Lymphomatoid granulomatosis with postoperative bronchospasm

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Recently, Gibbs¹ requested that patients with lymphomatoid granulomatosis be reported to broaden our knowledge of this clinical entity. We report a case whose dominant features were associated with bronchospasm and pneumothoraces after lung biopsy. Bronchospasm has not previously been reported as a feature associated with lymphomatoid granulomatosis.

Case report

A 68-year-old male patient was seen because of a left facial nerve palsy. He had had no previous illnesses but had been a heavy smoker all his life. Physical examination showed a partial left seventh nerve palsy only. Routine chest radiographs showed numerous "coin" lesions in both lung fields which were considered to be metastatic in nature. Radiography of the skull vault and internal auditory meati showed no space-occupying lesion. The only abnormality on blood analysis was a raised ESR of 66 mm/hr. A barium meal, barium enema, and IVP were all negative. Bronchoscopy was negative, and transbronchial biopsies and brushings from all the lower lobe bronchi did not yield any evidence of neoplasia. A left otitis media was implicated as the cause for the seventh nerve palsy and a myringotomy was performed. A few days later, one of the coin lesions in the right lung was biopsied through a small anterior right thoracotomy incision. A pathological report was as follows: "The lung tissue shows a vasocentric and vasodestructive process. The muscular pulmonary arteries and veins have their walls infiltrated by histiocytic-type cells and lymphocytes, with reduction or obliteration of the lumina. The lung parenchyma is also infiltrated by a lymphomatoid process and contains multiple areas of necrosis. Bacterial and fungal stains are uniformly negative. The appearances are those described by Liebow *et al*² as lymphomatoid granulomatosis." Thirty-six hours after the lung

biopsy, the patient developed severe bronchospasm and a right-sided pneumothorax. He was treated with aminophylline and intravenous steroids but required ventilation.

A right pleural drain was inserted after tracheal intubation but an immediate chest radiograph revealed a second pneumothorax, this time on the left side. Bilateral chest drainage and mechanical ventilation were continued for five days. Despite continued steroid treatment, the radiological coin lesions were unchanged two months later. He had been discharged from hospital after this time, still on treatment with prednisone on alternate days.

A maxillary sinus carcinoma was discovered one year later. The patient died after a long illness in August 1979.

Discussion

This case is the first in which lymphomatoid granulomatosis has been associated with bronchospasm. The use of steroids in this patient was precipitated by the bronchospasm, although the role of steroids in the treatment of lymphomatoid granulomatosis remains unclear. However, our patient showed no advancement of his underlying radiographic lesions while under treatment with steroids. The occurrence of spontaneous pneumothoraces is well recorded in this disease, but in our case, it is thought most likely to represent a phenomenon secondary to the bronchospasm and open lung biopsy, and to the artificial ventilation on the left side.

His subsequent development of a neoplasm, in this instance a carcinoma, is also a feature well documented originally by Liebow and his colleagues.²

References

- 1 Gibbs AR. Lymphomatoid granulomatosis: a condition with affinities to Wegener's granulomatosis and lymphoma. *Thorax* 1977; 32:72-9.
- 2 Liebow AA, Carrington CB, Friedman PJ. Lymphomatoid granulomatosis. *Hum Pathol* 1972; 3:457-8.

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