

Bronchospasm induced by royal jelly

OUR CLINICAL pharmacology service runs a drug surveillance program on a limited list of acute diseases in the emergency ward of our hospital (1). We have recently seen three cases of bronchospasm related to royal jelly.

After the ingestion of royal jelly, two women and one man, ranging from 17 to 19 of age, developed acute bronchospasm associated with pruritus, urticaria and eyelid edema (Table 1). Clinical symptoms started between 30 min and 2 h after the ingestion of royal jelly. None of the patients had been exposed to any other medication, except one who had taken two tablets of co-trimoxazole, more than 12 h before bronchospasm started, for the treatment of a peri-

anal abscess. One of the patients had been taking royal jelly (associated with ginseng and tocopherol) every day for 1 month, and another

Three cases of an unusual drug reaction.

had taken royal jelly once before, 3 years earlier. Two patients had a history of atopic asthma during childhood, although 5 years and 9 years had elapsed, respectively, since the last crisis of wheezing. Bronchospasm was treated with epinephrine in one patient, and with terbutaline and corticosteroids in the other two. All three patients recovered on the day of admission. These reports suggest that royal jelly may cause allergic or nonallergic hypersensitivity reactions.

Royal jelly is secreted by the salivary glands of honeybees. It appears to be essential for the development of the queen bees. It has been used as a general tonic, and although claims had been made for its therapeutic value, none of these has been substantiated. It is also included in cosmetics for its alleged beneficial effects on the skin. It mainly consists of proteins, and studies are underway to investigate its allergenic compounds (2).

A few severe allergic reactions, including death, have been associated with the use of royal jelly in recent years. Most of the patients had a known history of asthma or atopy (3, 4). Up to now, the WHO International Program on Drug Monitoring has assembled 15 reports of bronchospasm in patients exposed to royal jelly. In addition, one case of dyspnea, facial edema, and pruritus possibly related to the use of royal jelly has been reported to the Spanish system of pharmacovigilance.

Two of our patients had a known history of atopy and asthma, and we suggest that patients with a history of asthma, atopy, or other allergic conditions may be at increased risk and should avoid this product. It would also be advisable to include warning labels with this information on every preparation containing royal jelly.

Key words: asthma; royal jelly.

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Table 1 Cases of acute bronchospasm in patients who had taken royal jelly

Patient	Age/ sex	Symptoms	History of asthma	Drugs taken	Induction period
1	17/F	Bronchospasm, urticaria	Yes ^a	Royal jelly	30 min
2	17/M	Bronchospasm, pruritus	Yes ^b	Royal jelly, ginseng, tocopherol	2 h
3	19/F	Bronchospasm, eyelid edema	No	Royal jelly, co-trimoxazole	30 min > 12 h

^aLast crisis 5 years before

^bLast crisis 9 years before

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