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Evidence that Food Proteins in Vaccines Cause the Development of Food Allergies and Its Implications for Vaccine Policy

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Abstract

Nobel Laureate Charles Richet demonstrated over a hundred years ago that injecting a protein into animals or humans causes immune system sensitization to that protein. Subsequent exposure to the protein can result in allergic reactions or anaphylaxis. This fact has since been demonstrated over and over again in humans and animal models. The Institute of Medicine (IOM) confirmed that food proteins in vaccines cause food allergy, in its 2011 report on vaccine adverse events. The IOM's confirmation is the latest and most authoritative since Dr. Richet's discovery. Many vaccines and injections contain food proteins. Many studies since 1940 have demonstrated that food proteins in vaccines cause sensitization in humans. Allergens in vaccines are not fully disclosed. No safe dosage level for injected allergens has been established. As a result, allergen quantities in vaccines and injections are not regulated. Allergen quantities in vaccine excipients are also not regulated. It has been demonstrated that a smaller quantity of allergen is needed to cause sensitization than elicitation. It is well recognized that many currently approved vaccines have enough allergen to cause anaphylaxis. Therefore, they contain more than enough allergen to cause sensitization. Children today have fewer childhood infectious diseases. They have less exposure to helminths. C-section birth rates have increased in the last few decades by 50%. C-section births are known to result in sub-optimal gut microbiome in the newborn. All the above result in an immune imbalance biased towards atopy. Vaccine schedules today include 30-40 shots. Up to five shots may be simultaneously administered in one sitting. Vaccines contain adjuvants such as pertussis toxins and aluminum compounds that also bias towards allergy. Adjuvants also increase the immunogenicity of injected food proteins. This combination of atopic children and food protein injection along with adjuvants, contributes to millions developing life-threatening food allergies. Given the scale and severity of the food allergy epidemic, urgent action is needed to change vaccine policy concerning vaccine specifications, manufacture, vaccine package insert documentation requirements, the Vaccine Adverse Event Reporting System (VAERS) and the National Vaccine Injury Compensation program. Many researchers have called for the removal of food proteins from vaccines and re-evaluation of adjuvants such as aluminum compounds. In the interim, food allergy warnings can be included in vaccine package inserts. Simultaneous administration of multiple vaccines can be stopped to avoid the combined negative effects of multiple food proteins and adjuvants.

Keywords: Vaccines; Food allergy; Adjuvant; Anaphylaxis; Precautionary principle; Prudent avoidance

Abbreviations: VAERS: Vaccine Adverse Event Reporting System; DTaP: acellular pertussis vaccine combined with diphtheria and tetanus toxoids; IgE: Immunoglobulin E; MMR: Measles, Mumps and Rubella vaccine; FDA: Food and Drug Administration; USP: United States Pharmacopeia; NIH: National Institutes of Health; NIAID: National Institute of Allergy and Infectious Diseases; IOM: Institute of Medicine

Background

More than 15 million Americans are estimated to suffer life-threatening food allergies. Many studies looking into the cause of food allergies do not seem to consider vaccines or injections as a cause [1,2,3].

Evidence

Brief history of allergens in vaccines and injections inducing allergy in healthy individuals

Nobel Laureate Charles Richet demonstrated over a hundred years ago that injecting proteins into humans or animals causes immune system sensitization to that protein. Subsequent exposure to the same protein can result in anaphylaxis. Let's call it the Richet allergy model. Wells [4] demonstrated in 1908 that injecting as little as 50 ng of ovalbumin into guinea pigs resulted in sensitization. Subsequent injections of ovalbumin resulted in an allergic reaction.

In 1940, Cooke et al. [5] describe induction of allergy by a tetanus vaccine. In 1952, Ratner et al. [6] were concerned about the possibility of sensitization to egg following the administration of influenza vaccines that are manufactured using chicken eggs. They studied a group of 319 subjects and found that 5 of them developed dermal sensitivity to egg following vaccination with vaccines containing egg proteins. All the subjects in the study were undergoing treatment for tuberculosis. The authors probably did not know that tuberculosis infection may offer protection against allergy [7]. They therefore found sensitization in 1.6% of vaccine recipients, even in a population that was protected from allergy, by tuberculosis infection. Yamane et al. [8] demonstrated a significant increase in anti-ovalbumin IgE in 36 out of 100 subjects following influenza vaccination.

In 1999, Nakayama et al. [9] found evidence of a causal relationship between administration of acellular pertussis vaccine combined with diphtheria and tetanus toxoids (DTaP) and the development of gelatin allergy. Following this study, in 2003, Kuno-Sakai et al. [10] used gelatin-free DTaP vaccine to demonstrate that the development of gelatin allergy

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