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test and the episode, the explanation for this phenomenon continues to be a subject of speculation. The tuberculin test may have acted as a traumatic or infectious trigger that activated the patient's innate immunity, thus increasing TNF- α production by the plasmacytoid dendritic cells and stimulating local activation and proliferation of pathogenic T cells, thereby leading to the episode. Because treatment with the same agent (or an agent of the same family) 5 could have caused the episode to persist, it was decided to change to a treatment with a different mechanism of action; the lesions were brought under control in a few days. In conclusion, our case extends the tuberculin-related complications that may be seen in patients with psoriasis who are undergoing treatment with etanercept.

Conflicts of Interest

Dr. Carlos Ferrándiz and Dr. José Manuel Carrascosa have received fees as consultants and/or speakers sponsored by Wyeth, Abbot, Schering-Plough, and Janssen-Cilag.

The other authors declare that they have no conflicts of interest.

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Flagellate Dermatitis After Eating Shiitake Mushrooms*

Dermatitis flagelada tras la ingesta de setas del género Shiitake

To the editor:

The shiitake mushroom (*Lentinus edodes*), commonly eaten in China and Japan, is the second most widely consumed mushroom species worldwide and it is also becoming increasingly available in Western markets. ^{1,2} In Japan, the shiitake mushroom is used as an antihypertensive or lipid-lowering agent and as adjuvant therapy against colorectal or gastric cancer because of the beneficial properties of its polysaccharide lentinan. ¹⁻⁴

Flagellate dermatitis caused by the consumption of undercooked or raw shiitake mushrooms usually occurs 48-72 hours after ingestion. It presents as papular, petechial, or

vesicular lesions in a crisscrossed, linear pattern, primarily on the trunk, upper limbs, neck, and face, accompanied by marked pruritus.¹⁻⁴

Several authors have reported other adverse reactions to shiitake mushrooms, including allergic contact dermatitis, phototoxicity, contact urticaria, allergic asthma, and isolated cases of chronic hypersensitivity pneumonitis induced by shiitake spores.⁵⁻⁷

We present the case of a 79-year-old woman who visited our unit for an emergency examination of a very itchy rash 72 hours after onset. The only relevant medical history was that the patient was being monitored for chronic cutaneous lupus. The lesions had not responded to an intramuscular corticosteroid injection administered 24 hours earlier.

The patient reported eating grilled mushrooms 72 hours prior to the appearance of the lesions. She had not taken any medication prior to the onset of the cutaneous symptoms, and presented no fever, joint pain, or other systemic symptoms.

Physical examination revealed multiple crisscrossing linear erythematous lesions composed of petechiae that did not blanch with pressure. The lesions were located primarily on the trunk, neckline, and proximal areas of the upper and lower limbs (Fig. 1). There was no mucosal involvement.

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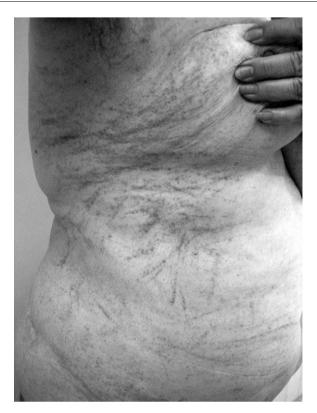


Figure 1 Crisscrossing linear erythematous lesions, primarily on the trunk.

Laboratory tests were normal, and a biopsy of one of the lesions revealed spongiotic dermatitis and slight blood extravasation in the superficial dermis.

The patient returned for a follow-up visit 2 weeks later, by which time the lesions had completely resolved (Fig. 2).



Figure 3 Positive scratch test with vesiculation after 96 hours. Inset, bottom right: shiitake mushrooms provided by the patient.

She provided a sample of the mushrooms she had ingested prior to the appearance of the lesions. They belonged to the shiitake species ($L.\ edodes$), though it was unclear whether they had been imported (Fig. 3). The mushrooms were refrigerated and later used to carry out, in the patient and 10 healthy controls, Finn Chamber epicutaneous patch tests and scratch tests in which a Microlance 3 needle ($0.5 \times 16 \, \text{mm}$) was used to prepare the surface of the skin without causing bleeding. The results were read 2, 48 and 72 hours after test administration. The patient's scratch test was positive at 48 and 96 hours, when it displayed marked erythema and vesiculation (Fig. 3), but her patch tests were negative. None of the controls had positive reactions in either hypersensitivity test.



Figure 2 Complete resolution of the lesions after 2 weeks.

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Shiitake dermatitis was first described in a series of 23 cases published in 1977 by Nakamura, who went on to publish a longer series in 1992. To date, approximately 100 cases have been reported worldwide, mostly in China and Japan, only a few in Europe, and none in Spain.

Shiitake dermatitis appears in certain people following consumption of undercooked or raw shiitake mushrooms; this suggests that these individuals must be susceptible or hypersensitive to a thermolabile substance present in the mushroom.

As biopsy results usually indicate nonspecific spongiotic dermatitis, ² shiitake dermatitis is diagnosed on the basis of the appropriate clinical signs and symptoms in a patient who has eaten undercooked or raw shiitake mushrooms. ^{2-4,8}

It has a clinical picture similar to that of the flagellate dermatitis induced by drugs such as bleomycin,⁴ although the mechanism of action does not appear to be the same.⁹ While lentinan, the polysaccharide found in shiitake mushrooms, is thought to be responsible for the lesions of flagellate dermatitis^{2–4,8} due to the production of IL-1, the exact pathogenesis is poorly understood.

The negative patch test results cast doubt on the hypersensitivity hypothesis. However, the results of scratch and prick-to-prick test vary, and in some cases, like that of our patient, these tests have been positive. ¹⁰ We therefore posit that the symptoms described were the result of a systemic allergic reaction to the shiitake mushroom.

This is the first case of shiitake dermatitis to be reported in Spain, and it yielded a positive scratch test result. We believe that this case supports the hypothesis that this dermatitis is caused by a delayed hypersensitivity reaction and that cutaneous hypersensitivity tests could therefore be useful tools for diagnosing the condition and determining its exact pathogenesis, which remains unclear.

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Comment on: Nonsexually Transmitted Acute Ulcer of the Vulva Associated With Influenza A Virus Infection[☆]

Úlcera vulvar aguda de transmisión no sexual asociada a infección por virus influenza A

To the Editor:

We read with great interest the letter published by Esteve-Martínez et al¹ on nonsexually transmitted acute ulcer of the vulva, or ulcus vulvae acutum, associated with influenza A virus infection, and would like to congratulate the authors on their concise and thorough review of this condition.

We agree with their conclusion that it is important to be familiar with this type of vulvar ulcer and its association with influenza A virus infection,^{2,3} and would like to draw readers' attention to fact that this ulcer can also occur in elderly patients, regardless of whether or not they report having had sexual relationships. One interesting case we saw recently was that of a 20-year-old woman with necrotizing genital ulcers that had required debridement in the gynecology department at our hospital.

The patient, with no relevant past history, reported that she had experienced fever and generalized joint pain 11 days before being seen in the dermatology department. She had been prescribed treatment with antipyretic medication and a single dose of oral levofloxacin by her primary care physician. Four hours after ingestion, the patient noted vulvar discomfort and an inflamed area. In the next 24 hours, she also developed pharyngeal discomfort and a worsening general state of health, leading her to visit the emergency department, where a polymerase chain reaction (PCR) assay confirmed influenza A subtype H1N1 infection. The

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