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Selective allergy to *Venus antiqua* clam

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Prevalence of self reported mollusc allergy ranges from 0.15% (1) up to 0.4% (2). As the reactions elicited can be severe, even life threatening, molluscs have been included in the list of potential food allergens that must appear mandatory on the labelling of foods (3, 4). In this article, we present a case of isolated food allergy to King Broderip clam (*Venus antiqua*).

A 68 year-old non-atopic man with a history of chronic bronchitis and high blood pressure, who had never worked in the food industry, presented 15–30 min after the intake of canned King Broderip clams, palpebral oedema, scalp and palmo-plantar pruritus, with shortness of breath that required treatment with antihistamines and corticosteroids in an emergency room.

Skin prick tests with commercial extracts of clam, shrimp, mussel, oyster and squid were negative (Laboratorios Leti, Barcelona, Spain). Prick–prick tests with canned mussel, razor, cockle and Pullet carpet shell (*Tapes pullastra*, another variety of clam) were negative, but positive (7 × 5 mm) for King Broderip clam (*Venus antiqua*). Total IgE was 245 kU/l, and specific IgE to clam (*Ruditapes spp*), crab, shrimp, mussel, tropomyosin (rPen a1) and house dust mites were negative (CAP Phadia,

Isolated allergy to *Venus antiqua* clam in which tropomyosin is not involved.

Upsala, Sweden). Oral challenges performed with canned mussel, razor and Pullet carpet shell were negative. An oral challenge was carried out with the same commercial brand of canned King Broderip clam to assess the implication of the single *species* and the high specificity of the reaction. Thirty minutes after the intake of the last portion (cumulative dose of 52 g), the patient developed generalized urticaria, facial oedema and mild bronchospasm with normal blood pressure that subsided quickly after the administration of intramuscular epinephrine, inhaled salbutamol and intravenous corticosteroids and antihistamines. To rule out the possibility of allergy to preservatives, a food challenge with canned cockle from the same brand as the canned King Broderip clam and containing the same additives was performed and no reaction was elicited.

The aforementioned allergological study suggests a specific IgE mediated reactivity to King Broderip clam. We have not detected sensitisation to other shellfish and we have even been able to demonstrate oral tolerance to other molluscs including other clam *species* and to *crustacea*. The patient was advised to avoid all clam *species* because of the difficulty of differentiating them, but was allowed to eat the remaining shellfish. Later on, he tolerated shrimps, prawns and oysters.

Mollusc allergy is frequently associated with crustacean allergy and in these cases, tropomyosin is the culprit panallergen (3). However, when isolated allergy to molluscs or to a single *species* occurs, tropomyosin does not seem to have a relevant role, as in our patient. In such cases, molluscs specific allergens or even *species* specific, may be involved (3, 5, 6), but they have been poorly defined. Unfortunately, we failed to identify the allergen/s involved in an immunoblotting assay.

We present a patient with a selective food allergy to King Broderip clam (*Venus antiqua*), who tolerated other molluscs including the closely related

Pullet carpet clam (*Tapes pullastra*), which therefore suggests the existence of specific allergen(s) in this clam *species*.

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