



## DERMATOSIS PAPULOSA ALBA – A RARE CASE REPORT

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**ABSTRACT** Dermatitis papulosa Nigra is found in African-american and Asians, often has its onset during adolescence. The lesions are located predominantly over the face, particularly on the malar regions, but they may also occur on the neck and the upper trunk. It is characterised by small, smooth, and pigmented papules.

**KEYWORDS :** Dermatitis papulosa nigra, Dermatitis papulosa alba, Vitiligo.

**INTRODUCTION:**

Dermatitis papulosa nigra is a very common condition with a familial basis. They occur as small, deeply pigmented papules over the face, neck and upper torso, onset is from the early twenties. This condition is estimated to affect up to 77% of African-American individuals and is progressive with more lesions occurring over time<sup>(1)</sup>. It is more commonly seen in women than men, and women tend to have more number of lesions than men.<sup>(1)</sup>

Lesions vary from pin-point to several millimetres in diameter. Histologically, they are identical to seborrheic keratoses, and should be considered as a variant.<sup>(2)</sup>

**CASE REPORT:**

A 55 year old female patient known case of vitiligo vulgaris for the past 25 years came to the dermatology OPD with complaints of raised skin lesions over the malar area of the face and eyelid, the lesions were completely asymptomatic. She had no other comorbidities. Systemic examination turned out normal.

Dermatological examination revealed complete depigmentation of the skin involving the face, chest, back, abdomen, bilateral upper and lower limbs with few areas of pigmentation involving bilateral eyelids, with presence of white papules near the eyelid and malar area of the face, measuring about 1-5mm in diameter, which was smooth in consistency.

**DISCUSSION:**

Dermatitis papulosa nigra (DPN) is a common benign naevoid condition generally occurring in adult black population. It was first introduced by Castellani in 1925.<sup>(3)</sup> DPN is considered as an epidermal nevus<sup>(4)</sup> or hamartoma with follicular origin<sup>(5)</sup> or a naevoid developmental defect of the pilosebaceous follicles histologically resembling seborrheic keratoses.<sup>(6)</sup>

Vitiligo, an autoimmune disorder characterized by localized/generalized depigmentation of the skin with or without involvement of the mucous membranes. It occurs worldwide with an overall prevalence of 1%. Adults and children of both sexes are equally affected, although there has been an increased incidence reported among females.<sup>(7,8,9)</sup>

However, majority of the vitiligo cases have been reported during the period of active growth.

Both the genetic and epigenetic factors play a role in the etiopathogenesis of vitiligo. Recent studies show that genetic factors play a major role. An alteration in the microenvironment of the epidermal-melanin units, related possibly to immunological and neurochemical factors have also been assumed.

In vitiligo, disruption of the process of physiological melanisation because of subcellular disorganization of unknown mechanism within the melanocytes culminates in their death and disappearance.

The various hypothesis that are proposed involve the immune response hypothesis<sup>(10)</sup>, neural hypothesis<sup>(10)</sup>, autotoxic self-destructive hypothesis<sup>(10)</sup>, composite hypothesis<sup>(10)</sup>, melanocyte growth factor reduction hypothesis,<sup>(10)</sup> antioxidant deficiency theory.<sup>(10)</sup>

In our case of vitiligo vulgaris, since there is dysfunction of the melanocytes, it has also led to the depigmentation of the DPN's, which we now term it as Dermatitis papulosa alba. Light cautery or hyfrecation may be effective.

**CONCLUSION:**

We report this case because of this rare occurrence of dermatitis papulosa alba in a case of vitiligo vulgaris, wherein the depigmentation has been proposed to be an outcome of a dynamic tug of war between the immune system and the pigment homeostatic mechanism.

**ACKNOWLEDGEMENT**

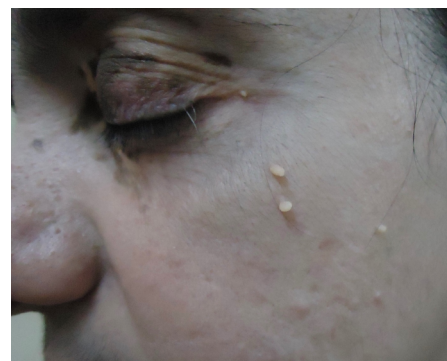
None

**CONFLICT OF INTEREST**

The authors declare that they have no conflict of interest.

**LEGENDS TO FIGURES:**

**FIG 1:** Clinical photograph showing depigmented papules near the lateral canthus and over the malar area.

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