Prevalence of childhood food allergy in Batumi
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Aims: To investigate the prevalence of food allergies and to identify the most common causes of the allergies in the population of preschool children from the city of Batumi.

Methods: The study was conducted with children population, in Batumi. The random sampling was applied in the study to ensure representative sample and the cross section method of epidemiological survey was used. At the first stage of the survey 840 children aged from 6 months to 7 years, were questioned. Data were collected through the face-to-face and phone interviews. At the second stage of the survey, the subjects of study were the part of the population, who revealed the clinical signs of food allergy for the last 12 months. The causal factors were revealed on the basis of answers to the questionnaire, anamnesis data, specific IgE measurements and skin prick tests. The risk factors were studied on the basis of case control studies.

Results: Skin manifestation (76%) of food allergy was significantly (p<0.05) higher than the rate of gastrointestinal symptoms (24%) in the studied population. The most common causes of food allergies in the study population were different food additives (29.2%), fish (22.6%), eggs (22.3%), milk (18.6%), honey (13.7%) and nut (4.3%). Such factors as inheritance from mother (OR=13.69; 95% CI=7.08-27.04), excess weight of newborn (OR=1.08; 95% CI=0.30-3.82) and bottle feeding (OR=5.29; 95% CI=3.30-8.51) are associated with higher risks of food allergies. IgE mediated reactions to the food allergens were identified in 98% of the patients.

Discussion: The prevalence of parentally reported allergy was 15.8%, while proven allergy cases were 6.1% positive on the basis of IgE/STP. Thus, the allergy presence is significantly overestimated by parent (p<0.01). This problem can be explained by lack of information and education about food allergy in parents. Allergy to nut is significantly higher in children between 3 and 5 years than in children of younger age, while allergy to milk and eggs was same in all ages.

Conclusions: In the childhood, allergic skin manifestation of food allergy is high. According to the data on obtained in the study, management of the risk factors as well as education of parents and caregivers play significant role in the focused and effective prevention of disease.