

## Allergic Rhinitis and Adenoidal Hypertrophy

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**Background:** Allergic rhinitis is a type of inflammation in the nose which occurs when the immune system overreacts to allergens in the air. The underlying mechanism involves IgE antibodies that attach to an allergen, and subsequently result in the release of inflammatory chemicals such as histamine from mast cells. It is triggered by environmental allergens such as pollen, pet, hair, dust or mold. Inherited genetics and environmental exposures contribute to the development of allergies. Signs and symptoms of allergic rhinitis are runny or stuffy nose and it can affect sleep and normal daily functions. Adenoidal hypertrophy is the unusual growth of the adenoid (pharyngeal tonsil) that causes an obstruction of the nasal airways. Adenoids start to get sizable during the first year of life and reach maximal volume in the age group of 5-6 years. Just how big the adenoids become is quite variable among individual children.

**Objective:** To determine the relationship between adenoid hypertrophy and allergic rhinitis in children.

**Methods:** Retrospective study of clinical studies for adenoid hypertrophy in children with allergic rhinitis.

**Results:** Some authors found that patients with allergic rhinitis have larger adenoidal tissue, but most of them found a reverse clinical picture with possible interpretation that severe anterior nasal obstruction, mainly caused by allergy, affects the passage of allergens able to stimulate adenoid tissue to enlarge. Infections may also play a more important role in the absence of allergy.

**Conclusion:** In children with allergic rhinitis, we should not only look for adenoidal hypertrophy. ENT doctor must pay attention to the anterior nasal obstruction by inferior turbinate hypertrophy.

**Key words:** allergic rhinitis, adenoid hypertrophy, children