ANSWER TO PHOTO QUIZ (PAGE 92)

ANOTHER CAUSE FOR FLAGELLATE DERMATITIS

DIAGNOSIS

Shiitake dermatitis or flagellate mushroom dermatitis

When the patient was directly asked, he acknowledged that he had eaten fish with Shiitake mushrooms five hours before the appearance of the rash. The diagnosis of Shiitake dermatitis was finally made, based on the morphological features of the clinical lesions and the clinical history. Antihistamines were prescribed and the rash resolved in one week without post-inflammatory hyperpigmentation.

The shiitake mushroom (*Lentinus edodes*), primarily used in Asian cooking, is now the second most widely consumed mushroom species worldwide. In addition to their culinary uses, it is known for having antihypertensive, lipid-lowering, and also anti-carcinogenic properties.

Shiitake dermatitis was first reported by Nakamura in 1977 as a toxicoderma developing after the consumption of raw or half-cooked mushrooms.[1] It usually presents as a linear erythematous eruption with papules, papulovesicles or plaques, and severe pruritus.

Onset can occur within hours to 4 or 5 days after ingestion of the mushrooms, but the time delay between ingestion and eruption is usually 24 to 48 hours.

The exact pathogenesis remains unknown. Shiitake dermatitis is considered a toxic reaction to lentinan, a thermolabile polysaccharide that increases interleukin-1, causing vasodilation and haemorrhage. Patch testing and skin prick testing have not been proven useful for diagnosing this condition, suggesting a non-allergic aetiology.[2] Histological examination is not mandatory but if performed it usually reveals non-specific histopathological features, including hyperkeratosis, spongiosis, dermal oedema and perivascular lymphocytic infiltrate with eosinophils.[3]

Differential diagnosis includes other causes of flagellate dermatitis induced by drugs such as bleomycin or bendamustine and autoimmune diseases as dermatomyositis or adult-onset Still's disease.[4] Symptomatic dermographism (also called urticaria factitia) and dermatitis artefacta should also be considered in the differential diagnosis.

Diagnosis is usually made based on clinical history and physical examination. Only symptomatic care with topical steroids and emollients, and in cases of associated pruritus, oral antihistamines, is necessary. Most authors consider that re-ingestion of shitake mushrooms is safe if they are thoroughly cooked as this allows denaturation of the toxin. The growing popularity of Asian cuisine has led to an increasing number of cases of Shiitake dermatitis in Europe. Physicians must be aware of this condition, to provide a prompt diagnosis, and management.

REFERENCES

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