CONTINUING MEDICAL EDUCATION EXAMINATION

Wheat Allergens Associated With Baker’s Asthma

Instructions to obtain 0.5 Continuing Medical Education Credits

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CM E Items

1) Which of the following statements is true regarding the epidemiology of baker’s asthma?
   a) Its prevalence has declined over the last 20 years.
   b) It is the commonest type of occupational asthma in France.
   c) Its incidence is higher among female employees.
   d) It is the most frequent type of occupational asthma in the United Kingdom.

2) Which of the following hypersensitivity disorders caused by wheat is not an IgE-mediated reaction?
   a) Celiac disease.
   b) Baker’s asthma.
   c) Immediate urticaria/angioedema after ingestion of a cereal formula.
   d) Wheat-dependent exercise-induced anaphylaxis.

3) Which of the following tests are recommended for the diagnosis of baker’s asthma?
   a) Skin prick tests with cereal flour reagents.
   b) Specific IgE measurements.
   c) Specific inhalation challenge with cereal extracts.
   d) All of the above.

4) Which of the following statements is not true regarding specific inhalation challenge with cereal flour extracts?
   a) This test is considered the gold standard in the diagnosis of baker’s asthma.
   b) It is not recommended because of the high specificity of skin prick tests.
   c) Some patients may react to some cereals and not to others.
   d) It can be useful for the diagnosis of nonasthmatic eosinophilic bronchitis.

5) Which of the following treatments can be used when baker’s asthma patients cannot be removed from exposure to cereal flour?
   a) Pharmacotherapy according to the level of asthma control.
   b) Specific immunotherapy with wheat flour.
   c) Omalizumab.
   d) All of the above.

6) The sensitization patterns to individual wheat allergens in patients with baker’s asthma seem to be:
   a) Very similar. The same sensitization profile is shown by most patients.
   b) Very different. There is a great individual heterogeneity in sensitization patterns.
   c) Common regarding some molecular markers.
   d) Very different, but 3 allergen families react with over 80% of patients.

7) The extraction of wheat flour with salt solutions (ie, 0.5 M NaCl) guarantees a protein preparation containing:
   a) All the main allergens associated with baker’s asthma.
   b) All the main allergens associated with wheat-dependent exercise-induced anaphylaxis.
   c) Only salt-soluble wheat flour allergens.
   d) Only salt-soluble wheat flour prolamins.

8) Wheat flour allergens belonging to the cereal α-amylase/trypsin inhibitor family are responsible for high cross-reactivity with:
   a) Their homologous inhibitor subunits from rye and barley flour.
   b) Their homologous allergens from pollens.
   c) Their homologous allergens from fruits (ie, peach).
   d) Their homologous allergens from house dust mites.

9) Have lipid transfer protein allergens detected from wheat flour been associated with baker’s asthma?
   a) No, LTPs are mostly allergens from fruits.
   b) No, wheat LTP Tri a 14 has only been related to food allergy.
   c) Yes, but only based on cross-reaction with peach Pru p 3.
   d) Yes, Tri a 14 is a major allergen associated with baker’s asthma.

10) Which of the following allergen families has not been linked to baker’s asthma?
    a) Thioredoxins.
    b) ß-Expansins.
    c) Bet v 1–like allergens.
    d) Peroxidases.
    e) Polcalcins.