Dear Cutis®:

While driving to work on a sunny morning, a 30-year-old dermatology resident experienced intense burning on his forehead that abated abruptly upon arrival at clinic. A sickle-shaped erythematous patch was noted (Figure). A diagnosis of phytophotodermatitis was proposed; however, the resident did not recall recent contact with plants. The diagnosis of photosensitivity dermatitis was confirmed when the resident remembered being inadvertently squirted with 5-aminolevulinic acid (ALA) while in clinic 24 hours prior and neglecting to wash it off. The lesion resolved spontaneously within a week.

Exogenous factors, an “outside job,” must be strongly considered when encountering strikingly geometric or bizarre-shaped skin lesions. ALA is a prodrug metabolized to protoporphyrin IX over several hours within the epidermis after topical application and is used in photodynamic therapy. Visible (blue) light activates protoporphyrin IX, immediately generating reactive oxygen species that destroy premalignant or malignant cells. This porphyrin also photosensitizes normal skin, as in this case, and causes the disorder protoporphyria when endogenous production is excessive.

Sincerely,
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Dr. Zeltser reports no conflict of interest.
Dr. Gilchrest is an advisory board member for DUSA Pharmaceuticals, Inc.