Comprehensive Review of Current Knowledge on Egg Oral Immunotherapy

Instructions for obtaining 1.4 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.org

"Actividad acreditada por el Consejo Catalán de Formación Continuada de las Profesiones Sanitarias – Comisión de Formación Continuada del Sistema Nacional de Salud con 1,4 CRÉDITOS".

Activity sponsored by Astra Laboratories
CME Items

1. With respect to the active treatment of egg allergy, which of the following statements is incorrect?
   a. Egg oral immunotherapy was first developed more than 100 years ago
   b. Egg oral immunotherapy consists of the regular administration of native or modified egg products to induce desensitization so that the patient can eat the product
   c. Subcutaneous or sublingual administration of egg in a single dose can resolve egg allergy
   d. Egg oral immunotherapy is a promising treatment for egg allergy

2. With respect to current egg oral immunotherapy protocols, which of the following statements is correct?
   a. They include an induction phase or dose increase phase and a maintenance dosing phase
   b. The 2 phases last the same in all protocols
   c. The induction phase always includes a dose escalation at home on the first day with several doses of egg administered rapidly and a build-up phase every day or every 1-2 weeks until a target dose is reached
   d. All protocols aim to achieve the same target dose

3. Which of the following is a goal of egg oral immunotherapy?
   a. “Maintained tolerance,” ie, the ability to ingest a food without reaction while continuing to take doses of that food regularly
   b. “Desensitization,” ie, the ability to tolerate a food after a period of egg avoidance (≥4 weeks)
   c. Avoidance of the risk of adverse reactions due to accidental exposure to egg
   d. Eating only raw egg

4. Which of the following is true with regard to published egg oral immunotherapy protocols?
   a. They use the same methodologies, inclusion criteria for recruitment of patients, egg materials, and target dose and have the same duration
   b. They are all controlled studies
   c. They must be performed during the first 2 years of life
   d. They are not contraindicated in asthmatic patients

5. Which of the following is true for the materials used in egg oral immunotherapy?
   a. In vivo and in vitro allergenic equivalence between raw and lyophilized egg white has been documented
   b. They must be the same for the induction phase and the maintenance phase
   c. An amount of 1-2 g of dehydrated egg white is equivalent to 1 raw egg white
   d. Raw or cooked natural sources, pasteurized whole egg, pasteurized raw egg white, lyophilized egg white, dehydrated whole egg, and dehydrated egg white have been used in different protocols

6. Which of the following statements about the induction phase of egg oral immunotherapy protocols is false?
   a. It has been reported to last from 5 to 224 days
   b. In most protocols, egg desensitization is successful in a median of >80% of patients, although this percentage can range from 0% to 100%
   c. It is fully demonstrated that protocols with a longer induction phase are more effective at inducing desensitization to egg
   d. Baseline egg sIgE levels may influence the success of the induction phase

7. Which of the following statements on the maintenance phase of egg oral immunotherapy is false?
   a. It consists of the regular administration of the same dose of egg for months or for the patient’s lifetime
   b. The maintenance dose is usually the target dose for the induction phase
   c. All patients who manage to reach the maintenance phase tolerate the established dose of egg throughout their lifetime
   d. Studies using dehydrated egg white administer maintenance doses ranging from 300 mg to 4000 mg

8. Which of the following statements about maintained tolerance of egg oral immunotherapy is false?
   a. It is the ultimate goal of egg oral immunotherapy
   b. It is assessed by performing an oral food challenge after a period of time in the maintenance phase followed by a period of egg avoidance
   c. Studies report that 28% to 75% of patients receiving egg oral immunotherapy finally achieve maintained tolerance
   d. Clinical and immunological markers that indicate successful permanent tolerance after egg oral immunotherapy are well documented

9. Which of the following statements about egg oral immunotherapy is true?
   a. During egg oral immunotherapy, adverse reactions affect 50% to 100% of patients and most are severe
   b. The most frequent adverse reactions in egg oral immunotherapy are respiratory reactions
   c. Non–IgE-mediated severe reactions, such as eosinophilic esophagitis, cannot occur
   d. The risk of egg oral immunotherapy is assessed by monitoring of basophil activation in asthmatic patients

10. Which of the following statements on immune modulation of successful egg oral immunotherapy is correct?
    a. Egg oral immunotherapy can induce a decrease in the size of the skin prick test wheal and in levels of egg white–specific IgE and an increase in levels of egg white IgG4
    b. Desensitization reflects reprogramming of the regulatory T-cell response to the allergen
    c. Biomarkers are not helpful in addressing egg oral immunotherapy
    d. Monitoring of basophil activation is imperative in egg oral immunotherapy