

# **Strict anatomical co existence and colocalization of vitiligo and psoriasis – a rare entity**

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## **Abstract**

We describe a case report of a 58 year old female patient who developed typical psoriatic plaques covering completely or partly the vitiliginous areas of her skin. Her psoriasis was strictly limited to the vitiliginous patches with no involvement of the normal skin. Strict anatomical coexistence of both diseases is extremely rare and suggests a casual mechanism, possibly due to a koebner phenomenon but genetic and environmental factors may also be involved.

## **Introduction**

The occurrence of psoriasis in patients with vitiligo has not been often described.<sup>1,2,3</sup> Vitiligo and psoriasis are common conditions with a prevalence of approximately 1% and 3% respectively<sup>4,5</sup> and may be present in the same person. Colocalisation of psoriasis and vitiligo is rare.

## **Case report**

A 58 year female reported to the department of dermatology with depigmented patches over the axillae, neck, breasts and groins, arms, forearm, elbows, hands, fingers, legs and thighs since 6 years. Patient noticed erythematous plaques with thick scaling over extensors and scalp since 2 years. Cutaneous examination revealed well defined and erythematous papules and plaques with silvery scales over arm, forearm, elbows, hands, fingers, legs and thighs. There was mild pruritus present over lesions. The psoriasis occurred only over many of the viligo lesions. There was co-localisation of psoriatic lesions over vitiligo patches. The PASI score of the patient was 12. A clinical diagnosis of coexistent vitiligo and psoriasis was made. These diagnoses were confirmed by histological examinations of biopsies from sites of psoriasis and from sites of vitiligo alone.

The patient was put on melanocyl 0.6 mg/kg body weight on alternate days, but patient complained of increased photosensitivity with aggravation of lesions after a few weeks of treatment. Subsequently, the patient was put on methotrexate 0.2 mg/kg body weight. The response started appearing within two weeks of treatment.

The psoriatic lesions cleared upto 6 weeks after treatment with methotrexate ( with a drop of PASI score to 3.2), but the repigmentation in vitiligo lesions took a longer time. After 12 weeks of treatment, the vitiligo patches showed partial repigmentation. The patient is still on treatment for vitiligo and is on a regular follow up.

## **Discussion**

In our case, the patient first presented with vitiligo and later psoriasis developed at many of the sites of vitiligo. Possibly the first case of guttate psoriasis restricted to areas of vitiligo was reported in 1989<sup>2</sup>. In

1998, Dhar and Malaks described the first likely case of vitiligo associated with psoriasis in a pediatric patient<sup>6</sup>.

Papdavid et al<sup>3</sup> stated that in cases of psoriasis limited to areas of vitiligo, their coexistence may result from koebner phenomenon. Several studies indicated a polygenic model for vitiligo<sup>7</sup> and psoriasis<sup>8,9</sup>

Many susceptibility loci of psoriasis<sup>10</sup> & vitiligo<sup>11,12</sup> have been mapped and a for vitiligo. AIS1, in chromosome IP 31, is situated close to the susceptibility locus for psoriasis PSORS7<sup>1,2</sup>. Nevertheless, the possibility of loci being identical is minimized by the low prevalence of psoriasis in patients with vitiligo.

Co-localisation of two disorders which possess a prominent immunological component in their pathogenesis may offer a clue as their causation.<sup>13</sup>

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