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Allergy to maggots

INHALANT allergies induced by flies or their larvae have been recognized and reported. Some cases were due to occupational exposure (1, 2), but others to occasional exposure, as in fishing for sport (2-4).

A 12-year-old boy was sent to our service for allergologic evaluation. He had a personal history of atopic dermatitis, and a family history of atopic diseases. In the last 3 years, the patient had presented several episodes of urticaria, nasal obstruction, itching of the eyes, and angioedema of the eyelids, always related to a fishing trip. From the patient's personal history, we discovered that clinical flare-ups (mainly rhinoconjunctivitis and angioedema) occurred immediately after he handled the worms used as fishing bait, and disappeared a few hours after he returned home, spontaneously or after treatment with antihistaminic drugs. The bait worms were identified as larvae of *Calliphora vomitoria* (bluebottle, blowfly) (Table 1), and they were fed a fodder containing mainly cornflour. Skin prick tests and detection of serum IgE (Pharmacia CAP System®, Uppsala, Sweden) to common inhalants were negative. The total IgE level was 12 IU/ml.

Extracts from whole larvae, fodder, and cornflour were obtained from Ifidesa-Aristegui Laboratories (Bilbao, Spain), and prepared at 10 mg/ml for prick testing. Prick tests with the extracts were performed on our patient, eliciting a positive reaction to the whole-larvae extract (18 × 10 mm wheal diameter), but the tests were negative both to the fodder and to the cornflour extracts. Prick tests with the same larvae extract were performed on five atopic and five nonatopic subjects as control group; all of them were negative. Serum specific IgE to the larvae extract could not be detected by

the method used (RAST, Pharmacia, Uppsala, Sweden).

Although allergic symptoms are known to be related to emanations from various insects and their larvae, different mechanisms have been implied (5). Stockley et al. (3) showed the presence of a delayed asthmatic response to a maggot anti-

*Rhinoconjunctivitis,
urticaria, and
angioedema with
positive skin prick test
to maggots (Calliphora
vomitoria).*

gen that is associated with circulating IgG antibody, and concluded that such an association is consistent with circulating immune complex disease. However, in most of the published cases, skin tests and RAST studies confirmed

that reactions were due to specific IgE-mediated hypersensitivity, even in late asthmatic reactions (1, 3, 5). Although specific IgE to the whole-larvae extract could not be detected in serum, the clinical features of the reaction and positive skin prick test with the whole-larvae extract indicate an IgE-mediated mechanism in our patient.

Key words: atopic allergy; *Calliphora vomitoria*; maggot.

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Table 1. Taxonomy of *Calliphora vomitoria* (1)

Phylum:	Arthropoda
Class:	Insecta
Order:	Diptera
Suborder:	Cyclorhapha
Family:	Calliphoridae
Genus:	<i>Calliphora</i>
Species:	<i>Calliphora vomitoria</i>

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