aorta, especially when the aortic root is poorly imaged by left parasternal scanning.

REFERENCES


Bronchopulmonary Lavage in Alveolar Microlithiasis*

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We describe the first known use of volume-controlled bronchopulmonary lavage in a case of alveolar microlithiasis. Although the procedure has often been discussed in the literature as theoretically useful in the therapy for this disease, in our case it showed no efficacy in clearing the alveolar spheres.

Review articles on clinical applications of bronchopulmonary lavage mention that microlithiasis could benefit from the procedure on theoretical grounds, despite the finding that the alveolar spheres vary in size from 0.25 mm to 1.0 mm in diameter. However, the microcalculi appear to be, on the average, larger than the terminal bronchioles. These calcific bodies appear to increase in size and in degree of calcification with aging, and many years may be required for the development of the mature lesion and the abnormalities of the alveolar wall.

We recently had the opportunity to treat a case of microlithiasis in a 15-year-old girl, strictly following the technique of volume-controlled bronchopulmonary lavage recommended by Ramirez et al, Kylstra et al, Rogers and Tantum, Paula, and Palombini et al.

CASE REPORT

A 15-year-old girl from Rio Grande was admitted to our hospital on Oct 10, 1974, for evaluation of abnormalities noted on previous chest x-ray films. Her local physician had suggested that she could have far-advanced pulmonary tuberculosis. The patient was entirely asymptomatic, denying dyspnea, cough, hemoptysis, chest pain, loss of weight, or night sweats. The patient had no known exposure to toxic dusts. Her family history disclosed no pulmonary disease; she had two older healthy brothers.

On physical examination the patient appeared to be healthy and well developed. She weighed 39.0 kg and was 148 cm tall. Her vital signs were within normal limits. The thorax expanded normally, and good diaphragmatic excursions were present bilaterally. Breath sounds were normal, and no rales or rhonchi were heard. There was no digital clubbing.

The hemoglobin, WBC count, and differential were normal. Results of urinalysis, skin tests for tuberculosis, and studies for acid-fast bacilli, routine pathogens, and malignant cells were negative.

An x-ray film taken on admission showed the typical

![Figure 1. Chest x-ray film on admission.](http://journal.publications.chestnet.org/pdaccess.ashx?url=/data/journals/chest/21241/ on 06/03/2017)
The procedure was followed by intensive postural drainage. Eleven liters of saline solution was used.

The first aliquot of saline solution drained from the lung had a turbid aspect, and the following aliquots were clear. After some minutes a mucoid secretion could be seen fluctuating in the surface of the fluid in most of the bottles. Within this mucoid material, as well as at the bottom of all the bottles, several spherules, all of them measuring less than 1 mm, could be seen as well as palpated (Fig 2 and 3). The number of microcalculi lavaged by the procedure did not exceed 500.

An x-ray control film taken one week after the bronchopulmonary lavage failed to show any clearing in the roentgenographic findings of the disease. The patient remained asymptomatic.

**DISCUSSION**

As could be expected from previous findings that the calcific bodies filling the alveoli in alveolar microlithiasis vary in size from 0.25 to 1.0 mm, the procedure failed to demonstrate any radiologic, laboratory, or clinical efficacy in clearing the abnormal alveolar spherules typical of the disease. Probably most of the spherules are larger than the terminal bronchioles.

Even in a 15-year-old girl, in whom we could expect either that the spherules had not significantly increased in size and in degree of calcification or that the abnormalities of the alveolar wall were not important, the lavage did not seem to offer any advantage in therapy for this disease.

It is hoped that this finding can be of help in future reviews on the applications of bronchopulmonary lavage.

**REFERENCES**