2470 INFLUENCE OF HOUSING FACTORS ON HOUSE DUST MITE DER P1 LEVELS


We determined the influence of housing factors on Der p1 levels in Southampton houses. Dust was collected from 63 living rooms and 235 mattresses in the house by standardized methods. Der p1 content of the dust was measured by ELISA.

Results: The weight of dust collected was unrelated to the level of Der p1 (p=0.32). Mean household mattress Der p1 level was significantly correlated with living room Der p1 level (r=0.512, p<0.0001). Mean mattress Der p1 level was significantly negatively correlated with age of the house (r=-0.51, p<0.01), and Der p1 levels were significantly lower in houses built post 1970 (mean 6.70±17.22 μg/g, p<0.0001). Mean mattress living room Der p1 levels were unaffected by social class, the number of rooms in the house, the crowding index or householder reported dampness in the house. Neither double glazing nor central heating significantly affected mean der p1 levels. Mattress Der p1 levels were significantly correlated with the age of mattress (r=0.286, p<0.0001), but were unaffected by frequency or type of cleaning of mattress or linen. Mean mattress Der p1 levels were significantly lower if the occupants always slept with the window open (9.54±15.05 μg/g, p<0.05). Sensitivity: Within house factors significantly affect the level of Der p1 in the whole house. New houses do not have increased levels of Der p1, health and placebos are not significantly different. The simplest stratagem to decrease mite Der p1 levels is to sleep with the bedroom window open all year round.

2471 DOES VACUUMING OR A PLACEBO MATTRESS-COVER EFFECT THE DER P1 LEVEL IN MATTRESSES?


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Introduction: The question of this study is whether in house dust mite allergy studies the sampling of dust using a vacuum-cleaner or placebo mattress-covers used in the control group have a decreasing effect on the amount of Der-p1.

Methods: Dust samples were taken from 82 uncovered mattresses, using a Philips 1400 W vacuum-cleaner. In order to study the effect of vacuuming, second vacuuming samples on the uncovered mattresses. The correlation was taken (at 10, 16 and 22 weeks). Dust samples were collected with a vacuum-cleaner (Philips Turbo Exclusive TCE56, 1400 W). Mattresses were vacuums with an intensity of 5 minutes/m². The results are shown in the following figure:

2472 LONG-TERM EFFECTS OF MATTRESS-COVERS ON HOUSE DUST MITE (DER-P1)

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House dust mite (HDM) plays an important role in allergic asthma. The use of special mattress-covers might decrease the HDM-concentration in the mattress, but the extent of these effects on HDM-concentrations at the long term are still questionable. It is very important to know whether mattress-covers do decrease Der-p1-concentrations and if so, whether these effects still exist after several months. Therefore, the aim of this study was to assess, whether mattress-covers decrease Der-p1-concentrations and if these effects are still present after 5 months. This was done in a single-blind randomized controlled 22-week trial with 23 subjects. Baseline dust-samples were taken of the bare mattress of all 23 subjects. Subjects were then randomly divided into two groups (intervention group (N = 10) and placebo (N = 13 group). In the intervention group, mattress, duvet and pillow covers (Gore®), which were impermeable to the house dust mite were covered to the bedding. In the placebo group mattress covers, which were permeable to the house dust mite were used. The mattresses were covered directly after the baseline dust-sample. During the following 22 weeks 3 dust-samples were taken (at 10, 16 and 22 weeks). Dust samples were collected with a vacuum-cleaner (Philips Turbo Exclusive TCE56, 1400 W). Mattresses were vacuumed with an intensity of 5 minutes/m². The results are shown in the following figure:

2473 COMPARISON OF PERIPHERAL BLOOD EOSINOPHILS AND SERUM ECP AS A MARKER OF ALLERGEN AVOIDANCE BY ALLERGIC ASTHMATICS IN A HIGH ALTITUDE ENVIRONMENT


The aim of this study was to evaluate if peripheral blood eosinophils or serum ECP can serve as a marker to document allergen avoidance. 18 asthmatics (10 females and 8 males with an age range of 14 to 41 years, median 22 years) admitted to the Hochgebirgsklinik Davos-Wolfgang were studied. The aim of this study was to evaluate if peripheral blood eosinophils or serum ECP can serve as a marker to document allergen avoidance. 18 asthmatics (10 females and 8 males with an age range of 14 to 41 years, median 22 years) admitted to the Hochgebirgsklinik Davos-Wolfgang were studied. The aim of this study was to evaluate if peripheral blood eosinophils or serum ECP can serve as a marker to document allergen avoidance. 18 asthmatics (10 females and 8 males with an age range of 14 to 41 years, median 22 years) admitted to the Hochgebirgsklinik Davos-Wolfgang were studied. The aim of this study was to evaluate if peripheral blood eosinophils or serum ECP can serve as a marker to document allergen avoidance.