

A child with hypopigmented patches on the trunk: Is it vitiligo?

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Case history

The parents of a 3-year-old boy are extremely worried by the appearance, over the preceding 3–4 months, of multiple irregularly shaped hypopigmented patches, predominantly over the anterior and posterior trunk (Fig. 1). Itch does not seem to be a feature and the child is otherwise healthy. The mother is concerned as her own brother developed similar areas of pigment loss as an adult and has been diagnosed with vitiligo. Your further questioning of the parents reveals that the father of the patient is an asthmatic and suffered with eczema as a child.

Is this likely to be vitiligo?

In view of the family history of vitiligo, that diagnosis needs to be considered. However, on closer inspection some of the lesions show mild erythema and scaling. Further questioning of the parents elicits a history of a number of erythematous dry and mildly pruritic lesions occurring in approximately the same distribution 5 months previously while the family were visiting relatives in Europe during the cold Northern winter. At the time the parents applied sorbolene cream and used some water-dispersible bath oil, which seemed to stop the pruritus and on return from their overseas trip the problem had apparently resolved. Although itching can occur in the early stages of vitiligo it is unusual. Vitiligo usually starts on sun exposed areas (e.g. face, backs of hands), but the distribution of lesions in this case does not exclude vitiligo. Vitiligo lesions are often quite sharply demarcated whereas the

lesions of this child tend to merge into the surrounding unaffected skin.

What other conditions can produce this type of depigmentation?

Hypomelanotic areas can be seen in the yeast infection, Pityriasis versicolor, which affects the trunk, most commonly the upper trunk. The macules typically show a fine scale that, if not obvious clinically, can be elicited by scraping the skin. Microscopy of skin scrapings will show typical short fungal filaments and spores. That particular yeast infection is rare in children in temperate climates, but is common in children in tropical areas. Hypopigmented macules are frequently seen following resolution of inflammatory skin diseases such as eczema and psoriasis.

What is the most likely diagnosis?

The family history of atopy and the history of an itchy rash some months previously suggests the diagnosis of post inflammatory hypopigmentation following an episode of eczema, which, in the case of this patient, was precipitated by the unusually dry and low humidity conditions encountered while he was in the Northern hemisphere. Post inflammatory hypopigmentation is more common in racially pigmented skin. The presence of some areas showing features of mild subacute eczema, apparently insufficient to cause significant pruritus, is the clue to the diagnosis.

What causes the pigment loss?

It is suggested that there is a block in the transfer of melanosomes to the epidermal cells as a result of the edema and inflammation associated with the preceding eczema. The hypopigmented macules exactly correspond to the site of the skin rash that preceded them.

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Figure 1 Ovoid depigmented macules without scale distributed over the back of the 3-year-old child.

How should this be treated?

The parents should be reassured that this is very unlikely to be vitiligo and that, over the ensuing 4–6 months, the normal pigmentation will return, provided that the inflammation is controlled by application of a mild to moderate strength topical corticosteroid in an emollient ointment (not cream) base (e.g. Betamethasone valerate 0.2 mg/g ointment applied twice daily) to the active lesions showing erythema and scaling and the use of bland emollients (e.g. water dispersible bath oils or simple moisturisers such as olive oil 10% in aqueous cream) for the whole trunk.

Further reading

Hunter J, Savin J, Dahl M. Disorders of pigmentation. In: *Clinical Dermatology*, 3rd edn. Oxford: Blackwell Science, 2002; 242–52.