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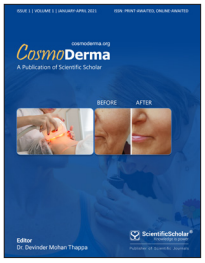

Editorial

Facial dyschromias with unresolved boundaries in the skin of color

Devinder Mohan Thappa[1], Munisamy Malathi[1], Arunachalam Narayanan[1]

[1]Department of Dermatology and STD, Jawaharlal Institute of Postgraduate Medical Education and Research, Puducherry, India.

***Corresponding author:**
Devinder Mohan Thappa, Department of Dermatology and STD, Jawaharlal Institute of Postgraduate Medical Education and Research, Puducherry, India.

dmthappa@gmail.com

Received : 24 December 2021
Accepted : 24 December 2021
Published : 07 January 2022

DOI
10.25259/CSDM_73_2021

Quick Response Code:

Facial dyschromia, commonly encountered among persons with skin of color results in harmful emotional and psychological effect, significantly affecting their quality of life. In fact, dyspigmentation particularly hyperpigmentation is one of the most common dermatological problems among persons with skin of color often posing diagnostic challenges to the treating physicians. There are varied causes for facial hyperpigmentation and some of these can be difficult to diagnose clinically, histopathologically, and by dermoscopy.

Melasma is a common cause of facial dyschromia in women of reproductive age group, presenting with sharp hyperpigmented macules with irregular outline [Figure 1] associated with increased or normal levels of melanocytes and an increased number of melanosomes. Melasma is most often a clinical diagnosis which sometimes needs to be differentiated from ephelides, lentigines, exogenous ochronosis, and post-inflammatory hyperpigmentation (PIH). Occasionally, it might be difficult to differentiate melasma from natural pigmentary demarcation lines among those with darker skin tones.

PIH is hypermelanosis that follows injury or inflammatory skin disorders on the face such as acne vulgaris, impetigo, pseudofolliculitis barbae, contact dermatitis, atopic dermatitis, insect bites, and to name a few. While epidermal PIH manifests as dark brown macules which disappear spontaneously over months to years, dermal PIH appears as blue-gray macular lesions that take years to resolve.

Maturational hyperpigmentation presents as hyperpigmented patches with ill-defined borders most commonly affecting the lateral aspects of face, dorsa of hands, and feet. Occurring in the 4^{th}–5^{th} decade of life, it is more likely associated with chronic sun exposure but may also be associated with obesity and diabetes, probably a marker of insulin resistance.

Periorbital melanosis, commonly referred to as dark circles, is a distressing condition due to the prematurely aged appearance. Most commonly occurring in middle-aged women, it can be due to many causes which include constitutional cause, local edema, increased vascularity in periorbital region, skin laxity, distinctive tear trough formation, and PIH. Periorbital melanosis needs to be differentiated from PIH due to atopic dermatitis or contact dermatitis.

Exogenous ochronosis is a rare dermatosis. It is due to prolonged use of skin-lightening agent presents with a typical erythematous pinkish hue on photo-exposed areas of face such as the malar area of cheeks, forehead, sides of face, and periorbital areas. There can be a stippled pigmentation with caviar-like black macules or micropapules in these regions. Hydroquinone, resorcinol, phenol, mercury, and/or picric acid contained in these products are responsible for the ochronosis. Hence, a stringent history and clinical observation clinch the diagnosis which can be confirmed by typical histopathologic findings. Dermoscopy demonstrates scattered blue-gray structures obliterating the follicular openings.

Acanthosis nigricans (AN) characterized by symmetric, hyperpigmented, velvety thickening of skin commonly involving axillae, neck folds, and flexures of the upper and lower limbs and rarely involving face, umbilicus, inguinal fold, inframammary region, and perioral and perianal areas. There are eight types of AN classified as benign, obesity-associated, syndromic, malignant, acral, unilateral, drug-induced, and mixed types. The prevalence of AN greatly varies based on age, race, type, and associated factors. Facial AN and periorbital melanosis have been reported to be associated with insulin resistance and metabolic syndrome in India. Emerging entity, facial AN in isolation is difficult to differentiate from other facial dyschromias. Sometimes, facial AN is confused with seborrheic melanosis, a vague entity in India.

Dermatosis papulosa nigra, a type of seborrheic keratosis, is a common benign condition observed in darker skin races in younger age group presenting as multiple dark papules measuring 1–5 mm in size distributed on the face, neck, and upper back. These lesions may be sessile or pedunculated. In older age group, seborrheic keratosis produces many pigmented papular and plaque lesions in head-and-neck region.

