How often is coughing the presenting complaint in patients with gastroesophageal reflux disease?

EVIDENCE-BASED ANSWER

Frequent coughing is a concern for approximately 35% of those with typical gastroesophageal reflux disease (GERD) symptoms of heartburn and acid regurgitation as compared with 11% in those who do not have these symptoms. Among pulmonary clinic patients with complaints of chronic cough, GERD may be the underlying cause in 40%. (Grade of recommendation: C, based on extrapolation from cohort studies.) However, no studies directly address prevalence of coughing as a presenting complaint in patients with GERD.

EVIDENCE SUMMARY

While many sources state that extraesophageal symptoms (eg, cough, chest pain, asthma) are reported by patients with GERD, only one study reported the frequency of associated symptoms.[1] This population-based survey showed that symptoms of reflux and acid regurgitation are experienced by almost 60% of the population each year. The prevalence of frequent heartburn and acid reflux was approximately 20%. Bronchitis, defined as cough that occurs as often as 4 to 6 times per day on 4 or more days per week, was reported by more than 20% of those with frequent typical GERD symptoms (occurring at least weekly) and by 15% of those with infrequent GERD symptoms. Interestingly, bronchitis was reported by almost 11% of those without GERD. This study showed the association of cough with GERD but did not address whether the cough was the initial presenting complaint.

In as many as 40% of patients with cough, GERD is the underlying cause.[2-7] Chronic cough may be triggered by more than one condition (eg, GERD, postnasal drip, or asthma) in 18% to 93% of patients.[8] Among patients with cough caused by GERD, 50% to 75% do not have classic symptoms of reflux or regurgitation.[9] Finally, cough may initiate GERD and start a cough–reflux cycle.[9] These studies were conducted in pulmonary clinics. Patients with cough whose underlying GERD was easily diagnosed and treated by their primary physician were probably not referred for evaluation in a pulmonary clinic.

RECOMMENDATIONS FROM OTHERS

The American College of Chest Physicians issued a consensus statement in 1999 regarding the management of cough.[10] According to the statement, GERD should be strongly suspected in coughing patients with upper GI symptoms or in those without GI symptoms who have normal chest radiographs, do not smoke, and do not take angiotensin-converting enzyme inhibitors. The statement reports that asthma, postnasal drip syndrome (PNDS), and GERD are the causes of cough in nearly 100% of these patients. The recommendation for evaluation of GERD is a 24-hour pH monitor or an empiric trial of antireflux medication after ruling out asthma and PNDS.

Alan M. Adelman, MD, MS
Department of Family and Community Medicine
Penn State University College of Medicine
Hershey, Pennsylvania
Literature search by Joan Nachelsky, MLS

CLINICAL COMMENTARY

Most studies of patients with chronic cough find GERD to be among the top 3 causes of this condition. Although many of these patients report other symptoms of reflux, cough is the sole symptom in some. Monitoring of esophageal pH for 24 hours is considered the gold standard for diagnosis of GERD, but limited availability and variable patient acceptance diminish the universal application of this method. A trial of intensive antireflux therapy may represent a cost-effective and practical approach to such patients, since cough from GERD may take up to 3 months to improve under such a regimen.

Les W. Hall, MD
Department of Internal Medicine
University of Missouri
Columbia

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