



Shiitake Flagellate Dermatitis

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A man in his early 70s presented with a 3-day history of intensely pruritic erythematous papules and papular vesicular eruption arranged in a flagellate pattern on his neck, trunk, (Figure 1), and extremities with no general symptoms. On questioning, he had eaten undercooked shiitake mushrooms 2 days before the onset of the cutaneous lesions. Laboratory investigation was unremarkable. A skin biopsy revealed spongiosis, marked papillary dermal edema, and a dermal perivascular inflammatory infiltrate mainly composed of lymphocytes and eosinophils. A diagnosis of shiitake flagellate dermatitis (SFD) was made. He was treated with oral antihistamines and topical calamine lotion. The eruption resolved completely in about 10 days, only leaving mild hyperpigmentation (Figure 2).

Shiitake flagellate dermatitis typically occurs about 24 to 48 hours after eating raw or undercooked shiitake mushrooms. The exact pathogenesis of SFD remains unclear. It is more likely a direct toxic reaction to lentinan, an inflammatory polysaccharide



FIGURE 1. On the back of a patient with shiitake flagellate dermatitis, erythematous papules and papular vesicular eruption arranged in a flagellate pattern.



FIGURE 2. After treated with oral antihistamines and topical calamine lotion, the eruption of a patient with shiitake flagellate dermatitis resolved in about 10 days, only leaving mild hyperpigmentation.

found in shiitake mushrooms that is broken down by heat.¹ It is characterized by erythematous linear grouped papules, petechiae, or vesicular lesions resembling scratch or whiplash marks. Some people can develop laboratory abnormalities and reactive airway disease.² The histological findings are consistent with a hypersensitivity reaction and are nonspecific. These findings should prompt the clinician to look for an exposure to an allergen (contact or ingested), drug, infection, or systemic disorder. The differential diagnosis of SFD also includes dermatographic urticaria, bleomycin therapy, dermatomyositis, adult Still disease, and human immunodeficiency virus with hypereosinophilic syndrome. Shiitake flagellate dermatitis is self-limited, and antihistamines and topical corticosteroids have been used for symptomatic relief. Fully cooking shiitake mushrooms before ingestion usually prevents recurrence.

POTENTIAL COMPETING INTERESTS

The authors report no competing interests.

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