Hori nevi are commonly reported in adult Asian females of Chinese descent. They have various shades of color ranging from brown, brown-to-gray, gray, or bluish clusters of macules, involving the bilateral malar areas, forehead, upper eyelids, and nose. It can be mistaken for melasma. Histopathology only has subtle points to differentiate it from bilateral nevus of Ota.

Ephelides presenting as well-demarcated, light or medium brown macules of varying shades of color measuring 1–3 mm in size involving sun-exposed areas of face, upper trunk, and lateral aspect of upper limbs are predominantly a clinical diagnosis. Histology reveals a normal epidermis with an increase in melanocytic activity in the absence of an increased melanocyte count in contrast to lentigines which demonstrate epidermal hyperplasia with basal layer pigmentation associated with increased number of melanocytes.

Lentigines, a benign condition predominantly affecting the fair colored population aged over 60 years of age, may occur in Asians too. These present as multiple sharply demarcated brown to dark brown macules of uniform color ranging from a few millimeters to around 2 cm in size involving the sun-exposed regions of face, upper trunk, and upper limbs. Histopathology rules out lentigo maligna.

Lichen planus pigmentosus (LPP), a type of lichen planus most often affecting people of skin of color, is quite common in India. It has been attributed to photosensitizers present in cosmetic fragrances, hair dyes, and mustard oil; however, its exact pathophysiology is unknown. It typically presents as asymptomatic diffuse hyperpigmented dark brown to bluish macules and patches, distributed bilaterally on the sun-exposed areas of forehead, temples, and neck commonly [Figure 2] and can also involve the trunk, especially flexural regions. Lack of an erythematous border and the presence of mucosal lesions distinguish LPP from erythema dyschromicum perstans with both these conditions probably belonging to a clinical spectrum.

Other less common disorders of facial hyperpigmentation include toxic melanoderma, drug-induced hyperpigmentation (silver, gold, antimalarials, and antpsychotics), seborrheic melanosis, pigmented nasal transverse bands, allergic salute, pigmentary demarcation lines, nevus of Ota, idiopathic eruptive macular pigmentation, erythrose peribuccale pigmentaire de Brocq, erythromelanosis follicularis faciei et colli, Poikiloderma of Civatte (which occurs below

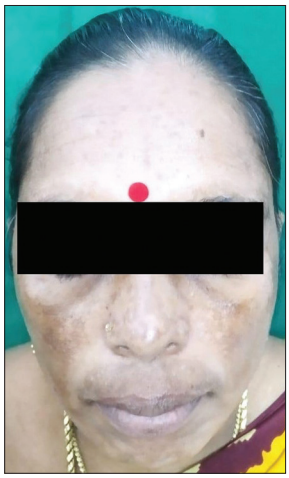

Figure 1: Melasma presenting as symmetric, hyperpigmented patches with an irregular outline, occurring on the face.

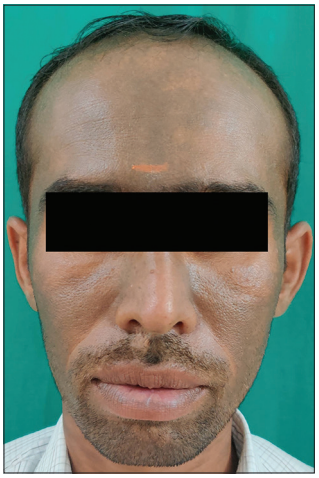

Figure 2: Lichen planus pigmentosus presenting as diffuse hyperpigmented dark brown to bluish macules and patches, distributed bilaterally on the sun-exposed areas of face.

mandible), Riehl's melanosis, actinic lichen planus, and topical steroid-induced pigmentation with rosacea such as rash, facial frictional melanosis (due to habit of rubbing), and post-chikungunya pigmentation.

Facial dyschromia is thus a diagnostic challenge due to the overlapping features indistinctive histology which makes both clinical and histopathologic diagnoses difficult. Non-invasive investigation such as Wood's light examination has utitlity in the diagnosis and assessment of disease severity of melasma. Dermoscopy can be a handy aid in clinical practice while dealing with facial dyschromias in skin of color especially of LPP and ochronosis.

How to cite this article: Thappa DM, Malathi M, Narayanan A. Facial dyschromias with unresolved boundaries in the skin of color. CosmoDerma 2022;2:1.