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Reply to Lescoat et al.

From the Authors:

We thank Lescoat and colleagues for their correspondence and their interest in our work (1). We fully agree about the importance of a new awareness regarding silica hazards and their relationship with connective tissue disease (CTD) in artificial-stone workers. We certainly hope that our joint efforts in highlighting this important area result in greater collaboration among subspecialty physicians, toxicologists, and leaders in occupational medicine and public health globally.

Lescoat and colleagues are right to point out the broader history of the observed association between CTD and silica exposure. We were restricted by word limits in our report from acknowledging the work of the Scottish physician B. Bramwell, who in 1914 first noted an increased prevalence of scleroderma among stonemasons in his seminal paper (2). Increased mortality from "chronic rheumatism" in coalminers was subsequently reported by Collis and Yule in the United Kingdom in 1933 (3) and by Anthony Caplan, a physician working on the Cardiff Pneumoconiosis Panel, who described pneumoconiosis in coal miners with rheumatoid arthritis in 1953 (4). L. D. Erasmus reported a high prevalence of scleroderma among South African gold miners in 1957 (5), and the association between silica exposure and CTD, especially systemic sclerosis or scleroderma, has subsequently been confirmed in many publications.

Our suggestion regarding systematic screening of patients for CTD after silica exposure, both with and without pulmonary involvement, would not only aid interdisciplinary research but would also assist in the clinical diagnosis of CTD in line with the VEDOSS (Very Early Diagnosis of Systemic Sclerosis) strategy (6), as Lescoat and colleagues note. The VEDOSS strategy centers on a combination of autoimmune antibody testing, capillaroscopic findings, and clinical detection of "puffy fingers" preceding sclerodactyly. Importantly, longitudinal follow-up for 5 years or more is required. Applying this strategy with longitudinal follow-up of patients occupationally exposed to silica may enable earlier diagnosis of both silicosis and associated CTD and improve patient outcomes with earlier intervention. We would welcome the interdisciplinary clinical use of capillaroscopy and optimal surveillance strategies, and we hope that by working together we can gain a better understanding of the pathogenesis of both silicosis and CTD.

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