



Clinical Allergy Tips

Edited by Stuart A. Friedman, MD

Editors Note: A recent Google search of "cough" revealed 21,000,000 results. This very common symptom motivates many clinic visits. Allergy-Immunology specialists usually see these patients after they have been evaluated and treated by their primary care physician, and by an otolaryngologist as well as a pulmonary physician. This month Dr. Michael Kaliner, past President of WAO and AAAAI, shares his approach to this vexing clinical problem. He feels confident that by following this approach, it will lead to the proper diagnosis and treatment plan for almost every patient with chronic cough.



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Initial evaluation of cough

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Chronic cough is one of the most common reasons that patients seek my care. Over the years, I have developed an efficient initial approach to determine the cause of cough. The concept is based upon the most frequent causes of cough: post-nasal drip is the most common cause, followed by intrathoracic causes including asthma and bronchitis, the third most common is gastroesophageal reflux disease (GERD) or laryngopharyngeal reflux (LPR), and least common of the major causes is side effects to antihypertensive medications like ACE inhibitors.

I determine the pattern of coughing with these questions:

- Do you cough every day? Every hour? Every 30 minutes? – And so on until I know the frequency.
- Then; do you cough yourself awake at night? If so, how many times? Do you cough when you first lie down in bed at night?
- When you cough, is it a single cough or do you go into a spasm?
- Is the cough in your throat (and I touch my throat) or deeper in your chest (and I tap my self across the chest)?
- Is the cough wet or dry?
- If you bring up mucus, what's the color?
- If you collect all of the mucus you bring up in 24 hours into a coffee cup, how much would you fill it up?
- When is the worst time you cough?

At the end of this series, I have a good idea if the cough is from post-nasal drip (throat, single or spasm, maybe worse on lying down but usually does not wake up the patient, may be very frequent, scant mucus) or from the chest (deep in the chest, usually less frequent, usually with mucus production, usually wakes patients up if it is bronchitis, color depends on the presence of infections).

My evaluation includes a history of allergy, asthma, GERD/LPR and medication use. I skin test the patients, do pulmonary function testing, usually with a pre- and post-bronchodilator measurement.

If the patients are on ACE inhibitors, I stop that first. Unless there is evidence of asthma, I usually start therapy aimed at reducing post-nasal drip. This might include nasal or sinus lavages, nasal corticosteroid in combination with nasal antihistamines, and attention to appropriate allergy treatment. We treat the sinuses if there is evidence of rhinosinusitis, or I may get a CT of the sinuses to rule out sinusitis. One useful treatment has been to include methascolamine 2.5 or 5 mg 1 to 4 times a day as a drying agent in patients with post-nasal drip, if I think the cause is benign and that it might improve with reduced secretions.

GERD/LPR is usually the third choice in treatment unless patients have clear cut symptoms of reflux or LPR. The constellation of symptoms that triggers the diagnosis of LPR as the primary cause includes throat clearing, hoarseness, a lump in the throat and cough. I confirm this suspicion with laryngoscopy looking for swelling and redness in the larynx.

The most difficult cases have two or even three causes. In such cases, I end up treating asthma, rhinitis or sinusitis and GERD/LPR.

Overall, nearly all patients respond to these approaches, even if they have had cough for years or sometimes decades.