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### Letters to the Editor

## Wall Abscess due to *Mycobacterium Avium* Intracellulare (MAI) in a Patient with Pneumoconiosis

### Absceso de pared por Mycobacterium avium intracellulare (MAI) en un paciente con neumoconiosis

### To the Editor:

Only a minority of people exposed to Mycobacterium avium intracellulare (MAI), mainly immunosuppressed patients or those with underlying pulmonary pathology, develop lung disease caused by this germ.<sup>1,2</sup> Although the relationship of silicosis with tuberculosis and even with other mycobacteria, such as Mycobacterium kasasii, are frequently reported, the association of this pneumoconiosis with MAI hasbeeninfrequently described.3 MAI affectation in immunocompetent patients varies depending on whether the presentation is in either a previously healthy or pathological pulmonary parenchyma.<sup>4</sup> In subjects with previous parenchymatous affectation, the most frequent manifestation is more or less extensive fibrocavitary affectation, while in those with healthy lungs before the MAI infection, the most probable radiological alterations are bronchiectasis and reticularnodular affectation, with less lung affectation.<sup>5</sup> Pleural adhesion and thickening are evident on computed tomography (CT) in half of the cases, and these are usually adjacent to the lung lesions; pleural effusion, however, is very infrequent.<sup>1</sup> In an exhaustive review of the medical literature, we have not found any cases reporting an abscess due to MAI at the level of the chest wall produced by contiguity, either hematogenous or primary. We describe the exceptional case of a patient with complicated silicosis and MAI infection who developed an abscess due to this germ at the level of the chest wall due to a fistula from one of the present cavitated lung lesions. The patient was a 67-year-old male with a work history of various decades at a granite quarry, ex-smoker who had smoked more than 40 packs/year, who had been diagnosed some years earlier with stage C complicated silicosis with important functional repercussions and chronic respiratory insufficiency. Ten months before, he had been diagnosed with pulmonary mycobacteriosis caused by MAI and was receiving treatment with rifampicin, ethambutol and clarithromycin at standard dosages. The patient was transferred to our hospital from another center in order to study a mass on the anterior chest wall. He referred a lump that had been evolving over the previous six months, located in the left anterior chest wall, which had fluctuated in size. Given the persistence of the lesion and the appearance of pain and signs of inflammation, the patient had consulted with his physician. During our examination, we observed a tumor that was 10 cm in diameter, soft in consistency and painful to the touch on the upper anterior wall of the left hemothorax (fig. 1A). Lab work-up on peripheral blood, including HIV serology, revealed no noteworthy data. Sputum smear for acid-fast bacilli was slightly positive, with mycobacterial culture positive for MAI. Computed tomography (CT) revealed: micronodular pattern predominantly in both upper lobes, with irregularly-edged large masses also in the upper lobes (one of which was cavitated); panlobular emphysema; bullas and multiple calcified hilar and mediastinal lymphadenopathies; and a fistula towards the soft area, where a collection with air-fluid level had formed (fig. 1B). Fine-needle aspiration was performed, obtaining abundant purulentlooking material, whose immediate examination showed BAAR, while MAI was later cultured. Due to the comorbidity of the patient and the growth of the chest wall lesion with spontaneous cutaneous fistulization in the following weeks, a percutaneous drain was inserted. The aforementioned antibiotic treatment was maintained for a total of 18 months, obtaining favorable clinical, radiological and microbiological responses. This case is the first report describing a fistula from a cavitated lung lesion to the chest wall cause by MAI.<sup>1</sup> In



Figure 1. A) Tumor located at the upper anterior level of the left chest wall. B) Thoracic computed tomography (CT) showing an irregular mass in the right upper lobe, another left apical cavitated mass, and a mass with air-fluid level in the left thoracic wall.

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an exhaustive recent review,<sup>5</sup> not even in an extensive series<sup>6</sup> of surgical treatment of MAI cases was there mention of a similar case. What we find striking is the good therapeutic response obtained with completely conservative management, conditioned by the baseline situation of the patient, while the favorable evolution could be explained by the spontaneous drainage of the cavitated lesion of the LUL.

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### What is the Technique of Choice for Diagnosing Mediastinal Lesions?

### ¿Cuál es la técnica de elección para diagnosticar lesiones mediastínicas?

#### To the Editor:

The objective of the useful article by Pérez Dueñas et al.,<sup>1</sup> recently published in your journal, is to "evaluate the diagnostic accuracy of CT-guided percutaneous fine needle aspiration cytology (FNAC) for detecting malignant mediastinal lesions". The study raises interest and demonstrates, in a series of 126 patients with no control group, that this technique is viable, quite safe and diagnostically efficient (sensitivity 95%). The authors conclude that the technique "should be considered the diagnostic procedure of choice when there is suspicion of malignancy of a mediastinal lesion; more aggressive techniques such as endoscopic procedures should be left for difficult cases". We believe, however, that the results of the study are not sufficient in order to reach such a conclusion.

First of all, it is a series of selected patients, with no comparative control group using other techniques, constituting a population that is different from the studies carried out with endoscopy;<sup>2,3</sup> thus, the results cannot be compared. In order to do so, it would be necessary to design a clinical assay, with a control group, including variables such as the type and location of the mediastinal lesion, risk factors (emphysema, etc.), radiological exposure and cost-efficiency. With these data, patient groups could be established, as could the order of choice for the most adequate procedure for each case.

Second of all, we would like to give consideration to the aggressive nature of these tests. Applying proper methodology, flexible bronchoscopy allows for the bronchial tree to be examined and to obtain samples from proximal mediastinal lesions both efficiently and safely, with hardly any contraindications. Recent studies using scales with variables for pain and discomfort demonstrate that it is a test that is very well tolerated by most patients.<sup>4</sup> Therefore, bronchoscopy can currently be considered a minimally invasive technique. The study at hand does not analyze this aspect, nor does it use any variables that evaluate or compare the aggressiveness of the procedures. Therefore, it cannot be concluded that one or the other procedure is better depending on this criterion.

In short, we believe that the data provided are very interesting and useful, but, as we have explained, they are not sufficient to establish the diagnostic procedure of choice for studying mediastinal lesions. The choice should probably be based on which is most adequate (bronchoscopy, mediastinoscopy or CT-guided aspiration) depending on the location of the lesion, etiological suspicion and patient characteristics.

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