

**CHRONIC COUGH: A MYRIAD OF AETIOLOGIES**

Dear Sir,

I read with great interest the article entitled 'Prolonged cough presenting with diagnostic difficulty: a study of aetiological and clinical outcomes' by Poulouse et al.<sup>(1)</sup> Utilising spirometry, methacholine challenge test, sputum eosinophil count and otolaryngologic consultation, the authors found that 35% of negative-screening patients remain non-diagnostic after these examinations. However, chronic cough possesses other aetiologies in addition to the traditionally-touted "upper airway syndrome" (including post-nasal dripping and gastroesophageal reflux disease),<sup>(2)</sup> such as non-asthmatic eosinophilic bronchitis. I would like to address some of these issues here.

First of all, age in itself is an important aspect that should be factored into diagnostic classification. In children or adolescents, cystic fibrosis, primary ciliary dyskinesia or foreign body aspiration are some of the causes of chronic cough.<sup>(3)</sup> However, in adults, as those in Poulouse et al's study, infrequent diagnoses, such as pulmonary parenchymal lesion (not obvious on chest film, e.g. interstitial lung disease), pertussis (if not vaccinated during growth or waning of vaccine effect) or left ventricular dysfunction (causing so called "cardiac asthma"),<sup>(4)</sup> should be considered in addition to the more common ones. To further explore this possibility, it may be prudent to conduct additional studies such as high-resolution chest computed tomography, serologic test for common respiratory virus and pertussis as well as echocardiography, as dictated by physical examination and clinical signs and symptoms. Autoimmune-related pulmonary disorder can rarely be a consideration in this setting, as the average age of the study population in Poulouse et al's study is relatively young (median age is 39 years).

Finally, besides angiotensin-converting enzyme inhibitors, other rare medications can also result in chronic cough. An example is ribavirin used in the hepatitis C treatment regimen.<sup>(5)</sup> Nutritional deficiencies (vitamin B<sub>12</sub>) can also be an unrecognised origin of chronic cough.<sup>(6)</sup> In light of this, I believe that a more comprehensive history-taking and rigorous examination may be considered when encountering patients with chronic cough.

Yours sincerely,

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