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Linear Vitiligo Going on a Varix Way: Possible Association with Koebner Phenomenon

Vitiligo lineal sobre el trayecto de una variz: posible fenómeno de Koebner

To the Editor:

We present the case of a woman of 40 years of age with a history of obesity, systemic hypertension, and migraine, and who was on treatment with clorthalidone, propranolol, and rizatriptan. She was seen for a clearly delimited hypopigmented macule on the lateral aspect of the left thigh and lower leg, following the path of a varicose vein (Figure 1). The lesion appeared on an area of previously healthy skin. There were no other lesions characteristic of vitiligo, although the patient reported a family history of vitiligo in her maternal grandmother. Additional tests, including complete blood count, routine biochemistry, and autoimmune screening (antinuclear and antithyroid antibodies) were normal or negative. Histology of the lesion showed a normal epidermis, with the presence of vascular ectasia in the superficial dermis and no melanophages or signs of inflammation (Figure 2). Masson-Fontana staining revealed an absence of melanocytes in the basal layer (Figure 3). Clinical and histology findings were consistent with a diagnosis of vitiligo. The patient was followed up for 10 months with no treatment and perifollicular re-pigmentation was observed, supporting the previous diagnosis.



Figure 1 Linear hypopigmentation on the path of a varicose vein and perifollicular repigmentation.

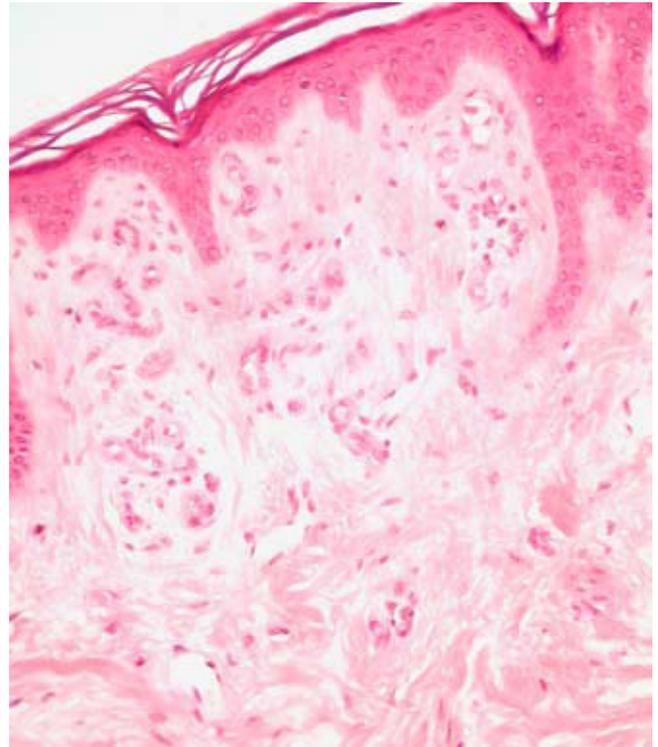


Figure 2 Hypopigmented macule: vascular ectasia in the superficial dermis with no inflammatory infiltrate or melanophages. Hematoxylin-eosin, original magnification $\times 200$.

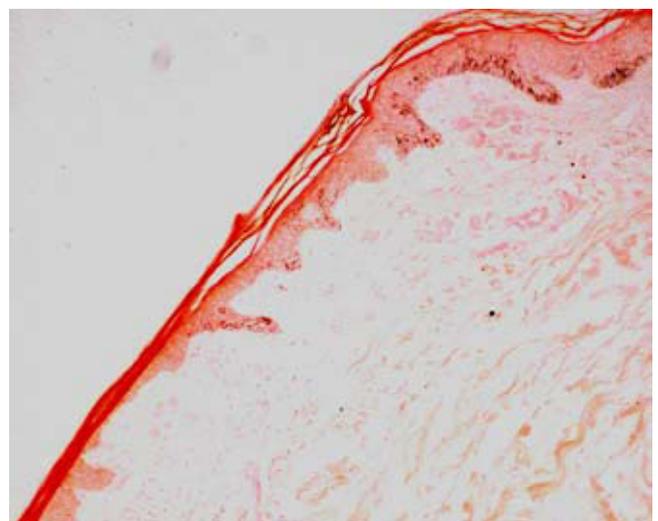


Figure 3 Histological section through the area of transition between skin with normal pigmentation and the hypopigmented macule, showing a total absence of melanocytes in the hypopigmented area. Masson-Fontana, original magnification $\times 40$.

This is the first case we have encountered of vitiligo following the path of a varicose vein. Although this could be coincidental, the linear distribution over a dilated vein could also perhaps be explained as a Koebner phenomenon stimulated by the underlying vessel.

Koebner phenomenon is often associated with vitiligo, which has been described over bony prominences and other areas easily susceptible to trauma, even when the trauma is mild, as may be caused by washing or clothing. Vitiligo in association with trauma has also been observed on surgical wounds, and this can be an indicator of the likelihood of vitiligo developing in healthy skin grafts,¹ or after various types of inflammatory skin disease.^{2,3} It is worth noting that linear patterns in skin lesions can be related to anatomical structures (blood vessels, lymph vessels or nerves), mechanical factors (stretch marks, dermatoglyphism), or trauma (Koebner phenomenon).⁴

We present the case of a patient with vitiligo following the path of a varicose vein. While the clinical presentation allows us to suggest the vitiligo developed in response to a Koebner phenomenon, this isolated case is not supported by previous descriptions of a similar nature and may simply be a casual occurrence.

References

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