CASE REPORTS

Sequelae of a 'magic mushroom banquet'

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Summary

Magic mushroom festivals are becoming increasingly common especially in some areas of Wales where the mushroom can be found in profusion. The authors report on the sequelae of one such festival, and point out the dangers of which the participants generally are unaware.

Introduction

Mushroom cults have been well known in Central and South America, and archaeological evidence dates their existence back to the year 1000 B.C. (Horowitz, 1978). The mushroom most commonly used for hallucinogenic purposes in the U.K. is *Psilocybe semilanceata* or the 'liberty-cap' (Fig. 1.)

FIG. 1. *Psilocybe semilanceata* – The 'magic mushroom'.

These mushrooms contain psilocybin and psilocin, which are indole hallucinogens derived from tryptamine. Psilocybin converts to psilocin in the body,

but it is the former which is the more resistant of the 2 toxins, and which retains considerable activity even in dried mushrooms. Psilocybin (1.0 g) has the potency of about 0.005 g of LSD, but it acts more quickly, usually within 30 min of ingestion and has psychoactive effects lasting up to 6 hr (Horowitz, 1978).

Case report

The mushroom in the U.K. grows in the Autumn, and a newly discovered mushroom patch on the outskirts of Cardiff tempted 100 young people to gather one evening to try the effects. The festival resulted in 19 people feeling ill enough to require the attentions of general practitioners in the area. Ten went to the casualty department of 3 hospitals in the area, and 2 required hospital admission at the University Hospital of Wales.

The 19 patients all exhibited varying degrees of euphoria, fear, visual hallucinations especially of vivid colours, and perceptual alterations of time and space. They all admitted to eating 20 or more of the new mushrooms, and all felt nauseated, and in some cases this was associated with vomiting.

The 2 hospital admissions were both in their early twenties; they had never eaten magic mushrooms before and on this occasion claimed they had ingested about 100 mushrooms each. They were both very apprehensive, and admitted to vivid visual hallucinations of colour. They both had signs of sympathomimetic excess that included a dry mouth, mydriasis, a sinus tachycardia of between 110–120 beats/min and brisk peripheral reflexes. In addition, one of the patients had paraesthesiae affecting the left side of the face and the left arm, but with no associated weakness.

The electrolytes were normal in both cases and a stomach wash-out was performed. The effects of poisoning had disappeared 12 hr after admission except for the left-sided paraesthesia which persisted, although with diminishing severity for another 12 hr up until the patient took his own discharge.

Discussion

The psilocybin mushroom has very similar effects to that of synthetic psilocybin—the ingestion of 20–30 medium-sized mushrooms being equivalent to an oral dose of 10–12 mg of psilocybin which in a non-tolerant adult would be expected to cause visual or auditory hallucinations associated with alteration of perception (Lampe, 1979).

Larger doses may, however, have more serious side effects. Sympathomimetic effects are well recognized and there have been reports of convulsions and even deaths in small children (McCawley, Brumett and Dana, 1962). Acute delirious and psychiatric states can occur (Hyde *et al.*, 1978) and there have been reports of persistent psychiatric effects after mushroom ingestion, which include 'schizophrenia-like conditions' and inappropriate anxiety states (Benjamin, 1979). Paraesthesia of a cortical distribution has not previously been described.

Psilocin is a class A drug under the Misuse of Drugs Act, 1971, but because the mushroom is not mentioned in the Act, possession is not illegal. Until the Act is so changed, physicians may expect

to see an increasing number of patients suffering from the side effects of over-indulgence. Therapeutic intervention is rarely required because of the brevity of the response, and would be directed mainly to the relief of convulsions or acute psychiatric states.

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