
Correspondence

RHINOCONJUNCTIVITIS CAUSED BY *CALLIPHORA* SPP LARVAE

To the Editor:

Allergy to maggots or larvae used as fishing bait has been described previously in the medical literature.¹ We describe herein 3 cases of allergy to *Calliphora* spp larvae studied by in vivo and in vitro methods. Three fishermen 41, 28, and 18 years old experienced rhinorrhea, palatinus pruritus, sneezing, and conjunctival injection 20 minutes after exposure to fishing bait.

MATERIALS AND METHODS

Asticots used as fishing bait were identified as Bluebottle, *Calliphora* spp. A *Calliphora* larvae sample was extracted in phosphate-buffered saline and centrifuged, and the supernatant was dialyzed, sterile filtered, and freeze-dried. The protein content was measured by the Bradford method.²

All 3 patients underwent skin prick testing (SPT) with common aeroallergens (pollens, molds, house dust mites, and cat and dog danders) and *Calliphora* extract. Conjunctival provocation testing (CPT) was performed with 1/10 serial dilutions of the extract. We used 0.9% saline solution as a negative control in the contralateral eye.

Specific IgE was determined by the enzyme allergosorbent test.³ The assays were calibrated with a positive pool serum to olive pollen (CAP Pharmacia, Uppsala, Sweden). Extracts were analyzed on sodium dodecyl sulfate–polyacrylamide gel electrophoresis (SDS-PAGE) and were transferred to nitrocellulose membranes for immunoblotting.

RESULTS

In all 3 cases, the results of SPT were negative to the common aeroallergens and positive to the *Calliphora* extract at a protein concentration of 1.25 mg/mL. In 2 patients, IgE antibodies to *Calliphora* were detected (0.9 and 21 kU/L, respectively). In these patients, the CPT result was positive at 0.125 mg/mL. The immunoblotting displayed IgE bands of 70 and 90 kDa, and in the patient with the highest level of IgE, additional bands of 119 and 152 kDa appeared. In addition, SDS-PAGE displayed a major 80-kDa protein not recognized by any sera. In the patient without detectable IgE, the CPT result was positive at 1.25 mg/mL. In atopic controls, the SPT and CPT results were negative.

CONCLUSIONS

We present 3 patients with respiratory symptoms (rhinoconjunctivitis) caused by exposure to fly larvae. We have demonstrated IgE-mediated hypersensitivity to *Calliphora* larvae by means of SPT, CPT, and raised levels of specific IgE to *Calliphora* allergens. A similar spectrum of major allergens,

between 30 and 94 kDa, has been identified in another case of *Calliphora* sensitization in a fisherman with respiratory and cutaneous symptoms.⁴ It has been observed that sensitization to maggots may occur from exposure with insects in the occupational setting and in amateur fishing.⁵ Allergic reactions by inhalation of larvae particles, not only by skin contact, can appear in the fishermen community.

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ISOLATED CHRONIC CONJUNCTIVITIS DUE TO STORAGE MITE ALLERGY

To the Editor:

Chronic allergic conjunctivitis is a long-lasting disease that affects the quality life of sensitized individuals. It is particularly troublesome in patients whose conditions are misdiagnosed, who are usually referred to ophthalmologists, allergists, internists, or psychiatrists. Two cases of isolated chronic conjunctivitis due to sensitization to storage mites are described herein.

PATIENT 1

A 22-year-old man allergic to nuts complained of severe conjunctivitis that occurred daily on awakening for the last 5 years. Photophobia was so annoying that the patient switched

to a night shift and avoided most social activities. His bedroom was remarkable for having no windows, a wet wall, and generalized disorder. The results of extensive allergologic workup had been repeatedly negative for conjunctivitis.

Skin tests performed with extracts of *Dermatophagoides pteronyssinus*, *Dermatophagoides farinae*, *Dermatophagoides microceras*, *Lepidoglyphus destructor*, *Tyrophagus putrescentiae*, *Acarus siro*, *Glycyphagus domesticus*, and a battery of common local pollens, allergenic fungi, and cat and dog danders produced negative results, except for positive results for *L destructor* and doubtful results for *G domesticus*. The result of a double-blind conjunctival provocation test with *L destructor* and *D pteronyssinus* extracts (LETI SL, Tres Cantos, Madrid, Spain) was strongly positive for *L destructor* at 0.1 HEP/mL and negative for *D pteronyssinus* at 100 HEP/mL. The level of specific IgE to *L destructor* was 0.47 kU/L. Changes in the bedroom conditions were established, and the signs and symptoms of conjunctivitis resolved.

