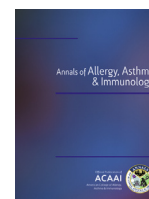




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Letter

Update on influenza vaccination of egg allergic patients

The Adverse Reactions to Vaccines Practice Parameter 2012 update,¹ consistent with new recommendations from the Centers for Disease Control's Advisory Committee on Immunization Practices (ACIP),² recommended that egg-allergic persons receive injectable inactivated influenza vaccine (IIV) as a single dose without prior vaccine skin testing and be observed for 30 minutes afterwards for any possible allergic reaction. Furthermore, the update recommended that, if the reaction to the ingestion of eggs was hives only, the vaccine could be administered in a primary care setting, whereas if the reaction to the ingestion of eggs was more severe, the vaccine should be administered in an allergist's office.

Since publication of the 2012 update:

1. Examination of Vaccine Adverse Event Reporting System data after the new ACIP recommendations indicated no disproportionate reporting of allergy or anaphylaxis after influenza vaccination.³
2. Subsequent studies have been published on the administration of IIV to egg-allergic recipients, including those with severe reactions to the ingestion of egg.
 - a. Des Roches et al⁴ describe their own study as well as the 26 previously published studies in which collectively 4,172 patients with egg allergy received 4,729 doses of IIV with no cases of anaphylaxis, including 513 with severe allergy who uneventfully received 597 doses.
 - b. Greenhawt et al⁵ describe a multicenter, combined prospective randomized controlled trial and retrospective study, noting no vaccine-related reactions in an additional 143 patients with severe egg allergy.
 - c. Both authors independently concluded that the risk of an adverse reaction to IIV is exceptionally low for any patient with any severity of egg allergy and that these patients can be vaccinated safely with a single dose of IIV, without requiring administration by an allergist, which otherwise poses an unnecessary barrier to immunization and is not justified based on available safety data.
3. Two new influenza vaccines not grown in eggs have been approved for patients 18 years and older; Flucelvax,⁶ prepared from virus propagated in cell culture, and Flublok,⁷ recombinant hemagglutinin proteins produced in an insect cell line.

Based on this additional information, the following are recommended:

1. As per the 2012 update, all patients with egg allergy of any severity, including anaphylaxis, should receive IIV annually,

using any age-approved brand of IIV in an age-appropriate dose. Such patients can receive the vaccine as a single dose without prior vaccine skin testing.

2. For egg-allergic patients 18 years of age and older, either egg-based or egg-free IIV can be used.
3. Special precautions regarding medical setting and waiting periods after administration of IIV to egg-allergic recipients beyond those recommended for any vaccine are not warranted. As per ACIP General Recommendations on Immunization,⁸ providers should be aware that "Although anaphylactic reactions are rare after vaccination, their immediate onset and life-threatening nature require that all personnel and facilities providing vaccinations have procedures in place for anaphylaxis management." For IIV, language that describes egg-allergic recipients as being at increased risk compared with non-egg-allergic recipients or requiring special precautions should be removed from guidelines and product labeling.

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- 3 Centers for Disease Control and Prevention. Meeting of the Advisory Committee on Immunization Practices (ACIP) Summary Report June 20–21, 2012. Available at <http://www.cdc.gov/vaccines/acip/meetings/downloads/min-archive/min-jun12.pdf>. Accessed August 3, 2013.
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