

Letter to the editor

We read with interest the recent articles (1, 2) concerning the use of capsaicin cough provocation in the investigation of patients with asthma-like symptoms. Our group have had an interest in this area for a number of years, from an occupational viewpoint, and we believe our findings may be of interest to the authors.

We investigated a group of irritant-exposed glass bottle workers who were experiencing work-related asthma-like symptoms, and mucous membrane irritation. These workers were found not to be suffering from occupational asthma, or reactive airways dysfunction syndrome. At the time, this was termed "cough and airway irritancy syndrome" (3), and it was associated with increased capsaicin cough sensitivity compared to a control group of hospital workers (4). Immunologic investigation of these workers by whole-blood flow cytometry demonstrated a very different pattern of immune cells compared with a group of flour-exposed bakers with similar upper and lower respiratory tract symptoms. The symptomatic bakers showed elevated CD4+ CD25+ lymphocyte markers (activated T-helper cells) above control, changes similar to asthmatic patients, whereas the glass bottle workers did not (5).

We would also like to draw the authors' attention to the considerable body of research that has previously been published, in light of statements that "we do not know how patients with other causes of cough react to capsaicin provocation" (2).

Briefly, Choudry's group have shown that patients with nonproductive cough (excluding those with postnasal drip) generally have increased cough sensitivity to capsaicin, as do those with bronchiectasis and

current infection (6). The same group have also demonstrated successful treatment of chronic cough to be associated with a reduction in capsaicin cough sensitivity (7). Increased cough sensitivities (i.e., low cough thresholds) have also been demonstrated in patients with ACE inhibitor cough (8), upper respiratory tract infection (9), and interstitial lung disease associated with progressive systemic sclerosis (10). Interestingly, patients with chronic obstructive pulmonary disease did not show altered cough sensitivity to capsaicin, but did cough more during citric acid cough challenge (11).

It is also interesting to note that it is well recognized that women generally have lower cough thresholds than men (12), and this is entirely consistent with the authors' previous findings (13) that eight out of 10 of the patients with "sensory hyperreactivity" were women.

We firmly believe that, while cough challenges are clinically useful in assessing response to treatment (7), and in defining different research populations (4), their diagnostic specificity as an "objective way to test sensory hyperreactivity" is questionable (2).

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