to these allergens is therefore an important aspect of asthma treatment. Because mattresses, bedding and textile floor-covering constitute the major domestic reservoirs of HDM-allergens, avoidance measures concentrating on these sites are probably of primary importance. However, avoidance measures are expensive and often require substantial effort from either patients or relatives. It is therefore important to evaluate whether it is necessary to reduce HDM to both mattress, bedding and floor-covering or to concentrate in one or two of these sites for the treatment of adult asthmatics.

**Methods:** In a double-blind placebo controlled intervention trial, the effect of different avoidance measures was assessed. After a baseline period of 4 weeks, 133 HDM-allergic patients with asthma (FEV1 < pred: 86%; P<0.05) were randomly allocated to an active and placebo sanitation group. The active sanitation consisted of treating floor covering with Acrotosan® and encasing mattress and bedding with HDM-impermeable covers (Intervent® Bedding Systems, W.L. Gore & Ass.). The placebo sanitation consisted of treatment of the covering with water and the use of mattress covers, which were permeable to the house dust mite. At the start of the baseline and 8 weeks after the intervention separate dust samples were taken from the mattress, livingroom and bedroom floor with a vacuum cleaner (Phills TC636, 1400 W). FEV1 and PC20 (bronchial hypersensitivity) were measured during and out pollen season, significantly correlated with serum IgE and blood eosinophil counts. During pollen season 16 out 49 rhinitis patients demonstrated values of PC20 < 2 mg hist./m3.

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**P2463**

Aspecific Airway Hyperresponsiveness in Mono-Sensitive Sicilian Patients with Allergic Rhinitis Correlates with Serum IgE Levels and Blood Eosinophil during and out Pollen Season


Allegoric rhinitis has been said to be a risk factor for the development of asthma as suggested by its frequent association with airway hyperreactivity. However, little is known about the effect of natural specific allergen exposure on the bronchial reactivity of mono-sensitive patients with rhinitis in the Southern Mediterranean area, in relation to skin reactivity to allergens, serum IgE levels and blood eosinophils. The significance of the association between allergic rhinitis, asthma and abnormal airway responsiveness with regard to the pathogenesis of asthma is unclear. For this reason, we have studied specific bronchial hyperreactivity in patients with seasonal allergic rhinitis, with reference to the responsible allergen. The aim of the study was to correlate the bronchial responsiveness to methacholine in subjects with allergic rhinitis during and out the pollen season with serum IgE and blood eosinophil count.

Fourty-two consecutive patients with clinical diagnosis of allergic rhinitis and mono-positive skin prick test (SPT) to pollen allergens were enrolled in the study. Twenty patients suffered from seasonal rhinitis to *Parietaria* pollen, 15 patients to *Omalthea* pollen and 14 patients to *Olea* pollen. In all patients lung function measurements (assessed as response to methacholine), serum IgE and eosinophil were measured during and out pollen season.

During pollen season 16 out 49 rhinitis patients demonstrated values of PC20<FEV1 above the asthmatic range whereas out pollen season only 8 patients were in the asthmatic range. By analysing the results with reference to the responsible allergen, during the pollen season 15 out 16 patients were *Parietaria*-sensitive and out pollen season 7 patients. Finally, in *Parietaria*-sensitive rhinitis bronchial responsiveness, both during and out pollen season, significantly correlated with serum IgE and with blood eosinophil counts.

Our results are consistent with the hypothesis that *Parietaria* is much important in relation to *Olea* and *Crasnae* as a risk for developing nonspecific bronchial hyperreactivity. Our results are consistent with the hypothesis that *Parietaria* is much important with blood eosinophil counts. Both during and out pollen season, significantly correlated with serum IgE and blood eosinophil counts.

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**P2464**

Contribution of Separate House Dust Mite Avoidance Measures in Improving the Clinical Condition of Asthmatic Patients

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**Background:** House dust mite (HDM) allergens, especially *Der p 1*, are known to influence respiratory morbidity in atopic-allergic asthma. Reduction of exposure...