



## **THE ASSOCIATION BETWEEN ASTHMA AND GASTROESOPHAGEAL REFLUX DISEASE**

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Asthma can be triggered by many different conditions. Most commonly allergens play a significant role; however, there are other triggers that can make asthma worse. Increasingly the association of Gastroesophageal Reflux Disease (GERD) and worsening asthma is being recognized.

GERD occurs when a small valve between the stomach and esophagus leaks, causing digestive fluids and stomach acid to “back up” from the stomach into the esophagus. It is uncertain why GERD can lead to worsening asthma. One theory is that there is direct aspiration of acid into the lung from the esophagus as a result of the GERD. The presence of acid in the lung can trigger an asthma attack. Another theory is that there is a neurologic message between the irritated esophagus from GERD signaling the lung to undergo asthmatic changes.

The association between GERD and asthma has been observed for many years. In fact, writings from the Talmud showed that doctors at that time had a concern about the effect of stomach disorders on respiratory disorders. In recent years, several large-scale medical studies using hospital records and patient charts have consistently shown a higher proportion of individuals having asthma and GERD than would otherwise be expected.

The asthmatic symptoms triggered by GERD a person might experience are very similar to symptoms any individual with asthma may have but there can be some slight differences. Often the coughing, wheezing, chest tightness and shortness of breath, which is typical for asthma, may occur more often at night or following meals.

There are several medical studies, which have shown that if the GERD is treated there will be a decrease in asthma symptoms and a decrease in the need for asthma medications. Rather than perform diagnostic testing to confirm a diagnosis of GERD, physicians will presume the diagnosis of GERD and treat empirically. If the patient does not respond to anti-reflux measures, diagnostic testing is usually then performed. Diagnostic testing for GERD includes: 24 hour pH probe monitoring, upper endoscopy and an upper GI series.

There are several non-medical remedies that may be helpful in treating GERD. Some of the remedies include elevating the head of the bed 2 to 6 inches with wood blocks or bricks, avoiding foods that cause symptoms, avoiding lying down for 2 hours after eating, avoiding cigarette smoke, limiting coffee ingestion and eating smaller meals. Usually the response to non medical remedies is limited and ultimately an individual requires medication. Over-the-counter antacids and H2 blockers can provide some benefit but prescription medications known as proton pump antagonists tend to work the best in controlling the symptoms of GERD. Several medical studies have shown that it can take as long as 3 continuous months of proton pump antagonist medication use to see an improvement in the associated asthmatic symptoms. In cases not responsive to medications, a surgical procedure known as a Nissen fundoplication is an option.

The association between GERD and asthma has been observed for many years. It is now only in the last few years, that there are successful therapies available for treating the underlying GERD that will then decrease the need for asthma medications and asthma symptoms in an individual suffering from both common disorders. It may take as long as three months until an individual will experience the full benefit of anti-reflux therapy in controlling their associated asthma.