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### Neutrophils function in patients with a deficit of IgG subclass

Gerard Pasternak<sup>1,2</sup>, Aleksandra Lewandowicz-Uszyńska<sup>1,2</sup> and Maryla Kazimierowska-Niemczuk<sup>1</sup>

<sup>1</sup>Wrocław Medical University, Poland

<sup>2</sup>Provincial Hospital J. Gromkowski, Poland

Neutrophil function is an essential component of innate immunity which depends on many factors, both internal and outside of the organism. Deficits in disorders of humoral immunity associated with a deficit of antibodies are the most common primary immunodeficiency in children with recurrent respiratory tract infections and bronchial asthma. Study included 100 children (aged 6 months to 18 years) referred to the Department of Clinical Immunology and Pediatrics purpose of diagnosis of recurrent respiratory tract infections. All children screening for hemolytic activity of the complement, the concentration of the major classes of immunoglobulins (IgG, IgA, IgM, IgE) of the IgG subclasses (IgG1, IgG2, IgG3, IgG4), the number of lymphocytes with a phenotype of CD3+, CD4+, CD8+, CD19+ and CD56+ were examined and properties of phagocytic neutrophils. It was evaluated neutrophils phagocytosis efficiency relative to *Staphylococcus aureus* 209P, phagocytic index and the percentage of phagocytic neutrophils. Examined children were divided into two groups: Those with normal concentrations of the IgG subclasses or a deficit of them. It has been demonstrated a number of abnormalities of the neutrophil function in children with a deficit of the IgG subclasses as well as normal concentrations of of the IgG subclasses.

### Biography

Gerard Pasternak was graduated from the Medical University Wrocław in 2008. Since 2015, he has been the Assistant at the Department and Clinic of Pediatrics, Immunology and Rheumatology of Developmental Age MU Wrocław and the Department of Immunology and Pediatrics, Provincial Hospital J. Gromkowski, Wrocław (since 2010). He serves as a didactic Assistant Professor in the Department. He participates in conducting activities in the field of primary immunodeficiency for students of III-VI of the year and takes part in the preparation and conducting of workshops for patients with PID and their families. His professional interests and research are concentrated on the diagnosis and treatment of primary and secondary immunodeficiencies with particular emphasis on deficit of the IgG subclasses.

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