Is There a Beneficial Affect on the Symptoms and Signs of Asthma When Reduction in House Dust Mite is Achieved: A Systematic Review

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Introduction Allergen avoidance methods such as mattress encasings, acaricides on mattresses, tannic acid on floors and washing bedding at high temperatures are thought to be ways of controlling the symptoms of asthma. However, the evidence in this field is confusing.

Rationale The objective of this review was to establish if there is a beneficial effect on the symptoms and signs of asthma when reduction in house dust mite reservoirs is proven.

Methods The search strategies were formulated using a variety of electronic databases, hand searching of appropriate journals, and through personal communications with experts from the North West Lung Centre, Manchester. The inclusion criteria selected randomised control trials which examined adults and/or children over the age of 4 years, all considered to have asthma, and with proven sensitivity to house dust mite. In order to be included

studies had to show a reduction in house dust mite levels following the chosen intervention.

Results Of the fifty studies reviewed only four were found which satisfied all the inclusion criteria. The results showed a decrease in bronchial hyper-reactivity and symptoms in the intervention group in all four studies.

Conclusions In patients with asthma, allergen avoidance in the form of mattress covers impermeable to house dust mites, either alone or in conjunction with other allergen avoidance measures, had a positive effect on the symptoms of asthma.

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