

## Chronic Refractory Cough

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A 36-year-old moderately obese woman was referred to my clinic by her ENT physician for chronic refractory cough. She has had this kind of cough for 5 years without much improvement. She recently saw an ENT physician and had a thorough examination. She was told that she had acid reflux induced cough. She had several upper GI endoscopies (EGD) done in the past several years with all reported normal esophagus and she has been on high dose of acid suppression medication. I reviewed her medical records and EGD reports and decided another EGD is necessary. The EGD showed normal looking esophageal mucosa without any inflammation, which confirmed previous EGD examination. But I found that she had mild diffused gastritis with large amount of light bile-stained fluid in her stomach and mid/upper esophagus. I had to suction the bile-stained fluid almost right after the endoscope reached the mid-esophagus. She apparently has fluid reflux which might not contain chloride acid secreted by stomach mucosa because she was put on high acid suppression medication. But the bile containing fluid is also capable of causing cough. Based on my finding during EGD, her treatment plan was changed. She came back for a 2-week follow-up and reported complete resolution of her cough.

Chronic refractory cough is a difficult medical problem and can be caused by a variety of diseases. The common causes of chronic cough include the following:

- **Cigarette Smoking** is the most common cause of chronic cough.
- **Cough-variant asthma.** Some asthma sufferers have chronic cough as their only symptom. They may even have normal lung functions tests. This is often referred to as cough-variant asthma. Asthma symptoms can be aggravated by cold air, exposure to air pollutants or pollen, smoke, or perfumes.
- **Gastroesophageal reflux disease (GERD) refers to reflux, or backward flow, of stomach acid and other contents into the esophagus.** If stomach acid moves backward up the esophagus, refluxes result in spasm of the airways that can cause coughing. In some individuals, no sensation of heartburn is felt and their only symptom may be cough.
- **Sinus problems and Postnasal drip** also cause chronic cough. This condition can be difficult to detect.
- **Airway infection like bronchitis or pneumonia** cause coughing. These infections can be caused by virus, bacteria or fungus. In patients with asthma, viral upper respiratory infections often result in a protracted cough even after the infection has cleared.

- **Medications**, notably ACE inhibitors (Enalapril, lisinopril, etc.) for high blood pressure, can cause chronic cough.
- **Tumors, Sarcoidosis or other lung disease.**

The work-up of chronic refractory cough sometimes requires team work from multiple medical subspecialties. If you have chronic refractory cough, please contact Dr. Jeff Ye, North Atlanta Medical & Digestive Care at 770-346-0900. We can help!