

Anaphylaxis by fruits of the Fagaceae family: acorn and chestnut

L. Zapatero, M. L. Baeza*, Z. Sierra, M^a I. M. Molero

Key words: acorn; chestnut; cross-reactivity; food allergy.

The acorn nut is the fruit of the evergreen holm oak (*Quercus Ilex*), which belongs to the Fagaceae family. In Spain,

great extensions of this tree exist, however, sensitization to its pollen is rare. *Quercus*

Ilex fruit generally serves for feeding animals and it is rarely consumed by the man. The chestnut is the fruit of the *Castanea Sativa* tree that also belongs to the Fagaceae family which holds over 700 species. We present a boy who suffered two different allergic anaphylaxis by acorn and by chestnut.

A 4-year-old male developed, immediately after peeling and eating an acorn, ocular itching eyelid and lip angioedema, unproductive cough, wheezing and dyspnea. He was attended at the emergency unit and treated with systemic antihistamines and steroids; symptoms subsided in 24 h. Months later he experienced similar symptoms immediately after eating a chestnut. He did not refer any symptoms related to latex and eats bananas with good tolerance.

A protein extract was prepared with acorn peel and pulp in phosphate-saline buffer to be used in the allergologic study. Prick test resulted positive to acorn peel (6 × 6 mm), and chestnut (7 × 6 mm) and was negative to common aeroaller-

gens including *Quercus Ilex* pollen. Specific IgE was positive to chestnut: 10.8 kU/L (CAP, Pharmacia, Uppsala, Sweden). IgE ELISA peroxidase was positive to acorn peel, OD₄₉₅: 0.234 (control: 0.037), and acorn pulp OD₄₉₅: 0.292 (control: 0.084). Specific IgE by CAP to chestnut was inhibited by acorn peel extract by 59%. Partial cross-reactivity was demonstrated between these two nuts.

Many cases of allergy to chestnut have been described, either alone or associated to latex allergy (latex-fruit allergy syndrome) (1–4). In 1998, Vega et al. reported the only published case of allergy after eating acorn in a patient who was previously allergic to peanut (5). The low incidence of this allergy is probably related to the low rate of human ingestion. This patient, a 4-year old, had anaphylaxis caused by acorn and chestnut. Allergy to the evergreen holm oak fruit dose not look to be related to its pollen which is otherwise plentiful in Spain and rarely causes allergic symptoms (6). This patient is still very young so we will follow the case closely to look for future pollinosis. Finally, we have demonstrated cross-reactivity between acorn and chestnut, which may not be atypical because both fruits belong to the same family. Chestnut allergic patients should be cautious with acorn ingestion.

*H.G.U. Gregorio Marañón
Servicio de Alergia
Dr Esquerdo 47
Madrid 28007
Spain
Fax: +34915868214
E-mail: lbaezao@seaic.es

Accepted for publication 1 May 2005
Allergy 2005; 60:1542
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DOI: 10.1111/j.1398-9995.2005.00919.x

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Occupational eosinophilic bronchitis

M.-R. Yacoub, J.-L. Malo*, M. Labrecque, A. Cartier, C. Lemièrre

Key words: asthma; eosinophilic bronchitis; formaldehyde; occupational disease; welding fumes.

Eosinophilic bronchitis (EoB) is characterized by chronic cough and sputum eosinophilia. The diagnosis includes an evaluation of other causes of chronic cough, particularly asthma, cough-variant asthma, allergic rhinitis, gastro-oesopha-

Occupational eosinophilic bronchitis due to welding fumes and formaldehyde.