Anaphylaxis to mustard

Sirs,

Mustard has been implicated in very few cases of severe allergic reactions in spite of its widespread use. To our knowledge, just two cases of IgE-mediated anaphylaxis due to mustard have been reported in which serum specific IgE against mustard was demonstrated.1,2 Two cases of systemic anaphylaxis after ingestion of mustard, confirmed by in vitro methods, are presented.

Case 1 A 47 year old woman suffering from seasonal rhinoconjunctivitis since childhood developed 3 episodes of acute severe urticaria and facial angioedema accompanied by nausea, vomiting, dyspnoea, wheezing, chest tightness and hoarseness shortly after ingestion of vegetable sandwiches with mayonnaise and mustard. Prick skin tests with grass and olive pollen were positive. Total serum IgE value was 170 kU/l. Serum specific IgE against mustard gave a strong positive value of 23.6 kU/l (radioallergosorbent test class 4; Phadebas RAST units, Pharmacia Diagnostics). Oral challenges with eggs, olive oil, vinegar, lettuce and tomatoes were negative. A non-specific bronchial challenge with methacholine was done with a negative result, which demonstrates the absence of bronchial hyperreactivity in her basal situation.

Case 2 A 15 year old female with a past history of rhinoconjunctivitis and asthma after exposure to grass pollens presented an episode of generalized urticaria, facial and throat swelling followed by chest tightness, 45 min after ingestion of a vegetable salad containing mustard. Total serum IgE was 536 kU/l. Serum specific IgE against mustard was positive at 18.5 kU/l (radioallergosorbent test class 4). Oral challenges with the rest of the foods ingested that day were negative.

The high antigenic potency of mustard is well known,3 although cases of clinical manifestations are scarce. Our patients have histories of pollen allergy, which were not present in the previously reported patients. Some authors suggest the presence of similar antigenic determinants in grass pollen and mustard seeds4 while others think that a similar lectin activity could be responsible.5 More studies are required to clear up this point.

Carmen Vidal
César Díaz
Antonio Sáez
Matilde Rodriguez
Alfredo Iglesias
Servicio de Alergia
Hospital Puerta de Hierro,
c/ San Martin de Porres 4,
28035 Madrid, Spain.

References