

Hypersensitivity Pneumonitis Treated with an Electrostatic Dust Filter

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A 60-year-old woman had had recurrent acute migratory pneumonias for 9 months. The results of an evaluation, which included tests for serum precipitins, a transbronchial biopsy, and a bronchial provocation, confirmed a diagnosis of hypersensitivity pneumonitis caused by an *Aspergillus* species. The findings from gravity air cultures in the home showed a heavy infestation of mold. The installation of electrostatic dust filters in the return ducts of the central air conditioning system resulted in the lowering of mold colony counts to normal levels. This change in the environment enabled the patient to live at home without having the signs and symptoms of hypersensitivity pneumonitis, or a need for medication. Thirty months after the electrostatic dust filters were installed, total mold colony counts were still normal, the patient remained free of the signs and symptoms of hypersensitivity pneumonitis, and serum precipitins could no longer be demonstrated. The results of a bronchial challenge to *Aspergillus* species, however, remained positive; these positive results suggest that long-term memory immune mechanisms may play an important role in the pathogenesis of hypersensitivity pneumonitis and lessen the importance of precipitins in establishing a diagnosis. We report that electrostatic dust filters may be an effective treatment for patients with hypersensitivity pneumonitis when avoidance of the causative antigen cannot be easily and rapidly achieved.