

## Images in Dermatology

## Omeprazole-Induced Subacute Cutaneous Lupus Erythematosus

Elizabeth L. Hall, MD; Rahul Peravali, BS; Tejesh S. Patel, MD

**A man in his 80s** presented with a 2-year history of a pruritic rash on the trunk and arms. It was composed of annular, erythematous polycyclic plaques with peripheral scale and central areas of hyperpigmentation and clearing (Figure). A punch biopsy specimen revealed interface dermatitis with increased interstitial mucin compatible with lupus erythematosus. Serologic test results were positive for antinuclear antibody (titer, 1:640), anti-Ro/SSA, and anti-La/SSB while negative for antihistone, anti-Smith, and anti-double-



Clinical image of omeprazole-induced subacute cutaneous lupus erythematosus in a patient with Fitzpatrick type V skin.

stranded DNA antibodies. The patient had no coexisting joint, lung, kidney, or mucosal symptoms suggestive of systemic lupus erythematosus. A medication review found a history of omeprazole use beginning 1 month before the eruption's onset. Drug-induced subacute cutaneous lupus erythematosus (SCLE) was suspected, and the cessation of omeprazole led to marked improvement in the rash after 1 month.

A subset of cutaneous lupus erythematosus, SCLE is characterized by the presence of photodistributed annular or papulo-squamous plaques and is strongly associated with anti-Ro/SSA and anti-La/SSB antibodies.<sup>1</sup> As many as 30% of SCLE cases are thought to be induced or exacerbated by drugs.<sup>2</sup> Drug-induced pathogenesis should be considered, especially in elderly patients and those taking multiple medications.<sup>3</sup> Antihypertensives, anti-epileptics, antifungals, and proton pump inhibitors are among the most common causative agents. The precise pathogenesis of drug-induced SCLE is unknown; certain drugs may induce a photosensitivity reaction that facilitates the development of SCLE in susceptible individuals.<sup>3</sup>

Drug-induced and idiopathic SCLE are challenging to differentiate, but investigators have found characteristics that might distinguish them. Patients with drug-induced SCLE are typically older at age of onset and more likely to experience systemic symptoms.<sup>4</sup> Also, the drug-induced eruption may be more widespread and can exhibit additional cutaneous morphologic features such as palpable purpura, bullae, and lesions that resemble erythema multiforme.<sup>5</sup> A detailed medication and clinical history, coupled with a meticulous skin examination and histopathologic and/or serologic correlation, is imperative in reaching an early and correct diagnosis.

Management differs between the 2 entities. Immediate cessation of the associated agent is the cornerstone of drug-induced SCLE treatment. Topical corticosteroids and systemic antimalarials, medications used as first-line treatments in idiopathic SCLE, may also be used in drug-induced SCLE to expedite clinical improvement. Physicians must recognize drug-induced SCLE and appropriately diagnose patients of all skin types. Discontinuation of the causative agent will reduce patient morbidity and prevent unnecessary treatment.

## ARTICLE INFORMATION

**Author Affiliations:** Kaplan-Amonette Department of Dermatology, The University of Tennessee Health Science Center, Memphis (Hall, Patel); College of Medicine, The University of Tennessee Health Science Center, Memphis (Peravali).

**Corresponding Author:** Elizabeth L. Hall, MD, Kaplan-Amonette Department of Dermatology, The University of Tennessee Health Science Center, 930 Madison Ave, Ste 801, Memphis, TN 38104 (elee22@uthsc.edu).

**Published Online:** July 8, 2020.  
doi:10.1001/jamadermatol.2020.2415

**Conflict of Interest Disclosures:** None reported.

**Additional Contributions:** We thank the patient for granting permission to publish this information.

## REFERENCES

1. Sontheimer RD, Maddison PJ, Reichlin M, Jordon RE, Stastny P, Gilliam JN. Serologic and HLA associations in subacute cutaneous lupus erythematosus, a clinical subset of lupus erythematosus. *Ann Intern Med.* 1982;97(5):664-671.
2. Grönhagen CM, Forede CM, Linder M, Granath F, Nyberg F. Subacute cutaneous lupus erythematosus and its association with drugs. *Br J Dermatol.* 2012;167(2):296-305.
3. Lowe GC, Henderson CL, Grau RH, Hansen CB, Sontheimer RD. A systematic review of drug-induced subacute cutaneous lupus erythematosus. *Br J Dermatol.* 2011;164(3):465-472.
4. Guicciardi F, Atzori L, Marzano AV, et al. Are there distinct clinical and pathological features distinguishing idiopathic from drug-induced subacute cutaneous lupus erythematosus? *J Am Acad Dermatol.* 2019;81(2):403-411.
5. Marzano AV, Lazzari R, Polloni I, Crosti C, Fabbri P, Cugno M. Drug-induced subacute cutaneous lupus erythematosus. *Br J Dermatol.* 2011;165(2):335-341.