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Silvano Dragonieri[1], Antonio Baldassarre[2], Giovanna Elisiana Carpagnano[1]

Letter to the editor

Is abestos exposure a risk factor for small airways obstruction?

[1] Department of Respiratory Diseases, University of Bari, Italy
[2] Dipartimento di Medicina Sperimentale e Clínica, Università degli Studi di Firenze, Italy

To the editor,

during these pandemic years, COVID-19 is taking away focus from other respiratory diseases such as pneumoconiosis, which should not be overlooked.

We would like to emphasize the possible role of small airways in subjects with asbestos exposure.

In a very interesting study, Yang et al (1) investigated the relation between increased small airway obstruction and asbestos exposure in patients with asbestosis. The authors evaluated lung function in a cohort of 281 patients with newly diagnosed asbestosis during an eight-year period, evidencing that patients with asbestosis have small airway obstructive defects that are significantly associated with asbestos exposure (1).

These results are very consistent and in line with our previous study, in which we showed that a population of 655 long-term residents in an environmental asbestos (tremolite)-exposed area had a higher prevalence of small-airways disease compared to a group of 653 individuals living in areas not tremolite-exposed (2). Odds Ratio for small-airways obstruction was 3.46, irrespective of smoking status (2).

To date, our knowledge on the role of small airways in pulmonary diseases is still matter of debate. Although small airways have a minor contribution to airway resistance in healthy subjects, it has been shown that small airways are the major site of airflow limitation in diseases such as asthma and Chronic Obstructive Pulmonary Disease (3).

Taken these data together, we warmly encourage clinicians and researchers to always consider small airways parameters when performing lung function on asbestos-exposed subjects. Moreover, long-term investigations are warranted to explore the decline in airflow over time in patients with either occupational or environmental asbestos exposure and with asbestosis.

Disclosure statement

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References

1) Yang X, Yan Y, Xue C, Du X, Ye Q. Association between increased small airway obstruction and asbestos exposure in patients with asbestosis. Clin Respir J. 2018;12:1676-1684.
2) Dragonieri S, Massaro T, Trerotoli P, et al. Enviromental Asbestos Exposure as a Risk Factor for Small Airways Obstruction. Occup Med Health Aff 2014;2:164.
3) Burgel PR. The role of small airways in obstructive airway diseases. Eur Respir Rev 2011;20:23-33.

Correspondence: *Silvano Dragonieri, Department of Respiratory Diseases, University of Bari, Piazza Giulio Cesare 11, 70124 Bari, Italy, Tel. +390805593215, silvano.dragonieri@uniba.it*