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THE BASOPHIL ACTIVATION TEST IN CHILDREN SUSPECTED FOR FOOD ALLERGY

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It is difficult to estimate the correct diagnosis of food allergy. Most patients are diagnosed on the base of the clinical history, the presence of specific IgE in serum and skin tests. It is well known that the measurement of specific IgE sometimes gives us confusing information and it seems that it can be overcome by the using of a new in vitro functional test. The test measures the activation of basophils upon stimulation of cells in the presence of allergens. The expression of the activation marker CD63 on basophils (CD203c positive) is measured by flow cytometry. CD63 expression correlates strongly with degranulation of basophils. The new method was tested on the group of 20 children aged 1 to 12 years. We focused our attention on the paediatric patients suspected for IgE mediated food allergy. The skin testing could not be used because of the severe clinical symptoms, small age or the impossibility to omit the regular antihistamine therapy. In all cases when the basophil activation test was negative also specific IgE was negative. We found the positive basophil activation in 30% of specific IgE negativity. Clinical symptoms and the results of the restrictive diet confirmed false negative results of specific IgE. Our preliminary results show that the test of the basophil´s activation in children is more sensitive than the measurement of specific IgE.