

Cross-reactivity Syndromes in Food Allergy

Instructions to obtain 0.5 Continuing Medical Education Credits

These credits can be earned by reading the text and taking this CME examination online through the SEAIC web site at www.seaic.es.

The questions should be answered within 6 weeks from the publication of the examination.



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CME Items

- 1) The WHO guidelines for the prediction of allergenicity specify that a protein can cross-react with an allergen if
 - a. They share at least 35% sequence similarity in an 80-amino acid fragment
 - b. They share at least 70% sequence similarity in an 80-amino acid fragment
 - c. It contains complete sequence identity of a peptide of at least 6-8 amino acids with the allergen
 - d. a and c are true
- 2) In allergy to cow milk it is true that
 - a. Most patients tolerate goat milk
 - b. Goat milk is most likely better tolerated than mare milk
 - c. The molecular basis of the cross-reactivity between cow milk and veal is allergy to bovine serum albumin
 - d. Most patients are also allergic to veal
- 3) In allergy to chicken eggs it is false that
 - a. Allergy to other bird eggs is the norm
 - b. Bird-egg syndrome consists of the association between respiratory allergy and avian antigens and between food allergy and egg yolk
 - c. The molecular basis of bird-egg syndrome is allergy to ovomucoid
 - d. Bird-egg syndrome is more frequent in adults
- 4) In allergy to fish it is false that
 - a. Parvalbumin is the molecular allergen most frequently involved
 - b. Cross-reactivity between parvalbumin from different species is frequent
 - c. Patients allergic to fish may not be allergic to all species of fish
 - d. Those fish which will most likely be tolerated are megrim, hake, and cod
- 5) In allergy to meat, it is true that
 - a. All the allergenic determinants involved are peptides
 - b. Clinical symptoms are always mild
 - c. Sensitization to galactose- α -1,3-galactose is the cause of allergy to meat from poultry
 - d. Allergies to meat due to sensitization to galactose- α -1,3-galactose are characterized by late onset of clinical symptoms
- 6) In relation to cross-reactivity between legumes, it is false that
 - a. The frequency of clinically relevant cross-reactivity is variable depending on the inducer legume
 - b. In patients allergic to peanuts from the USA, allergy to another legume is rare
 - c. In patients allergic to lentil, clinical reactivity to pea is exceptional
 - d. Most lentil-allergic patients react to another species of legume.
- 7) In cross-reactivity between different nuts, which of the following allergenic families are not potentially molecular bases?
 - a. 2S albumins, 7S globulins, and 11S globulins
 - b. Lipid transfer proteins
 - c. Profilins and homologs of Bet v 1
 - d. All the families listed are potentially molecular bases for cross-reactivity between nuts
- 8) With regard to cross-reactivity syndromes between pollens and foods, it is false that
 - a. Oral allergy syndrome is the characteristic manifestation in allergy to plant foods associated with sensitization to *Artemisia* pollen
 - b. Up to 70% of patients with allergy to birch pollen also have allergy to plant foods
 - c. Allergy to profilins is the usual molecular basis of oral allergy syndrome due to melon
 - d. In the Mediterranean area, sensitization to profilins is associated with pollinosis due to grasses
- 9) With regard to cross-reactivity between vegetables due to allergy to lipid transfer proteins, it is false that
 - a. Lipid transfer proteins are allergens that are both thermally stable and resistant to peptic digestion
 - b. They are the main allergens from Rosaceae fruits
 - c. Cross-reactivity only exists between lipid transfer proteins of sources that are taxonomically related
 - d. Peaches are usually the primary trigger
- 10) With regard to cross-reactivity between vegetables due to allergy to lipid transfer proteins, it is false that
 - a. The range of lipid transfer proteins recognized by the IgE of patients allergic to lipid transfer proteins is variable
 - b. Sensitization to Art v 3 may serve as a marker for the recognition of lipid transfer proteins from more food sources
 - c. Patients with sensitization to multiple lipid transfer proteins should be considered at risk of developing anaphylaxis
 - d. In a patient allergic to Pru p 3, the percentage of sequence identity between Pru p 3 and the lipid transfer proteins from a food to which the patient is sensitized allows the risk of reaction to that food to be estimated