## Images in Medicine

## Asbestos exposure and pulmonary disease. Why is the occupation history so important?

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76 years old male patient, with cardiovascular risk factors, including arterial hypertension and diabetes mellitus type 2, as well as a sarcoidosis diagnosis established in 2003, he was admitted to the emergency service due to a grade IV dyspnea. He was hemodynamically stable, apyretic having bi-basal inspiratory crepitations at pulmonary auscultation. A thorax X ray highlighted bilateral interstitial type hypotransparencies and pleural alterations with calcifications in the lower thirds (Fig. A).

At this point in time, pleural plaques were valued and the sarcoidosis diagnosis questioned, having the patient being questioned about his past exposure. He confirmed professional exposure to asbestos for 10 years, in formwork insulation. A thorax CAT scan was performed, revealing bilateral pleural plaques in the lower thirds and interstitial compromise with a pattern of unpolished glass, more marked in the lower lobes. A bronchofibroscopy was performed having the bronchoalveolar wash (BAW) showed a lymphocytic alveolitis with a high CD4/CD8 ratio (3,5), as well as alveolar macrophages phagocyting asbestos bodies

(*Fig. B*), in the cytology exam. No microbial agent was isolated. Therefore the asbestosis diagnosis was established.

## **Discussion**

The asbestosis diagnosis was based on the professional background, imagiology findings and asbestos documents in optical microscopy. In the thorax X Ray it should be highlighted the importance of pleural plaques in the initial assessment of Diffuse Parenchymal Lung Disease (DPLD). High resolution CAT scan findings are common to other DPLD. The diagnosis key is in the professional background. A simple method of searching asbestos bodies, using optical microscopy must be performed to document the presence of one or more asbestos body per mL of BAW. The disease can evolve, even in the absence of continuous exposure to asbestos and mesothelioma can be a later complication.

## References

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A FIG. A e B

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