PATIENT 2

A 23-year-old man complained of daily bilateral conjunctival itching, mucinous secretion, and red eyes of 6 months of evolution. The patient denied rhinitis, cough, asthma, or having pets at home, but he described his office as a wet, closed basement room. Skin tests with the previously mentioned allergens produced positive results for *L destructor* only. A double-blind conjunctival test result was positive for *L destructor* at 0.1 HEP/mL. The level of *L destructor* spe-

cific IgE was 0.86 kU/L. Avoidance measures at home had little effect, and the patient received specific immunotherapy.

Immunoblots of both patients' sera samples demonstrated a single 14-kDa IgE-binding band (Fig 1), probably Lep d 2.¹ The patients' mattresses disclosed 616 mites per gram of dust and 7,543 mites per gram of dust, respectively, mainly corresponding to storage mites.

CONCLUSION

The in vivo and in vitro tests performed in both patients demonstrated sensitization and isolated allergic conjunctivitis due to *L destructor*. Conjunctivitis is more prevalent in individuals sensitized to storage mites than to house dust mites,² although isolated conjunctivitis is rare.

Storage mite exposure may be more frequent than expected in urban populations³ and particularly in damp housing conditions.⁴ Because cross-reactivity between *L destructor* and *G domesticus* is well known,⁵ the routine use of standardized extract of *L destructor* and *G domesticus* may be useful for detecting hidden storage mite sensitization.

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ORAL MITE ANAPHYLAXIS (PANCAKE SYNDROME) ALSO OBSERVED IN CHILDREN

To the Editor:

Anaphylaxis triggered by mite-contaminated foods is being increasingly reported.¹ It is recognized as a hidden food

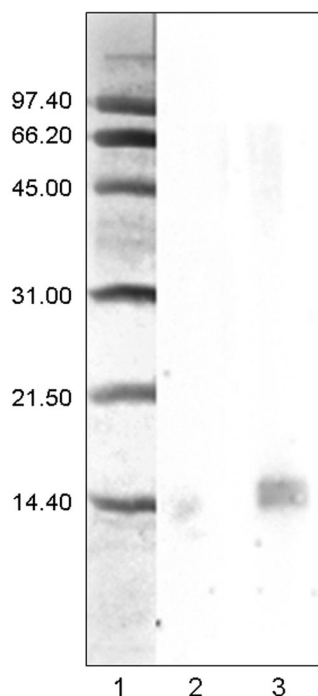


Figure 1. Immunoblot. Lane 1, molecular weight standards; lane 2, patient 1; and lane 3, patient 2.

allergy that is more often associated with foods made with wheat flour that contains mites, frequently pancakes. Therefore, we proposed the term *pancake syndrome*.²

In a recent issue of the *Annals*, Wen et al³ reported a case of oral mite anaphylaxis (OMA) in an 8-year-old Taiwanese boy. Interestingly, Taiwan is located in the intertropical region, northern latitude 23°, with a climate seasonally favorable for mite growth.² In addition, 2 series of OMA patients (from Caracas and Canary Islands) included exclusively adult and adolescent patients ranging in age from 13 to 45 years. Nevertheless, Matsumoto and Satoh⁴ have observed in Japan 6 patients with OMA aged 7, 9, 11, 13, 14, and 16 years. We have also treated children with OMA, the youngest being 7 years old. This patient developed OMA 2 years before experiencing facial angioedema after ibuprofen intake and probably belongs to a subset of individuals with a particular susceptibility for both OMA and nonsteroidal anti-inflammatory drug hypersensitivity (the new triad).⁵

