



IMAGE

Flagellate dermatitis secondary to intake shiitake mushrooms

Dermatitis flagelada por ingesta de setas shiitake

Elisabeth Gómez Moyano*, Leandro Martínez Pilar

Dermatology Department, Hospital Regional Universitario de Málaga, Spain

A 63 year-old-man presented with a severely itching dermatitis without other signs or symptoms. His medical history was unremarkable.

On physical examination we observed confluent erythematous micropapules in a linear and parallel pattern on the trunk, simulating a whiplash striped (Figs. 1 and 2). He denied contact with plants, and he had not received bleomycin. Two days before onset the patient ate grilled shiitake mushrooms in an Asian restaurant. After the lunch the patient go to the beach.

The laboratory studies showed eosinophilia (700 cells/mcL). C-reactive protein, TSH, ferritin, creatine phosphokinase were in the normal range and negative antinuclear antibodies.

He started treatment with cetirizine 10 mg/day and topical methylprednisolone aceponate 0.1% for 2 weeks with good clinical response.

Flagellate dermatitis is a rare, presumably toxic epidermal damage following consumption of raw or half-cooked Shiitake mushrooms,¹ or cutaneous side effect of bleomycin² or bendamustine. More uncommon causes of flagellate dermatitis are dermatomyositis, Still's disease and Chikungunya fever.

Flagellate dermatitis caused by the consumption of undercooked or raw shiitake mushrooms usually occurs



Figure 1 Parallel striped whiplash-like erythema-toedematous lesions.

* Corresponding author.

E-mail address: [\(E.G. Moyano\).](mailto:elisabeth.gomez.moyano@gmail.com)



Figure 2 Confluent erythematous micropapules in a linear and pattern on the trunk, simulating a whiplash striped.

48–72 h after ingestion, secondary to delayed hypersensitivity reaction.² It presents as papular, petechial, or vesicular lesions in a crisscrossed, linear pattern, with intense itching. This dermatosis affects the trunk and extremities, less often

the face or hair-covered scalp. The histology is variable and not particularly specific.

Some authors consider that the lentinan could induce a direct toxic skin reaction, other authors submitted their patients to patch and prick tests that came out positive, and they believe that the answer is a late onset hypersensitivity.³

Whether cofactors, such as medications like ACE-inhibitors or diuretics, or UV-exposure, possibly play an additional role is also under discussion.⁴

There was a suggestion of possibility of photodermatoses by Hanada, because the 47% of patients of a serie of 94 patients with shiitake dermatitis developed lesions after sunexposure.⁵ Phototoxic dermatitis is caused by contact or ingestion of some photosensitizing substance, as in the present case is shiitake ingestion.

Conflict of interest

No conflict of interest.

References

1. Santos N, Silva PM, São Bráz MAA. Case of flagellate dermatitis after ingestion of shiitake mushrooms. *J Allergy Clin Immunol Pract.* 2018;6:647–8.
2. Imhof RL, Tollefson MM. Bleomycin-induced flagellate dermatitis. *Mayo Clin Proc.* 2019;94:371–2.
3. Lapresta A, de Miguel R, Sánchez-Moya AI, Robuschi F, Cardona C. Shiitake dermatitis in a Spanish patient. *Dermatol Online J.* 2011;17:16.
4. Maier T, Herzinger T. Flagellanten dermatitis auf Shiitake-Pilze. *Hautarzt.* 2007;58:1021–2.
5. Hanada K, Hashimoto I. Flagellate mushroom (Shiitake) dermatitis and photosensitivity. *Dermatology.* 1998;197:255–7.