Correspondence

Coffee worker's lung: reconsideration of a case report

SIR,—In 1970 one of us described a patient who was thought to have extrinsic allergic alveolitis due to exposure to coffee bean dust.¹ The term "coffee worker's lung" was introduced. No other reports of coffee worker's lung have been published to our knowledge. Reports of respiratory disease associated with the exposure to coffee bean dust concern asthmatic reactions due to immunoglobulin E mediated allergy or to hyperresponsiveness of the bronchial tree.²

The clinical and radiological features of our patient and the histological findings were initially thought to represent diffuse or cryptogenic fibrosing alveolitis. Because of the exposure during 20 years to coffee bean dust a tentative diagnosis of extrinsic allergic alveolitis was proposed. The histopathological and immunohistochemical findings did not contradict this diagnosis. However, the clinical evolution has forced us to reconsider this case.

The patient has developed an obvious rheumatoid arthritis with positive response to the RA latex test (1/152) and antinuclear factor (1/160). In retrospect the vague arthritic complaints in 1970 were probably the first signs. The respiratory symptoms, the radiological features, and the pulmonary function abnormalities have all progressed despite treatment with prednisone and the avoidance of coffee bean dust.

The serum of our patient contained precipitins to coffee bean dust. Others³ also found precipitins in coffee workers in Uganda. However, precipitins to "Kiboko dust, derived from the dried flesh of the cherry of the coffee bean", were also present in the serum of a large number of controls. We have no control data from workers who had been similarly exposed but were apparently unaffected.

The pathological differentiation between the pulmonary abnormalities in rheumatoid arthritis and extrinsic allergic alveolitis may be difficult. Both may cause interstitial pneumonitis with the presence of lymphocytes, plasma cells, and a few eosinophils.^{4,5} The involvement of the pleura and the hyperplasia of bronchus associated lymphoid tissue suggest a rheumatoid inflammatory process. In

extrinsic allergic alveolitis granulomas are frequently present, but they were not found in our patient.

In conclusion, we think that our patient suffers from cryptogenic fibrosing alveolitis associated with rheumatoid arthritis. The diagnosis of extrinsic allergic alveolitis classified as "coffee worker's lung" was probably incorrect

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¹ Van Toorn DW. Coffee worker's lung, a new example of extrinsic allergic alveolitis. *Thorax* 1970;25:399-405.

² Zuskin E, Valic F, Kaceljak B. Immunological and respiratory changes in coffee workers. *Thorax* 1981;36:9-13.

³ Pepys J, Longbottom JL, Jenkins PA. Vegetable dust pneumoconioses. *Am Rev Respir Dis* 1964;89:842-58.

⁴ Cervantes-Perez P, Toro-Perez AH, Rodriguez-Jurado P. Pulmonary involvement in rheumatoid arthritis. *JAMA* 1980;243:1715-9.

⁵ Robberts RC, Moore VI. Immunopathogenesis of hypersensitivity pneumonitis. *Am Rev Respir Dis* 1977;116:1075-90.

Notice

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