The Heliotrope Sign of Dermatomyositis: The Correct Meaning of the Term Heliotrope

A common misconception is that the word heliotrope refers to the localization of the cutaneous lesions on sun-exposed areas. The terms heliotrope and heliotropic mean “turning towards the sun” and derive from Greek helios (sun), meaning “sun,” and trophein (to turn). Over the years, the term heliotrope has been used to indicate things that either reflect or turn to the sun, including an instrument for land survey, a mineral, and, above all, a flower.

The heliotrope sign (HS) indicates a violaceous to dusky erythematous skin eruption, with or without edema, symmetrically involving the periorbital regions and often the forehead (Figure, A). Sometimes, a paler form appears as a slight discoloration of the eyelid border. Although it rarely occurs in patients with dermatomyositis and scleroderma, the HS is a typical feature of acute dermatomyositis. The HS refers to the flower Heliotropium, a genus of flowering plants belonging to the family of Benigoineae. This genus Heliotropium includes hundreds of different species, among which Heliotropium peruvianum is the most representative and shows small, fragrant, purplish petals (Figure, B). The color heliotrope has been defined in relationship to this flower and has received specific color coordinates that are registered in A Dictionary of Color. The similarity between the hue of the periorbital rash of dermatomyositis and that of the petals of the flower justifies the use of the term heliotrope.

The flower that turns to the sun in the European countries is the sunflower (Helianthus annuus), which Van Gogh immortalized with a vivid yellow color (Figure, C). Therefore, in the absence of knowledge about H peruvianum, the HS associated with dermatomyositis would not make sense to European dermatologists, who have their own heliotropic flower, but with a different color. The correct etymology of the term heliotrope may be found in the Rhenatography Image Bank website, which mentions the "association rash-flower." Consideration of the etymology of medical terms may be useful to better understand their significance.

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Figure. A, Heliotrope sign of dermatomyositis; B, Heliotropium peruvianum; and C, Helianthus annuus.

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