

Irritable Larynx Syndrome (mystery chronic cough)

Some adults with a chronic dry cough (longer than 6 months) seem to defy all explanation and resist all the usual standard treatments. Some of these patients have coughed for years resulting in frustration not only in terms of treatment, but diagnosis. Often, patients are told their cough is due to reflux, allergy, asthma, infection, aspiration, virus, etc. and undergo numerous exams and studies including pulmonary function tests, chest x-rays, reflux studies, barium swallows, upper endoscopy, CT scans, MRI scans, etc. Even all medications known to cause a cough as a side effect (i.e. statins, ACE Inhibitors and Angiotensin Receptor Blockers) are removed to no avail. Furthermore, proposed treatments with antibiotics, proton pump inhibitors, allergy medications, cough suppressants, steroid inhalers, etc. are not successful. Eventually, some are even told it's all in their head (psychogenic cough, habit cough, tic cough, etc.) or idiopathic.

A typical patient with the chronic cough is described as follows:

- Started during or after recovering from a viral laryngitis and/or upper respiratory infection
- Dry cough
- Cough occurs due to no perceivable reason...perhaps only a tickle
- Cough may occur several times an hour to even as often as several times a minute (must be distinguished from whooping cough severe attacks of a choking cough that lasts 1-2 minutes with distinctive whooping noise, often with near vomiting and appearance of suffocation).
- Cough does not seem to get better with time (months or even years)
- All diagnostic studies performed come back normal
- Endoscopy of the throat and voice box is normal (this exam will be performed on the first visit to ensure that there is no anatomic reason for the cough). Such anatomic factors that may trigger a cough include an elongated uvula as well as large tonsils.

What does this mean? Essentially, this means that the nerve that provides sensation to the voice box and is responsible for triggering the cough reflex has been injured, usually by a virus. When this happens, the nerve's level of sensitivity before it triggers the cough reflex becomes markedly reduced; in other words, it becomes hyper-sensitive.

Normally, the nerve recovers its normal level of sensitivity and the cough resolves. However, in some patients, the nerve does not recover and a persistent chronic cough results. In this scenario, the best medications are those that "calm" the nerve down. Such medications include amitriptyline, pregabalin (Lyrica), or gabapentin (Neurontin).

A multidisciplinary approach can be helpful in managing this frustrating condition, with input from Speech and Language, Otolaryngology (ENT) and Respiratory medicine.