Specific IgE to various mites, including *Dermatophagoides pteronyssinus*, *Dermatophagoides farinae*, *Dermatophagoides microceras*, *Lepidoglyphus destructor*, *Tyrophagus putrescentiae*, *Blomia tropicalis*, *Acarus siro*, *Euroglyphus maynei*, and *Glyphus domesticus*, was present in the serum of the patient described by Wen et al. Since skin prick tests were performed only with *D pteronyssinus* and *D farinae* extracts and only *Blomia freemani* and Blo t 5 but neither Der p 1 nor Der f 1 allergens were present in the flour, the most likely explanation for these results is that extensive cross-reactions between investigated mite species exist.¹ It is known that *B tropicalis* has allergens not cross-reactive with *Dermatophagoides*, such as Blo t 5. In our experience, most allergic patients with rhinitis and/or asthma show immediate-type skin hypersensitivity to both mites. A smaller proportion of patients, ranging from 2.4% to 9.3%, have positive test results to *B tropicalis* and negative results to *D pteronyssinus*, whereas the percentage of subjects who react to *D pteronyssinus* but not to *B tropicalis* varies from 7.4% to 14.1%. We are not aware of studies on cross-reactivity between *Blomia freemani* and *Dermatophagoides* spp, although it is likely that cross-reacting allergens are also present in *Blomia freemani*.

In conclusion, we emphasize that OMA may occur in young allergic individuals, and pediatricians should be advised to consider this condition when a child presents with anaphylaxis of unknown origin that occurs after eating foods prepared with wheat flour, especially pancakes.

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CLOPIDOGREL DESENSITIZATION

To the Editor:

Coronary artery disease (CAD) is one the leading causes of death in the United States. Approximately 13 million people in the United States have been diagnosed as having CAD. Approximately 7.1 million people have a myocardial infarction every year, resulting in 494,382 deaths annually.¹ Primary and secondary CAD prevention strategies are rapidly advancing as our knowledge of this potentially fatal disease improves.

Throughout the years, we have significantly expanded our armamentarium for the treatment of CAD. Newer therapies and technologies have provided an efficient means of preventing this disease. The addition of well-validated medications, such as aspirin,² β -blockers, angiotensin-converting enzyme inhibitors,³ nitrates, and statins,⁴ has significantly reduced morbidity and mortality in patients who have been diagnosed as having CAD or who have had coronary events. Surgical and percutaneous coronary revascularization methods have significantly improved and now can provide symptomatic and survival benefits. More and more coronary revascularization procedures are being performed each year, with excellent long-term outcomes, particularly with availability of drug-eluting stents. These newer drug-coated de-

Table 1. Desensitization Protocol

Time	Dose, mg
0:00	0.005
0:30	0.010
1:00	0.020
1:30	0.040
2:00	0.080
2:30	0.160
3:00	0.300
3:30	0.600
4:00	1.200
4:30	2.5
5:00	5
5:30	10
6:00	20
6:30	40
7:00	75

vices with adjunctive antiplatelet medications significantly reduce restenosis rates compared with angioplasty alone or bare-metal stent implantation.

Clopidogrel (Plavix), an oral antiplatelet medication, has significantly reduced postpercutaneous intervention event rates and improved long-term outcomes.⁵⁻⁹ By inhibition of platelet aggregation via adenosine diphosphate-dependent mechanisms, clopidogrel has become the most important medication after stent implantation. In a small percentage of patients taking this medication, adverse effects may include a rash, which may be severe enough to warrant discontinued use of the drug. In the event that clopidogrel cannot be used, alternative treatments such as ticlopidine have decreased efficacy and require frequent follow-up and testing to prevent even more serious adverse effects.⁸

An allergic skin reaction to clopidogrel has been found to be IgE mediated. For this reason, it is possible to desensitize patients to this drug if they have an allergic reaction. We describe such a case in a 68-year-old white man with a medical history of CAD, hypertension, and asthma who underwent percutaneous intervention of a mid left anterior descending lesion with rotational atherectomy and stenting in July 2003. He was prescribed clopidogrel, 75 mg/d, as an adjunct to stent deployment. One week after the treatment began, the patient developed a generalized pruritic maculopapular rash, which he described as a bad case of hives. He did not have associated shortness of breath, hypotension, edema, or wheezing. The patient had a history of allergy to seafood and garlic; however, no prior drug allergies were known. The rash disappeared after discontinued use of clopidogrel. The patient was readmitted for anginal symptoms and had a second diagnostic cardiac catheterization, which revealed 95% mid left anterior descending lesion. The patient was scheduled for stenting and required clopidogrel desensitization before undergoing stent placement.

Table 1 outlines the desensitization protocol used. The patient was successfully desensitized and underwent cardiac catheterization and stent placement the next day with clopidogrel, 75 mg/d orally, thereafter.

This is the second case of successful desensitization to clopidogrel that we found in the literature.¹⁰ It is important for physicians to be aware that patients allergic to clopidogrel can successfully receive this medication in the future if needed.

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