

Inflammation and clinical immunology

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Selected parameters of non-specific resistance in children with recurrent respiratory tract infections

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The aim of the study was to neutrophil function by assessment of phagocytosis ability, granzyme K concentration in children with recurrent respiratory tract infection (RRTI).

The study included 91 children: Group I: 34 patients with RRTI (with low IgE levels and normal Vitamin D concentration); Group II: 18 patients with allergy (with higher IgE levels), Group III: 22 patients with RRTI and vitamin D deficiency; Group IV: 20 healthy children (control group).

The following analyses were performed: measurements of phagocytosis ability (total phagocytic efficiency, phagocytic index, percentage of phagocytic neutrophils), serum levels: Granzyme K, IgE, IgD, CD56+ blood lymphocytes phenotyping.

All patients characterized with normal IgA, IgG, IgM serum levels.

Group III (vitamin D deficiency) patients presented with the lowest total phagocytic efficiency levels although these differences did not reach statistical significance. Phagocytic index was the lowest in Group II i III. Percentage of phagocytic neutrophils was the lowest in Group II. The results were not statistically significant. Serum concentrations of Granzyme K were lowest in patients with allergy (Group II) and I Group III.

Figure 1

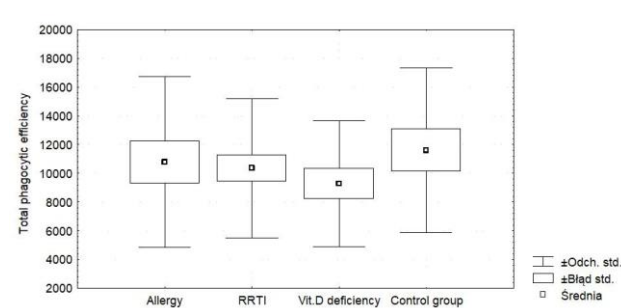


Figure 2

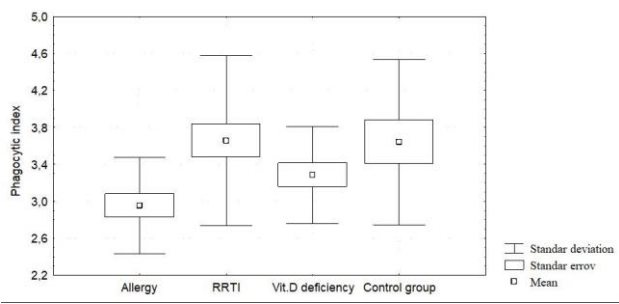


Figure 3

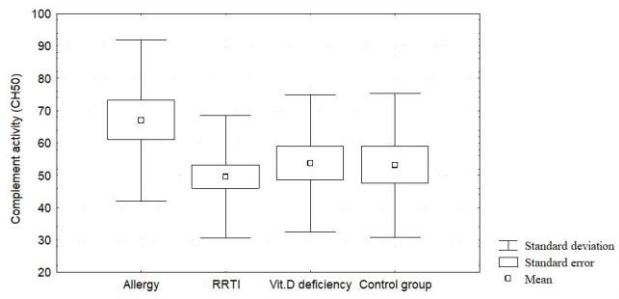


Figure 4

