Flagellate dermatitis due to raw shiitake consumption: a French Poison Control Centres study.

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OBJECTIVE
Shiitake mushroom (Lentinus edodes) is an edible fungus which was initially grown in Japan and China and appeared more recently on the European market. A flagellate erythema may follow shiitake consumption and was first described in Japan in 1977 (1). The aim of this paper is to report a French case series.

METHOD
A retrospective study of shiitake dermatitis cases, reported to the French Poison Control Centres (PCC) from January 2000 to November 2013. All data related to shiitake consumption were collected from all French PCCs and were extracted from the Poisons Centres database.

RESULTS
15 cases of flagellate dermatitis. The first case of this series occurred in 2006 and the last 8 cases were reported as of 2012.

Consumption:
- raw shiitake (n=14)
- raw shiitake powder infused for 5 min at room temperature (n=1).

SYMPTOMS
- Skin rash generally appeared 12-24 h after ingestion (2-120 h).
- Linear and itchy urticarial lesions formed on the trunk, arms and legs within a few hours and persisted for 3-21 days.
- For 3 patients, dermatitis was associated with digestive disorders such as diarrhoea or dysphagia.
- In 4 cases, rash and pruritus were either triggered or worsened by sun exposure.

TREATMENT
- Ten patients were administered corticosteroids and/or antihistamines, with little evidence of efficacy on both pruritus and the eruption.
- In one patient, topical corticosteroid treatment worsened the pruritus and skin eruption symptoms.
- All patients had a complete recovery.

DISCUSSION ET CONCLUSION
Due to the rapidly increasing consumption of exotic food in Western countries, it is no surprise that cases of shiitake dermatitis are now appearing in Europe. The mechanism of shiitake dermatitis currently remains unexplained and is thought to be toxic and due to lentinan, a polysaccharide component of the mushroom. There is no specific validated treatment of shiitake dermatitis. Health authorities have been alerted to boost public awareness of the risk of toxic dermatitis due to consumption of these raw or undercooked mushrooms.

Références

A perfect dinner to compare RAW and COOKED shiitake consumption!

A shiitake shared meal, 4 costumers.

Mrs A and Mrs B consumed cooked shiitake and remain asymptomatic.

Two other dinner guests, Mr C (case 1) and Mr D, are brothers who consumed raw shiitake. The symptoms of flagellate dermatitis had a similar clinical course in both cases.

In case 1, 10 days after the meal, the cutaneous manifestations worsened, with pruritus, after sun exposure. In both patients’ symptoms persisted for 12 and 15 days, respectively, but they both completely recovered.

TOXICITY MECHANISM?
Hypothesis (2,3): toxicodermia due to lentinan, a thermolabile polysaccharide component of the mushroom.