

## **Family Medicine Clerkship Plain Language Summary**

**Title:** Seasonal Allergies and Asthma, fighting one to improve another

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### **Plain Language Summary:**

Asthma affects more than 300 million worldwide, leading to 500,000 hospitalizations and 4000 deaths every year in America. Asthma symptoms get in the way of every day life, making many people have to miss work, school and sports. Symptoms include cough, wheezing, shortness-of-breath, respiratory failure, and even death.

Getting asthma under control can improve people's lives, helping them do the things they want to do without discomfort and fear of a severe asthma attack. One way to help control asthma symptoms is to find out what sort of things or activities, often called triggers, lead to asthma symptoms. Everyone has different triggers, including colds, exercise and cigarette smoke. For many people with asthma, one thing that can bring on asthma symptoms is seasonal allergies, and controlling allergies can help prevent asthma symptoms.

Research shows that for people with asthma and allergies, taking a daily antihistamine can help reduce asthma symptoms like coughing, wheezing, and shortness-of-breath. In one study, patients taking cetirizine (or Zyrtec©) during the peak allergy season in the fall reported less allergy symptoms like runny nose and sneezing, but also less asthma symptoms.

Asthma is a two-part disease. The first part is called bronchoconstriction. This means that the airways in your lungs get smaller, making it harder to breathe. The second part is inflammation. This means that when you have asthma, the tissues in your lungs get swollen, making it harder for air to pass through. Inflammation also irritates your lungs, making them more likely to have asthma attacks.

Antihistamines like cetirizine work on the inflammation part of asthma. By decreasing the inflammation in your lungs, they reduce the swelling in-between the airways in your lungs, making it easier for air to pass through and also making your lungs less irritated, decreasing the likelihood of asthma symptoms like coughing, wheezing, and shortness-of-breath.

Antihistamines should never be considered as a stand-alone treatment for asthma. All people with asthma should at the minimum have an inhaler prescribed by their doctor in case their symptoms get really bad, but antihistamines can be helpful in patients who feel like their allergies often trigger their asthma.

### **Additional Resources:**

Read more about asthma treatment at:

Medline: [www.nlm.nih.gov/medlineplus/asthma.html](http://www.nlm.nih.gov/medlineplus/asthma.html)

Mayo Clinic: <http://www.mayoclinic.com/health/asthma/DS00021>

**Key Words:**

Asthma

Antihistamine

Cetirizine

Zyrtec

Allergies

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