



## Note on Diagnosis of Asthma in Infants and Children

Barlaz Radev\*

Department of Immunology, University of Queensland, Queensland, Brisbane, Australia

### DESCRIPTION

Chronic asthma symptoms can include coughing, wheezing, chest tightness or pain, and/or breathing difficulties. Periodically, these symptoms show up, and they are typically brought on by particular triggers. Asthma sufferers' tiny airways narrow during this particular time, however the narrowing can be partially or totally reversed with asthma medications. Asthma patients' airways also respond to a range of stimuli, such as exercise, viral diseases (such as the common cold), allergens in food or inhalants to which the patient is allergic, and environmental factors.

The prevention of asthma remains a top priority, and recent developments in our knowledge of the various asthma phenotypes and the risk factors that go along with them may soon contribute to the development of efficient preventative measures. You can categorize prevention as primary or secondary. The most effective preventive measures are those that encourage immunological and pulmonary development without triggering an allergic reaction. In an effort to lessen the severity and morbidity of the condition and avoid harm to the developing respiratory system, secondary preventive techniques focus on high-risk new-born or kids who have already developed symptoms of asthma.

Most secondary preventive methods implemented to date have focused on symptomatic, high-risk new-born or kids in order to avoid treating a lot of kids who are probably going to outgrow their illness. Numerous studies have looked at the use of ICSs early in the course of asthma development in asthma prevention. By age 3, there was no discernible difference in the prevalence of asthma or lung function across the therapy groups. In the Prevention of Early Asthma in Kids (PEAK) study, 2- and 3-year-old children were randomized to receive 2 years of daily treatment with a low-dose ICS if they had a positive modified asthma predictive index<sup>77</sup> (recurrent wheezing, parental history of asthma, or signs of personal atopy).

In comparison to controls, the ICS group experienced less symptom burden and improved lung function during the treatment period. But soon after the ICS was stopped, there was no longer a discernible difference in the lung function or asthma load measurements between the groups. After their first episode of protracted wheezing (lasting longer than one month) or two medically verified episodes of wheezing, 200 infants with an atopic parent were randomly assigned to receive daily ICSs or a placebo. At age 5, there were no differences in the prevalence of asthma that had been medically diagnosed, the use of asthma drugs, lung function, or airway reactivity between the treatment groups.

The changed gut microbiome and, in particular, the reduced bacterial diversity in early infancy, have both been associated to childhood asthma. At the age of four, the development of atopic sensitization and asthma has been linked to a decreased relative abundance of several native gut bacteria, notably bifidobacteria, throughout the womb. It has been postulated that exposure to antibiotics during the susceptible period of infancy may increase the chance of developing asthma due to the effects of early antibiotic use on the gut flora.

The emergence of a persistent, partially reversible airflow restriction may be linked to chronic asthma. As a result, it might not be easy to tell chronic asthma apart from COPD. However, each of the two illnesses is more frequently linked to a number of clinical traits. Asthma generally manifests itself earlier in life. Patients with asthma may also have atopy and a history of the disease in their families. With asthma, anomalous airflow obstructions are typically less severe and more likely to be reversible. In asthma, sputum production is less frequent. In comparison to COPD patients, these patients also typically have a lower smoking history and higher steroid reactivity. Additionally, emphysema and chronic asthma are not related.

**Correspondence to:** Barlaz Radev, Department of Immunology, University of Queensland, Queensland, Brisbane, Australia, Email: barlaz@gmail.com

**Received:** 01-Aug-2022, Manuscript No. JAT-22-18097; **Editor assigned:** 05-Aug-2022, Pre QC No. JAT-22-18097 (PQ); **Reviewed:** 12-Aug-2022, QC No. JAT-22-18097; **Revised:** 29-Aug-2022, Manuscript No. JAT-22-18097 (R); **Published:** 05-Sep-2022, DOI: 10.35248/2155-6121.22.13.300.

**Citation:** Radev B (2022) Note on Diagnosis of Asthma in Infants and Children. J Allergy Ther. 13:300.

**Copyright:** © 2022 Radev B. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.