

SHIITAKE-INDUCED FLAGELLATE DERMATITIS – A CASE REPORT

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Summary

Shiitake-induced flagellate dermatitis is a rare cutaneous reaction characterized by linear erythematous lesions arranged in a flagellate pattern, typically occurring after the ingestion of inadequately cooked shiitake mushrooms.

We report the case of a 56-year-old male patient with no significant medical history who presented with an intensely pruritic eruption that developed 24–48 hours after consuming undercooked shiitake mushrooms. Clinical examination revealed linear erythematous lesions distributed over the trunk and limbs.

The diagnosis was established based on the characteristic clinical presentation and relevant dietary history, without the need for additional investigations. The patient showed complete resolution following symptomatic treatment.

Recognition of this entity is essential, as it allows for prompt diagnosis and prevents unnecessary investigations.

Keywords: *flagellate dermatitis, shiitake, cutaneous eruption, food-related reaction, lentinan.*

Received: 24.04.2026

Accepted: 25.05.2026

Introduction

Shiitake-induced flagellate dermatitis is a rare cutaneous reaction associated with the ingestion of insufficiently cooked shiitake mushrooms. It is characterized by the appearance of linear erythematous lesions arranged in a flagellate pattern, resembling whip-like marks.

The exact pathophysiological mechanism is not fully understood; however, lentinan, a thermolabile polysaccharide found in shiitake mushrooms, is believed to play a key role by triggering a toxic or immune-mediated reaction.

With the increasing global consumption of shiitake mushrooms, this condition is becoming more clinically relevant, and its recognition is crucial for accurate and timely diagnosis

medical history, who presented to the dermatology emergency department with an acute onset of an intensely pruritic cutaneous eruption.

The patient reported that the lesions appeared approximately 24–48 hours after consuming undercooked shiitake mushrooms.

Clinical examination revealed multiple linear erythematous lesions arranged in a flagellate pattern, distributed over the trunk and limbs, without associated systemic symptoms.

Based on the suggestive dietary history and the characteristic clinical appearance, a diagnosis of shiitake-induced flagellate dermatitis was established, without the need for further paraclinical investigations.

Materials and Methods

We present the case of a 56-year-old male patient with no significant personal or family

Results

The patient received symptomatic treatment with antihistamines and topical corticosteroids,

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Figure 1. Close-up view highlighting the whip-like linear configuration of the lesions.



Figure 2. Linear erythematous lesions arranged in a flagellate pattern on the trunk.



Figure 3. Overall clinical appearance showing the typical distribution of the lesions.

with complete resolution of the lesions within a few days.

Discussions

Shiitake-induced flagellate dermatitis is a rare but likely underdiagnosed condition, particularly in the context of increasing consumption of shiitake mushrooms worldwide.

It typically develops within 24–72 hours after ingestion of inadequately cooked mushrooms. The diagnosis is primarily clinical, based on the distinctive appearance of the lesions and a relevant dietary history.

In the absence of these key elements, the condition may be misdiagnosed. The main differential diagnoses include dermographism, drug-induced eruptions (particularly bleomycin-induced flagellate dermatitis), and other linear dermatoses of traumatic or allergic origin.

Treatment is symptomatic, consisting of antihistamines and corticosteroids, and the condition is self-limited, with resolution occurring within a few days.

Recognizing this entity is important in order to avoid unnecessary investigations and reduce patient anxiety.

Conclusions

Shiitake-induced flagellate dermatitis is a benign yet clinically distinctive condition that may be underrecognized in daily practice. Its characteristic flagellate pattern, in association with a suggestive dietary history, allows for a prompt clinical diagnosis without the need for extensive investigations.

Awareness of this entity is particularly important in the context of the increasing global consumption of shiitake mushrooms, as failure to recognize it may lead to misdiagnosis and unnecessary diagnostic procedures.

A thorough anamnesis, with emphasis on recent dietary intake, plays a pivotal role in establishing the diagnosis. Early recognition and appropriate symptomatic management ensure a favorable outcome and contribute to reducing patient anxiety.

Bibliography

1. Nakamura T. Shiitake (*Lentinus edodes*) dermatitis. *Contact Dermatitis*. 1992;27(2):65–70.
2. Hanada K, Hashimoto I. Flagellate dermatitis caused by shiitake mushroom. *J Am Acad Dermatol*. 1998;39:329–331.
3. Boels D, et al. Shiitake mushroom-induced flagellate dermatitis: a systematic review. *Int J Dermatol*. 2014;53:1489–1494.
4. Lolis MS, Goldberg DJ. Flagellate dermatitis after ingestion of shiitake mushrooms. *Dermatol Online J*. 2012;18(7):5.
5. Raguideau F, et al. Shiitake dermatitis: clinical features and pathophysiology. *Ann Dermatol Venereol*. 2015;142:45–50.

Conflict of interest
NONE DECLARED

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