

## THE CLINICAL PICTURE

### LIDIA MAROÑAS-JIMÉNEZ, MD

Department of Dermatology, Hospital 12 de Octubre, and i+12 Research Institute, Universidad Complutense, Madrid, Spain

### ALEJANDRO LOBATO-BEREZO, MD

Department of Dermatology, Hospital Severo Ochoa, Leganés, Madrid, Spain

### RAMON PIGEM, MD

Department of Dermatology, Hospital Clinic, Barcelona, Spain

### DIANA MENIS, MD

Department of Dermatology, Hospital 12 de Octubre, Madrid, Spain

### SARA PALENCIA-PÉREZ, MD, PhD

Department of Dermatology, Hospital 12 de Octubre, Madrid, Spain

# Whiplash-shaped acute rash



**FIGURE 1.** A widespread streaked rash with a scratch-like appearance over the patient's back.

**A** PREVIOUSLY HEALTHY 32-YEAR-OLD MAN presented to the emergency room with a persistent, nonpruritic rash on his trunk, which had suddenly appeared 2 days after he ate Chinese food.

Physical examination revealed multiple cross-linked linear plaques that appeared like scratches over his chest, back, and shoulders (**Figures 1 and 2**). He had no dermatographism, and his scalp, nails, palms, and soles were not affected. He had no signs of lymphadenopathy or systemic involvement.

Basic blood and urinary laboratory testing, blood cultures, and serologic studies showed normal or negative results.

Given the presentation and results of initial testing, his rash was diagnosed as flagellate erythema,

doi:10.3949/ccjm.83a.15062



**FIGURE 2.** Closer inspection of the lesions showed intensely erythematous linear plaques with a pseudovesicular surface.

likely due to shiitake mushroom intake. The diagnosis does not require histopathologic confirmation.

The rash resolved spontaneously over the next 2 weeks with use of a topical emollient and without scarring or residual hyperpigmentation.

## ■ FLAGELLATE ERYTHEMA

Flagellate erythema is a peculiar cutaneous eruption characterized by the progressive or sudden onset of parallel linear or curvilinear plaques, most commonly on the trunk. The plaques are typically arranged in a scratch pattern resembling marks left by the lashes of a whip.<sup>1</sup> In contrast to other itchy dermatoses and neurotic excoriations that may present with self-induced linear marks, flagellate erythema appears spontaneously.

### Drug-related causes, disease associations

Originally described in association with bleomycin treatment, flagellate erythema is currently considered a distinct feature of several dermatologic and systemic disorders, and therefore the ability to recognize it is

## FLAGELLATE ERYTHEMA

valuable in daily practice.<sup>2</sup> In addition to bleomycin analogues and anticancer agents such as peplomycin,<sup>1</sup> bendamustine,<sup>3</sup> and docetaxel,<sup>4</sup> physicians should consider shiitake dermatitis<sup>5</sup> and other less commonly reported associations such as dermatomyositis,<sup>6</sup> lupus,<sup>7</sup> Still disease,<sup>8</sup> and parvovirus infection.<sup>9</sup>

### Diagnostic features

The diagnosis of flagellate erythema is mainly based on the morphologic features of the clinical lesions.<sup>1</sup> Shiitake dermatitis and flagellate erythema related to rheumatologic disease usually present with more inflammatory and erythematous plaques. Chemotherapy-induced flagellate rash typically has a violaceous or purpuric coloration, which tends to leave notice-

able hyperpigmentation for several months.<sup>2</sup>

Skin biopsy may be necessary to distinguish it from similar-looking dermatoses with different histologic findings, such as dermatographism, phytophotodermatitis, erythema gyratum repens, and factitious dermatoses, which may require specific treatments or be related to important underlying pathology.<sup>1,2</sup>

### Treatment

Treatment includes both specific treatment of the underlying cause and symptomatic care of the skin with topical emollients and, in cases of associated pruritus, oral antihistamines. The patient should also be reassured about the self-healing nature of shiitake dermatitis rash.<sup>5</sup> ■

