Silicosis: Some Necessary Clarifications☆

Algunas precisiones obligadas sobre la silicosis

To the Editor,

With regard to the letter from Pérez-Alonso et al.,[1] we would like to point out the following: drawing attention to health problems that can go unnoticed is as important as not describing a mere opinion as scientific expertise. "Expertise" consists less of detecting the existence of a problem and more of being able to recognize when it really does not exist.[2]

Marble has a low SiO_2 content, and is not a risk factor for silicosis. The colloquial term "marble workers" should be avoided when referring to silicosis associated with working with quartz conglomerates. The *International Classification of Radiographs of Pneumoconioses* published by the International Labour Organization is a radiograph reading system that describes changes caused by the inhalation of different substances. Its aim is to codify radiological changes in a simple, reproducible manner.[3]

Our current understanding of silicosis comes from major epidemiological studies that have allowed us to determine that silicosis is a diffuse interstitial disease, in which the main risk factor is cumulative exposure to crystalline silica inhalation, with an irrefutable dose-response relationship. They have also led to the definition of diagnostic and prognostic criteria related to the aforementioned history of exposure, typical radiological manifestations and exclusion of other causes. In all these studies, the imaging tool used was chest X-ray.

High resolution computed tomography (HRCT) allows better definition of the lung parenchyma and shows changes that are sometimes not visible on the chest radiograph, specifically in pneumoconioses.[4] However, we have no data to assess the importance of these findings in the course of silicosis. This is one of the many reasons why HRCT is not recommended for screening and surveillance of exposed workers.[5] The diagnosis of 70 patients with "silicosis" in Hospital de Puerto Real, of which at least 9 had, according to the authors, a normal chest radiograph, would probably require a more thorough assessment by expert readers, as is the norm.[3] This is a type of condition that should be studied in detail, due to the high concentration of crystalline silica inhaled, the diameter of the median aerodynamic mass of these particles and the inclusion of organic pigments in the final product mixture. Nevertheless, the silicosis in question causes very well-defined radiological and functional changes that are recognized by experts who routinely evaluate such images. Spanish Order ITC/2585/2007 is intended to establish criteria and methods to define hazard levels and dust control strategies in workplaces with exposure to silica, and the health surveillance of workers to prevent silicosis. It also established the need to accredit special training in reading chest radiographs, in accordance with the ILO classification,[3] and in the interpretation of lung function tests.

Occupational physicians, primary care physicians and respiratory medicine specialists must help to properly assess this new health problem. Only by allowing firm scientific conclusions and avoiding scaremongering will we manage to control and prevent this new cause of silicosis.

References

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