

ANSWER

From the question on page 12.

Our initial diagnostic hypothesis was pulmonary alveolar phospholipoproteinosis in view of the “crazy paving” appearance on the CT scan. Bronchoalveolar lavage was performed and the fluid recovered had a total cell count of $700 \times 10^3/\text{ml}$ (89% macrophages, 3% neutrophils, 1% eosinophils). There were no germs, tumour cells or alveolar bleeding. The periodic acid/Schiff test was negative. Polarised light microscopy revealed birefringent particles, consistent with crystalline silica, within the macrophages (fig 1A). The patient stopped smoking cannabis and reported feeling well while continuing his chronic treatment for a manic-depressive disorder and with no need for corticosteroids. A check-up 1 month later gave normal clinical and CT results. The diagnosis of adulterated cannabis-induced lung disease is essentially based on: (1) the temporal association between exposure to a new adulterated illicit drug and development of the clinical and radiological patterns and (2) meticulous exclusion of all other possible causes including drug-induced pneumonitis and infectious disease.

ADULTERATED CANNABIS

Daily marijuana smoking has clearly been shown to have histopathological effects and adverse events on pulmonary function.¹⁻³ Adulterating cannabis with glass beads (fig 1B) or sand (“grit weed”) is a new trick used by cannabis dealers to increase the weight and boost profits. Since the late summer of 2006 this practice has become widespread in Europe. We report for the first time on a potential risk of this practice. Based on animal models of silica inhalation, one can imagine that the silica lung burden was not exceeded in this patient which would explain the “alveolitis” and the favourable outcome.⁴ A few anecdotal reports of mouth ulcers and breathing difficulty after inhalation of glass beads have been observed but not published, prompting the UK Department of Health to advise cannabis smokers of the harmfulness of these microscopic glass beads.⁵ In the present case we were not able to analyse the adulterated cannabis because the

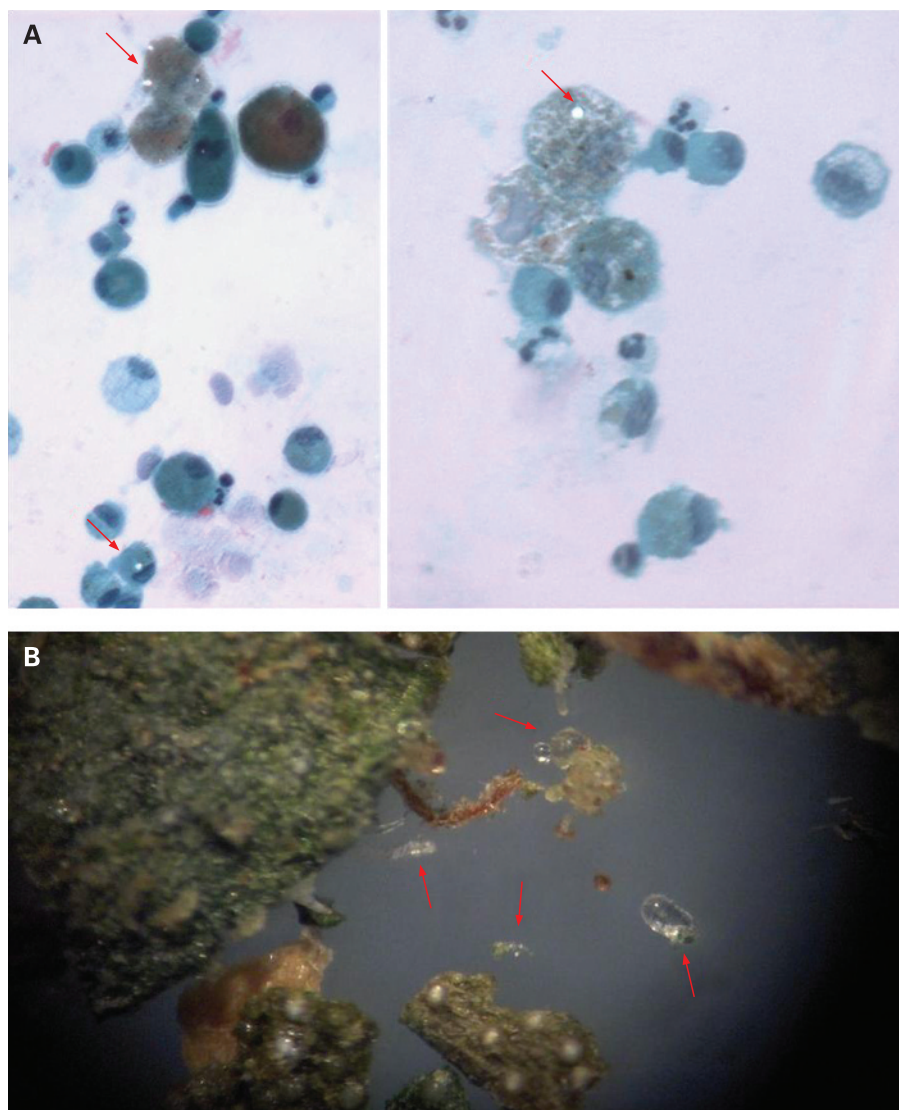


Figure 1 (A) Intra-alveolar macrophages with intracellular silica dust (arrows) revealed by polarised light microscopy ($\times 100$). (B) An example of adulterated cannabis with microscopic glass beads (arrows) from another user who complained of mouth ulcers and breathing difficulty after inhalation ($\times 40$).

patient had consumed it all, and we cannot exclude the presence of the microscopic glass beads frequently associated with sand.

Competing interests: None declared.

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