with MH, cosmetic treatment should be offered to patients who are concerned about the same. In my experience, use of alpha hydroxy acid-based night creams (e.g. glycolic acid 10-12%) and/or retinol-based gels or creams for night application, with day time sun-screen application substantially reduces the cosmetic blemish of MH. In stubborn cases, 4-6 sessions of superficial chemical peeling with glycolic or salicylic-mandelic acid peels is helpful.

References

1. Padhi T, Garima (2013) Metabolic syndrome and skin: psoriasis and beyond. Indian J Dermatol 58: 299-305.
2. Sonthalia S, Sarkar R (2014) Maturational Hyperpigmentation. In: Lahiri K, Chatterjee M, Sarkar R (edn.) Pigmentary Disorders: A Comprehensive

Compendium. (1st edn.) Philadelphia: Jaypee Brothers Medical Publishers pp. 430-433.

3. Alexander M (2006) Investigating unusual facial hyperpigmentation in darker skin. Dermatology Times [online].
4. Verma S, Vasani R, Joshi R, Phiske M, Punjabi P, et al. (2016) A descriptive study of facial acanthosis nigricans and its association with body mass index, waist circumference and insulin resistance using HOMA2 IR. Indian Dermatol Online J 7: 498-503.
5. Sonthalia S, Sarkar R, Neema S (2017) Maturational Hyperpigmentation. Pigm Int [In Press].