Nevertheless, the authors are to be congratulated on making patients and their GPs think more about the causes of chronic cough.

J. Widdicombe* and G. Fontana#

*University of London, London, UK. *University of Florence, Florence, Italy.

Correspondence: J. Widdicombe, 116 Pepys Road, London SW20 8NY, UK. E-mail: JohnWiddicombeJ@aol.com

Statement of Interest: None declared.

REFERENCES

- 1 Dettmar PW, Strugala V, Fathi H, et al. The online Cough Clinic: developing guideline-based diagnosis and advice. Eur Respir J 2009; 34: 819–824.
- **2** Morice AH, Fontana GA, Belvisi MG, *et al.* ERS guidelines on the assessment of cough. *Eur Respir J* 2007; 29: 1256–1276.
- **3** Morice AH, Fontana GA, Sovijarvi AR, et al. The diagnosis and management of chronic cough. Eur Respir J 2004; 24: 481–492.

DOI: 10.1183/09031936.00178309

To the Editors:

We read with great interest the recent article in the *European Respiratory Journal* by Determar *et al.* [1] which discussed an online cough diagnostic clinic. There have been few studies of chronic cough in the population so we are grateful to the authors for providing further data on this topic. We do, however, have several qualms regarding their study.

First, our main concern regards how the differential diagnosis between reflux, asthma and rhinitis was achieved. No clinical characteristic of cough (with the exception of moist cough in children) has been found to be useful in determining diagnostic probability [2-4]. Dettmar et al. [1] use items from various pathology-specific scales to determine the most probable cause of patients' cough. Most of these scales were originally developed and validated to evaluate disease severity, not to determine a cough's aetiology. The items from reflux symptoms index tools were validated to evaluate voice disorders in laryngopharyngeal reflux, not to ascertain a diagnosis of reflux in a patient presenting with a chronic cough. The questionnaire developed by JUPINER et al. [5] aimed to assess asthma control, not to make a diagnosis of asthma in a patient with a chronic cough. Furthermore, items related to cough timing such as "cough when you get out of bed in the morning", "cough brought on by singing or speaking", "cough after lying down", "cough waking you from sleep" are not correlated with a specific aetiology and may indeed be more related to disease severity than to its aetiology [2].

Secondly, DETTMAR *et al.* [1] conducted a validation study of their online cough clinic in 30 patients and found a close association between the web-based cough clinic diagnosis and that of the clinician's full work-up. However, they do not describe the criteria used by the clinician to establish the final diagnosis. Were the same questions used in the clinician's

assessment? Furthermore, there is no mention of whether the clinician was blinded to the result of the computerised diagnosis. The close association between the two assessments could be due to lack of blinding in the procedure.

Thirdly, chronic obstructive pulmonary disease (COPD) was not included in the online algorithm. 41.4% of included patients were either current or ex-smokers. Smokers with shortness of breath and cough could also be suffering from COPD

Finally, the study concludes that patients with asthma had worse cough scores than those with reflux or rhinitis. This may, however, be a case of secondary association. The diagnosis of asthma in the study was linked to a positive response to the item "cough waking you from sleep", and lack of sleep is the most important cough consequence affecting quality of life.

S. Leconte and J. Degryse

Dept of General Practice, Université Catholique de Louvain, Brussels, Belgium.

Correspondence: S. Leconte, Dept of General Practice, Université Catholique de Louvain, Avenue Mounier 53, Brussels, 1200, Belgium; E-mail: sophie.leconte@uclouvain.be

Statement of Interest: None declared.

REFERENCES

- 1 Dettmar PW, Strugala V, Fathi H, et al. The online Cough Clinic: developing guideline-based diagnosis and advice. Eur Respir J 2009; 34: 819–824.
- **2** Mello CJ, Irwin RS, Curley FJ. Predictive values of the character, timing, and complications of chronic cough in diagnosing its cause. *Arch Intern Med* 1996; 156: 997–1003.
- **3** Marchant JM, Masters IB, Taylor SM, *et al*. Utility of signs and symptoms of chronic cough in predicting specific cause in children. *Thorax* 2006; 61: 694–698.
- **4** Leconte S, Paulus D, Degryse J. Prolonged cough in children: a summary of the Belgian primary care clinical guideline. *Prim Care Respir J* 2008; 17: 206–211.
- **5** Juniper EF, O'Byrne PM, Guyatt GH, *et al.* Development and validation of a questionnaire to measure asthma control. *Eur Respir J* 1999; 14: 902–907.

DOI: 10.1183/09031936.00195509

From the authors:

We are grateful to J. Widdicombe and G. Fontana, and S. Leconte and J. Degryse, for providing a detailed critical analysis of our online Cough Clinic programme [1]. However, we believe they have essentially missed the point of the endeavour. We set out to tackle the thorny issue of translating the guidelines into advice accessible to members of the public. Such an enterprise will never provide the precision of a dissected animal, but to dismiss our mainly positive feedback because it is from a mere 944 patients is not only partial but is also a failure to appreciate inherent methodological differences.



EUROPEAN RESPIRATORY JOURNAL VOLUME 35 NUMBER 4 941