

# Vitiligo Coexistent with Striae: Association More than Coincidence?

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Dear Editor:

Koebner phenomenon, the appearance of preexisting skin lesions following trauma to previously uninvolved skin, is frequently seen with vitiligo, and the dermatological literature contains reports of various forms of trauma resulting in this phenomenon. However, the appearance of vitiligo coexistent with striae distensae as a form of Koebner phenomenon is rarely reported.

A 14-year-old boy presented with vitiliginous macules that had coexisted with striae on both legs for the past 4 months. He had developed several scattered depigmented macules on the right pretibial skin 1 year prior, and the lesions progressed slowly and asymptotically, so he ignored them and did not seek any treatment. Four months before seeking treatment, he noticed a relatively sudden onset of striae on both legs. Gradually he noticed rapidly developing white spots occurring throughout the striae, and he eventually sought treatment.

The patient had no history of excessive exercise or obesity, and was no evidence of any endocrinopathy. His height and weight had increased over the past year, but he did not know by exactly how much. Physical examination showed an otherwise well developed and healthy boy. Striae were scattered across both legs and were surrounded by vitiliginous macules. Some fresh erythematous striae located on both the pretibial regions and the right peroneal region were not affected (Fig. 1). He was prescribed traditional Chinese medicine granules made for

vitiligo treatment but failed to attend follow-up appointments.

Although vitiligo and striae are both common skin disorders, only two articles before now have reported this rare phenomenon<sup>1,2</sup>, and all the reported patients had preexisting vitiligo before the striae occurred, and striae were considered the initiating factor for the 'true Koebnerization' of vitiligo.

In this case, although the patient had vitiligo for 1 year prior to seeking treatment, he was otherwise a healthy and well-developed 14-year-old, so the striae in both legs were caused by the onset of puberty. Unlike the other reported cases, his vitiliginous macules were not restricted to the areas with striae; rather, his history of preexisting vitiligo and onset sequence of the striae and the developed vitiliginous lesions were consistent with the clinical aspect of Koebner phenomenon<sup>3</sup>. As such, we propose that in this patient, the vitiligo on and around the striae is the Koebner phenomenon and not just a coincidence.

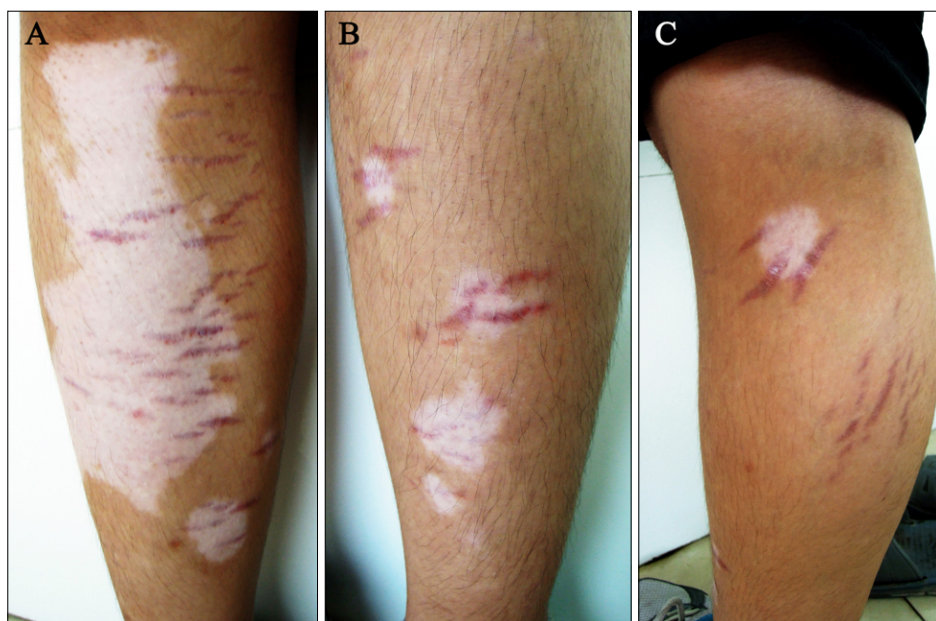
Striae-induced Koebner phenomenon in vitiligo has not been studied at the cellular level. Striae are a form of dermal scarring in which the pathological changes occur in the sub-epidermis while the overlying epidermis remains normal. However, the pathological changes in vitiligo are in the basal layer of the epidermis, so it still remains a mystery as to how a sub-epidermal condition can initiate the spread of vitiligo<sup>4</sup>.

Cause striae distensae and vitiligo are both common

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**Fig. 1.** Vitiligo on and around the striae distensae on the right (A) and left (B) pretibial regions; some fresh erythematous striae located on the right peroneal region (C) were not affected.

diseases in teenagers, but the two diseases occur together was rarely reported. It is important to document that striae are not only a common disfiguring cutaneous condition but may be a form of trauma that can initiate or precipitate the Koebner phenomenon in susceptible individuals with vitiligo. To the best of our knowledge, this is the first case of vitiligo coexistent with striae to be reported in China.

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