For the Patient

The full report is titled: “Relationship between treatment with antacid medication and the prevalence of food allergy in children.” It is in the May-June 2013 issue of Allergy Asthma Proceedings (volume 34, pages 227 to 232. The authors are DeMuth K, Steenko A, Sullivan K and Fitzpatrick A.

ANTACID MEDICATION AND FOOD ALLERGY IN CHILDREN

What is the Problem and What is Known About it so Far?
In the United States, the prevalence of food allergy has increased 18% since 1997 and is estimated to affect 8% of children less than 4 years old. Although some risk factors have been proposed to explain this increase, definitive evidence linking these risk factors to the development of food allergy is lacking especially in children. Gastroesophageal reflux (GER), a condition which occurs when stomach contents reflux, or back up, into the esophagus during or after a meal, is also very common in this same age group of children and affects 10–30% of that population. Treatment of GER often includes use of antacid medications (Proton Pump inhibitors (PPIs) and antihistamine H2 blockers), which reduce the amount of hydrochloric acid produced in the stomach and are thought to be one of the reasons why food allergies are increasing.

Why did the Researchers do this Particular Study?
To find out if the use of antacid medications was associated with higher prevalence of food allergy in allergic children.

Who or What was Studied?
The researchers studied 114 children from birth to 18 years of age who were seen at the Emory Children’s Center Allergy-Immunology Clinic for evaluation for allergic diseases such as asthma, allergic rhinitis, eczema, and food allergy) from 2009 to 2010.

How was the Study Done?
Parents of children with allergic diseases were given a questionnaire to complete relating to a history of treatment with antacid medication and food allergy. Patients’ charts were reviewed to see if any specific tests for food allergy were performed such as food specific IgE and/or skin prick test results.

What were the Limitations of the Study?
The results of information obtained by questionnaire are subject to error and inconsistencies and the study design did not take into consideration other risk factors which could contribute to the results such as increasing environmental pollution.

What are the Implications of the Study?
The researchers found that children with a history of having received treatment with antacid medication had a greater prevalence of having food allergy. They found that of the 104 children studied, 43% (45/104) had a diagnosis of food allergy and of these, 45% (47/104) had a parental report of treatment with antacid medication. Parents need to know that frequent and prolonged use of antacid medications might contribute to the development of food allergy and these medications should be used with careful discussion with their health care provider and, when prescribed, should be used for as brief a period as possible.