Medical Treatment of Pulmonary Aspergilloma

Key words: endocavitary antimycotics

Most cases of pulmonary aspergilloma remain stable for many years, and the course is quite variable. The prognosis for patients with pulmonary aspergilloma seems to be related more to the nature and severity of the underlying diseases, particularly chronic lung diseases, than to the fungus ball itself.

The treatment of choice in patients with repeated episodes of hemoptysis is surgical excision. However, this is often considered to be hazardous or impossible because of underlying disease, impairment of respiratory function, poor general condition or old age. When operation is contraindicated or refused by the patient, attempts of intracavitary instillation of an antifungal agent, either through an intrabronchial catheter or percutaneously, have been tried. Systemic antifungal agents are considered to be unvaluable since there is little diffusion of the agent into the cavity containing the fungus ball. Other agents, including sodium iodide, potassium iodide, N-acetylcysteine and aminocaproic acid, have also been used locally, either alone or with antimycotics.

Endocavitary treatment with antifungal agents, including amphotericin B (1–19), nystatin (4, 7), natamycin (20), pimaricin (7), flucytosine (21), miconazole (22), and ketoconazole (23), was associated with disintegration or a decrease in the size of fungus ball or clinical improvement. To my knowledge, this form of therapy has been employed successfully or with significant improvement in a relatively small number of patients in the English literature.

In this issue, Kawamura et al reported that patients with pulmonary aspergilloma responded poorly to intracavitary injection of amphotericin B (24).

See also p 209.

Why attempts of this form of therapy are successful in some patients and unsuccessful in others is not clear. Which antimycotic instilled, the optimal dose and total dosage of the agent and interval of instillation remain to be clarified. The touching time of agent instilled with viable Aspergillus on the surface of the fungus ball may be essential. Moreover, an adjunctive therapy to accelerate destruction of the fungus ball may be favorable. Further study of these problems will be necessary.

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Reference

21) Watanabe K, Hibino J, Izumi A, Mori T, Ikemoto H. A case of pulmonary...

