

## **Sensitization to Non-Pyroglyphid Mites in Urban Population of Croatia**

*Božica Kanceljak-Macan, Jelena Macan, Lucija Buneta<sup>1</sup>, Sanja Milkoviæ-Kraus*

Institute for Medical Research and Occupational Health, Zagreb; and <sup>1</sup>Jordanovac University Hospital for Lung Diseases, Zagreb University School of Medicine, Zagreb, Croatia

**Aim.** Determination of prevalence of sensitization to *Dermatophagoides pteronyssinus*, *Dermatophagoides farinae* (pyroglyphid mites), *Lepidoglyphus destructor*, and *Tyrophagus putrescentiae* (non-pyroglyphid mites) in urban continental Croatia.

**Methods.** Specific IgE (sIgE) and skin prick test (SPT) for *D. pteronyssinus*, *D. farinae*, *L. destructor*, and *T. putrescentiae* were performed in 67 men. SPT was performed with Epipharm-ALK allergens. A urtica (D+d)/2 of 3 mm or greater was considered a positive skin reaction. sIgE was measured by immunoCAP technology (UNI CAP). Values <0.35 kUA/L were considered nonspecific and >0.35 kUA/L increased.

**Results.** The prevalence of subjects with positive SPT was 35.8% for *T. putrescentiae*, 26.8% for *L. destructor* (26.8%), and 22.4% for *D. pteronyssinus* and *D. farinae*. The prevalence of increased sIgE for *D. pteronyssinus* and *D. farinae* was 23.9%, followed by *T. putrescentiae* (22.4%), and *L. destructor* (14.9%). Among subjects with increased IgE to *D. pteronyssinus* there were also increased IgE for *D. farinae* in 94%, for *T. putrescentiae* in 75%, and for *L. destructor* in 50%. Mean urtica diameter differed only for *L. destructor* between nonspecific and increased sIgE values in subjects with positive SPT ( $3.7 \pm 0.7$  mm vs.  $6.2 \pm 2.8$  mm;  $p=0.004$ ). Sensitization to storage mites was accompanied by respiratory symptoms in similar proportions as that to house dust mites (51.8% and 54.5%, respectively;  $p=0.8527$ ).

**Conclusion.** Sensitization to non-pyroglyphid mites is present in the general urban population of Croatia in similar proportions as to pyroglyphid mites, with the same range of respiratory symptoms. Testing with storage mites should be considered routine allergological diagnostic procedure.

**Key words:** allergens, dust; atopic hypersensitivity; Croatia; housedust; hypersensitivity, immediate; IgE; skin test