### REFERENCES

1. Yamamoto T, Nishioka K. Flagellate erythema. *Int J Dermatol* 2006; 45:627–631.
2. Bhushan P, Manjul P, Baliyan V. Flagellate dermatoses. *Indian J Dermatol Venereol Leprol* 2014; 80:149–152.
3. Mahmoud BH, Eide MJ. Bendamustine-induced “flagellate dermatitis.” *Dermatol Online J* 2012; 18:12.
4. Tallon B, Lamb S. Flagellate erythema induced by docetaxel. *Clin Exp Dermatol* 2008; 33:276–277.
5. Adler MJ, Larsen WG. Clinical variability of shiitake dermatitis. *J Am Acad Dermatol* 2012; 67:140–141.
6. Jara M, Américo J, Duce S, Borbujo J. Dermatomyositis and flagellate erythema. *Clin Exp Dermatol* 1996; 21:440–441.
7. Niiyama S, Katsuoka K. Systemic lupus erythematosus with flagellate erythema. *Eur J Dermatol* 2012; 22:808–809.
8. Ciliberto H, Kumar MG, Musiek A. Flagellate erythema in a patient with fever. *JAMA Dermatol* 2013; 149:1425–1426.
9. Miguélez A, Dueñas J, Hervás D, Hervás JA, Salva F, Martín-Santiago A. Flagellate erythema in parvovirus B19 infection. *Int J Dermatol* 2014; 53:e583–e585.

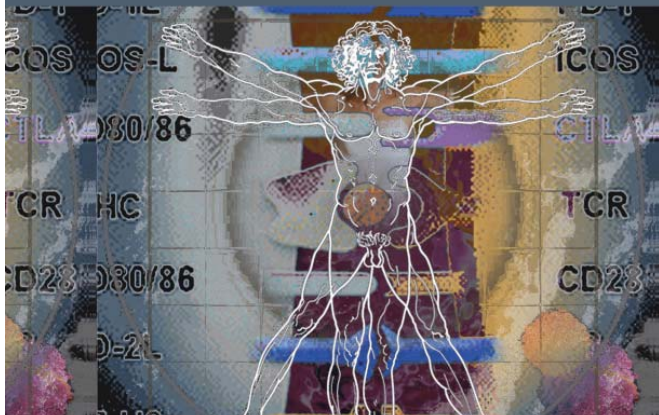
ADDRESS: Lidia Maroñas-Jiménez, MD, Department of Dermatology, Hospital 12 de Octubre, Avenida de Córdoba s/n, 28041 Madrid, Spain; lydia.maroasjimenez@gmail.com



R.J. Fasenmyer Center for Clinical Immunology

## Basic and Clinical Immunology

Complimentary CME-certified Webcast Series



Do you feel left behind by the rapid advances in laboratory immunology being applied to patient care?

IF SO, DON'T MISS THIS UNIQUE OPPORTUNITY TO GET UP TO SPEED IN BASIC AND CLINICAL IMMUNOLOGY.

As a shareholder in the evolving field of immune-based therapeutics, the **Basic and Clinical Immunology webcast series** is your source for education and training in this field.

### Watch these webcasts

- Overview of Innate Immunity, the Microbiome, and the Integrated Immune Response
- T Cell Effector Function (TH1, TH2, TH17) and Cytokine Biology
- Antigen Presentation, T Cell Activation and Deactivation
- Multiple Sclerosis – Cell Trafficking and the Integrated Immune Response
- Tolerance and Autoimmunity – Lessons from Animal Models and Primary Immunodeficiency Syndromes
- Immunoglobulins and Complement in Health and Disease
- Bone Immunology – Ankylosing Spondylitis and Psoriatic Arthritis
- B Cell Biology and T Follicular Helper Cells – The Fundamentals

These activities have been approved for AMA PRA Category 1 Credit™.

View today! [ccfcme.org/clinicimmun](http://ccfcme.org/clinicimmun)