

2nd International Congress on Bacteriology & Infectious Diseases

November 17-19, 2014 DoubleTree by Hilton Hotel Chicago-North Shore, USA

Antibiotic use and development of allergic diseases

Mohammad Ehlayel
Weill-Cornell-Medical College, Qatar

The prevalence of allergic diseases globally is rising sharply in both developed and developing countries. These diseases include bronchial asthma, allergic rhinitis, food allergy and atopic eczema. They have a tremendous impact on patients and their families reducing their quality of life, and increasing rates of morbidity and mortality in these patients. The economic burden on families and societies through direct and indirect costs particularly that of asthma and allergic rhinitis, is quite considerable. Current management of allergic diseases relies mainly on ameliorating disease severity and preventing complications. The worldwide rise in prevalence of allergic diseases promoted extensive research to determine the potential underlying factors. The role of genetic factors, allergen exposure, pollution, dietary habits, life style changes, microbial agents, has been studied. The parallel rise in prevalence of allergic diseases and use of antibiotics prompted many researchers to study possible association. Multiple studies were published in the last two decades. These evaluated the existence of any association between antibiotic use and risk of development of allergic diseases. Additionally, timing of antibiotic use in relation to patient's age; type, spectrum-coverage, and dosages of antibiotic used; and other factors were studied. Results of these studies seem inconsistent or contradicting. The possibility of an alteration of gut microbiota by antibiotic use leading to deviation of the nascent intestinal immunity of young infancy towards "pro-allergenic type" is determined. There are vivid efforts to develop strategies for primary prevention of allergic diseases. Modulating this antibiotic long-term effect might be one of these future strategies.

Biography

Mohammad Ehlayel is Associate Professor of Clinical Pediatrics at Weill-Cornell Medical College-Qatar and a senior consultant, and ex-Head (1998-2012) of Pediatric Allergy-Immunology Section at Department of Pediatrics, Hamad Medical Corporation, Qatar. He holds fellowship to American Academy of Pediatrics, American College of Allergy, Asthma, and Immunology and American Academy of Allergy, Asthma, and Immunology. He chaired and worked as a member of several scientific and advisory committees of national and international medical conferences. He is an editorial board member and a reviewer of 6 medical journals, published over 50 papers in international journal and delivered more than 70 presentations in international medical conferences.

mehlayel@gmail.com