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### **CORRESPONDENCE**

# Combined pulmonary fibrosis and emphysema in patients exposed to agrochemical compounds

To the Editors:

In the very interesting article concerning the clinical syndrome resulting from combined pulmonary fibrosis and emphysema (CPFE) published in the *European Respiratory Journal*, COTTIN *et al.* [1] speculated that both emphysema and fibrosis might be related to a common environmental trigger and/or genetic factor, with tobacco exposure playing a central role.

Here, we report our clinical experience of the same syndrome in order to emphasise the possible role of environmental exposure in the pathogenesis of the disease. Over the last 2 yrs, 41 patients with pulmonary fibrosis were investigated in our teaching hospital in Greece, which is located in the middle of a large rural area. In total, 21 cases fulfilled the criteria for the diagnosis of idiopathic pulmonary fibrosis, nine patients had an associated connective tissue disease, two had primary biliary cirrhosis, and nine patients met the imaging criteria for CPFE as described previously by COTTIN et al. [1]. All CPFE patients were male and current or ex-smokers. The most interesting point is that all patients were farmers and had significant exposure to agrochemical compounds. It is also important to point out that paraseptal emphysema in the upper lobes was also present in five cases and most prominent in three. It is well known that paraseptal emphysema is associated with tobacco smoking and results in fibrosis-like thickening of the interlobular septa [2]. However, the fact that our patients had the same imaging findings as those described by COTTIN et al. [1] shows that paraseptal emphysema is truly a novel finding and, as these authors suggest, it may be the hallmark of CPFE. Our findings are in complete agreement with those of COTTIN et al. [1]. Recently, CHURG et al. [3] have

also described an airway-centred interstitial fibrosis in 12 patients. One of them was a gardener and former smoker exposed to agrochemical compounds. According to the aforementioned observations, it seems possible that exposure to agrochemical compounds could be a potential triggering event, which is capable of causing airway and interstitial disease in probable genetically susceptible smokers.

Finally, we believe that combined pulmonary fibrosis and emphysema is a new characteristic entity that may occur in tobacco-smoking individuals exposed to an environmental trigger.

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## A theory explaining time trends in asthma prevalence

To the Editors:

I would like to comment on the interesting article by VAN SCHAYCK and SMIT [1], which documents time trends in the prevalence of childhood asthma in a Dutch general practice registry and corresponding data from repeated cross-sectional surveys in another venue within the same country. While they and others have described an apparent levelling off and/or decline in asthma prevalence, a recent report from Denmark describes an increasing prevalence, particularly for nonatopic asthma in young females and adolescents [2]. No satisfactory

explanation for these time trends has been offered. I would like to propose a theory that: 1) explains these geographical and temporal variations in asthma; 2) accounts for genetic susceptibility; and 3) offers the real possibility of prevention, improved treatment and even a potential "cure" for asthma and other related chronic obstructive lung diseases.

STRACHAN [3] has pointed out that time trends in asthma incidence and prevalence can only be accounted for by extremely strong environmental factor(s), among which infectious disease pandemics must be acknowledged. For