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**Case Report**

# Repigmentation of vitiligo universalis masquerading as pseudo-melasma

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## ABSTRACT

Vitiligo is a common depigmentation disorder that affects the melanocytes. We present a case of middle-aged female with complaints of pigmented lesion over both cheeks. Clinical differentials of melasma, pregnancy induced hypertension (PIH) was considered but which on further evaluation turned out to be re-pigmentation in vitiligo universalis that had developed during her postpartum which masqueraded as melasma.

**Keywords:** Vitiligo, Melasma, Pigmentation

## INTRODUCTION

Vitiligo is a common depigmentation disorder that affects the melanocytes.[1] In India, where fairness directed skin lightening medications and procedures are most sought after; it is important to know that the patient's complaints can be misleading in vitiligo and it is essential to know the normal skin tone of the patient which is varied especially in skin of colour.[2]

## CASE REPORT

A 48-year-old female presented with complaints of asymptomatic dark skin lesion over bilateral cheeks for past 6 months. On history taking, the patient revealed that she developed universal depigmentation which started over the right foot 8 years back when she was 6 months postpartum and then progressed to involve the entire body and there has been no progression of depigmentation for past 2 years. She had no comorbidities. There was no significant family history or prior treatment history.

On visual inspection, brown pigmented patches of size 5×4 cm and 3×2 cm with ill-defined margins was present over malar prominences and left upper eyelid respectively (Figure 1). Depigmentation was present all over body including scalp, lips but sparing facial, axillary, pubic hair. Two brown macules present over dorsal aspect of left foot near third and fourth digit. Multiple erythematous plaques with central clearing and raised active borders present over bilateral legs and thighs.

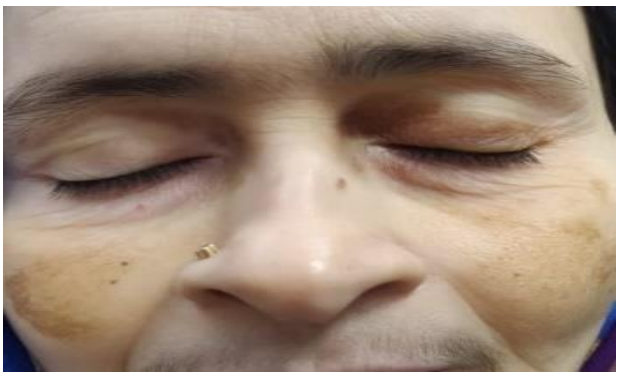

**Figure 1: Pigmented patch with ill-defined margins on bilateral cheeks extending to left eyelid and depigmentation sparing the facial hair.**

On Woods lamp examination, there was accentuation of pigmentation over the left upper eyelid and malar prominences partially (Figure 2). KOH examination of the skin from the erythematous lesions revealed dermatophyte infection. The patient was diagnosed as vitiligo universalis with spontaneous repigmentation and *Tinea corporis*.

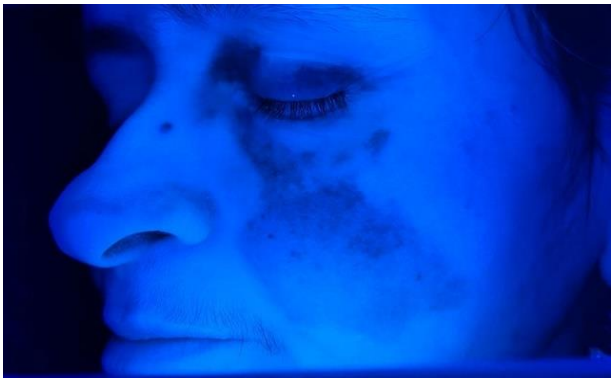

**Figure 2: On Wood's lamp examination, accentuation of epidermal component of melanin seen over the left eyelid.**

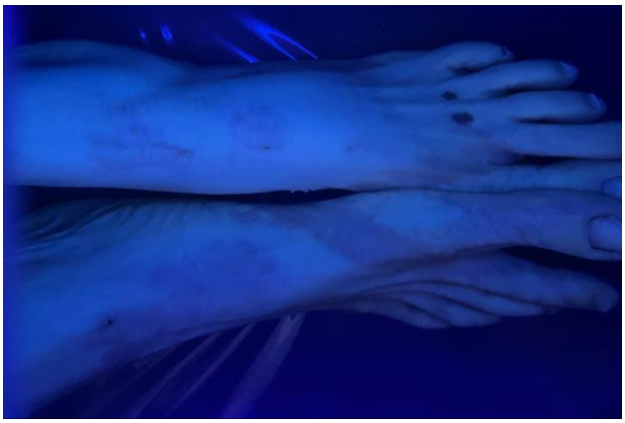

**Figure 3: On Wood's lamp examination, two round macules of pigmentation present on dorsum of left foot.**

## DISCUSSION

Vitiligo is a depigmenting skin disorder with prevalence of 0.5–2% of the population worldwide.[1] Vitiligo is classified based on clinical grounds into two major forms, namely, segmental vitiligo (SV) and non-segmental vitiligo (NSV).[3] Vitiligo universalis a form of NSV with complete or nearly complete depigmentation of the skin, body hair and sometimes oral/genital mucosae. However, vitiligo may spare the scalp, pubic, and axillary areas early in the course of disease and small perifollicular, discrete, or coalescent pigmentation may persist in sun-exposed areas.[3] In our patient the disease has been nonprogressive for 2 years. The presence of pigmented hairs in the spared areas is in direct contrast with oculocutaneous albinism (OCA 1B-TS), which is one of the differential diagnoses of vitiligo universalis; spares cooler areas like extremities while warmer areas like axilla, groin are affected first due to temperature sensitive enzyme activity.[4]

Our patient has poor prognostic markers such as delayed presentation and extensive involvement, acrofacial involvement, non-segmental type and mucosal involvement. Vitiligo universalis has been associated with polyendocrinopathy, neurofibromatosis 1, alopecia universalis, Grave's disease, Evans syndrome, antiphospholipid syndrome.[4] In our case scenario, the disease started within one year postpartum which in concordance with Danish study revealed that there is increased risk of autoimmune disorders during pregnancy and one year postpartum.[6] In a study from Singapore regarding vitiligo and pregnancy, in six months postdelivery assessment, about (36%) of patients reported disease worsening in vitiligo.[7]

Wood's lamp examination is useful in pigmentary disorders like melasma, vitiligo, ash leaf macules of tuberous sclerosis. In vitiligo, it helps in marking early lesions so that effective targeted phototherapy can be given.[8]

The treatment options available for vitiligo universalis are depigmenting agents like 88%phenol, MBEH, imatinib, imiquimod, diphencyprone and physical modalities like laser and cryotherapy. Repigmentation has been documented after chemotherapy, strong sun exposure and dialysis.[9] But in our patient no such previous history was available and patient wore sun protective clothing due to religious sentiments. Spontaneous repigmentation has been documented in less than 15% patients.[10] Although several theories have been proposed to explain the absence of melanocytes in vitiligo. A study by Tobin et al provides evidence that melanocytes are never completely absent in the depigmented epidermis and that these melanocytes can recover their functionality under an appropriate stimulus.[11]

## CONCLUSION

It is important to know about the normal skin tone which can be varied in skin of colour. In our patient though the apparent clinical presentation was that of hyperpigmentary disorder of melasma; history and detailed physical examination revealed the underlying depigmentary disorder of vitiligo. This case also highlights that though sun protected, certain areas like axilla, groin are spared which is conversely affected with sparing of extremities in oculocutaneous albinism (OCA 1B) which is one of the differential diagnoses of vitiligo universalis.

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