

Challenges in Treating Aesthetic Pigmentary Disorder in Southeast Asia

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Southeast Asia, with its diverse ethnicities, presents a wide range of Fitzpatrick skin types, predominantly types III to V [1]. Compared to Western populations, Southeast Asian skin is generally darker and contains larger amounts of melanin, which provides natural photoprotection [2]. However, despite this benefit, Asian skin shows a higher tendency towards pigmentary disorders [2].

Common pigmentary disorders include epidermal conditions such as lentigines, ephelides, and melasma, and dermal disorders like nevus of Ota and Hori's nevus [2]. Vitiligo and idiopathic guttate hypomelanosis (IGH), are not uncommon [3]. Post-inflammatory hyperpigmentation (PIH), often triggered by acne, laser treatments, or skin injury, is particularly prevalent [2,3]. Hyperpigmented lesions (melasma, PIH, lentigines) appear as dark patches, while hypopigmented conditions (vitiligo, IGH) present as lighter lesions [3].

Among these, melasma is the most common and one of the most challenging to treat [2]. It is an acquired symmetrical hypermelanosis that typically affects photo-exposed areas, with peak incidence between ages 30 and 44 years [2,4]. Prevalence varies, reaching up to 40% in women and 20% in men in Thailand, 4% in Malaysia, and 0.98% in Indonesia [4]. Contributing factors include genetics, UV exposure, pregnancy, hormonal therapy, and phototoxic drugs [2]. Melasma is notoriously difficult to manage due to its multifactorial causes, resistance to treatment, and high recurrence rate [5].

Current treatment strategies include topical therapies (hydroquinone, corticosteroids, tretinoin), chemical peels (salicylic acid, glycolic acid, trichloroacetic acid), and noncytotoxic or laser-based therapies [2,3,6]. However, these

approaches face challenges: long treatment durations, high patient commitment, risks of PIH, frequent relapses, and limited efficacy, particularly in Southeast Asian skin [6].

The demand for effective pigmentary disorder treatments continues to grow in Southeast Asia, driven by lighter skin tone preferences and the higher prevalence of melasma [6]. Yet, awareness of pigmentary disorders remains lower compared to Western countries, partly due to socioeconomic barriers and cultural differences in the perception of skin [7,8].

The unique characteristics of Asian skin, with distinct responses and side effects compared to Caucasian skin [9], highlights the need for more region-specific research [2]. A better understanding of Asian skin biology will improve therapeutic selection and enhance clinical management of pigmentary disorders [2]. Effective treatment not only enhances skin appearance but also significantly improves quality of life by reducing self-consciousness, social limitations, and dependence on cosmetic camouflage [3].

This Journal of Asia Pacific Aesthetic Sciences (JAPA) collaborative issue with the Pigmentary Disorder Special Interest Group (PDSIG) of the Philippine Dermatological Society (PDS) seeks to highlight the challenges of treating aesthetic pigmentary disorders in Southeast Asia, particularly in Malaysia and the Philippines. This issue features a range of disorders, novel treatment approaches, and case reports, while acknowledging current limitations. Moving forward, we aim to expand coverage to more Southeast Asian countries and disorders, while exploring innovative treatments with fewer adverse effects.

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