

Rhinovirus (RV) accounts for a large majority of virus-induced exacerbations of asthma among children and young adults. A wide diversity of RV genotypes cause recurrent infections that lead to attacks of wheezing that begin in infancy, and these early childhood episodes of wheeze with RV are associated with an increased risk for developing asthma as children grow older. After 3 years of age, RV becomes the dominant pathogen associated with viral induced attacks of asthma and can cause up to 70 to 80% of asthma exacerbations among children living in temperate and tropical climates. It has also become clear that the major risk factor for attacks of asthma provoked by rhinovirus during the school age years is the presence of allergic inflammation in the airway. In addition, the probability of an attack of wheezing induced by RV increases significantly among asthmatic children who have high titers of serum IgE antibody to allergens, such as dust mite (See reference below). Current research is being focused on understanding mechanisms underlying the role of RV in causing asthma attacks to guide the development of new treatments. This presentation will review data and information regarding the development and onset of asthma in relation to rhinovirus induced wheezing and the atopic status of the host.

References:

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