

Raised Linear Plaques on the Back

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A 77-year-old man with a history of hypertension, hyperlipidemia, and nonmelanoma skin cancer presented to the dermatology clinic for evaluation of a new rash of 2 days' duration. He trialed a previously prescribed triamcinolone cream 0.1% without improvement. The patient denied any recent travel, as well as fever, nausea, vomiting, or changes in bowel habits. Physical examination revealed diffuse, erythematous, raised, linear plaques on the mid to lower back.

WHAT'S YOUR DIAGNOSIS?

- acute urticaria
- cutaneous dermatomyositis
- dermatographism
- flagellate dermatitis
- maculopapular cutaneous mastocytosis

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The authors report no conflict of interest.

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doi:10.12788/cutis.0853

THE DIAGNOSIS: Flagellate Dermatitis

Upon further questioning by dermatology, the patient noted recent ingestion of shiitake mushrooms, which were not a part of his typical diet. Based on the appearance of the rash in the context of ingesting shiitake mushrooms, our patient was diagnosed with flagellate dermatitis. At 6-week follow-up, the patient's rash had resolved spontaneously without further intervention.

Flagellate dermatitis usually appears on the torso as linear whiplike streaks.¹ The eruption often is pruritic and may be preceded by severe pruritus. Flagellate dermatitis also is a well-documented complication of bleomycin sulfate therapy with an incidence rate of 8% to 66%.²

Other chemotherapeutic causes include peplomycin, bendamustine, docetaxel, cisplatin, and trastuzumab.³ Flagellate dermatitis also is seen in some patients with dermatomyositis.⁴ A thorough patient history, including medications and dietary habits, is necessary to differentiate flagellate dermatitis from dermatomyositis.

Flagellate dermatitis, also known as shiitake dermatitis, is observed as erythematous flagellate eruptions involving the trunk or extremities that present within 2 hours to 5 days of handling or consuming undercooked or raw shiitake mushrooms (*Lentinula edodes*),^{5,6} as was observed in our patient. Lentinan is the polysaccharide component of the shiitake species and is destabilized by heat.⁶ Ingestion of polysaccharide is associated with dermatitis, particularly in Japan, China, and Korea; however, the consumption of shiitake mushrooms has increased worldwide, and cases increasingly are reported outside of these typical regions. The rash typically resolves spontaneously; therefore, treatment is supportive. However, more severe

symptomatic cases may require courses of topical corticosteroids and antihistamines.⁶

In our case, the differential diagnosis consisted of acute urticaria, cutaneous dermatomyositis, dermatographism, and maculopapular cutaneous mastocytosis. Acute urticaria displays well-circumscribed edematous papules or plaques, and individual lesions last less than 24 hours. Cutaneous dermatomyositis includes additional systemic manifestations such as fatigue, malaise, and myalgia, as well as involvement of the gastrointestinal, respiratory, or cardiac organs. Dermatographism is evoked by stroking or rubbing of the skin, which results in asymptomatic lesions that persist for 15 to 30 minutes. Cases of maculopapular cutaneous mastocytosis more often are seen in children, and the histamine release most often causes gastrointestinal tract symptoms such as nausea, vomiting, and diarrhea, as well as flushing, blushing, pruritus, respiratory difficulty, and malaise.

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