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Risk Factors and Manifestations of Food Allergy in Young Children

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Abstract. This article highlights the features of the clinical course, etiology of food allergies in young children, depending on the types of feeding.

Key words: allergies, children, early age, risk factors

Relevance. Food allergies are quite common in the modern world, especially in infants and preschool children. This pathology tends to fade with age, but in some cases, with the wrong approach to baby nutrition or due to the physiological characteristics of the immune system of a particular child, is able to persist throughout life and even acquire a more severe course. Statistics on the incidence of food allergies in the world vary. According to the World Health Organization, **2.5%** of the population suffers from food allergies. But to a greater extent, infants and young children are sick, since in this group of patients, immunity is still at the stage of formation.

However, if you look at statistics in developed countries, PA:

- in 6-8% of cases it occurs in young children;
- in 2-4% - in adolescents;
- in 2% of cases - in adults.

Among all forms of allergic reaction, atopic dermatitis is recorded most often - in **30**% of cases.

Food allergy in children is a complex of symptoms that arise in the process of an inadequate immunological reaction of the body to certain foods or their individual components. The disease is accompanied by a number of symptoms from the respiratory system, gastrointestinal tract, as well as skin and respiratory phenomena [1].

The purpose of the study is to determine the characteristics of the clinical course and etiology of food allergies in young children, depending on the type of feeding.

Materials and methods. Under observation were **177** children (**110** boys; **67** girls) of early age, of which **39 (22**%) were under 1 year; **60 (33.9%**) from 1 year to 2 years; **78(44.1**%) – from 2 to 3 years.

The main and concomitant diseases were diagnosed according to clinical allergological examination (allergological anamnesis), analysis of a food diary, elimination and provocative tests and allergy tests[1,3,4]

Results and its discussion. As an analysis of the manifestations of clinical symptoms of food allergies in young children shows, it depends on the types of feeding (Table 1).

The following clinical forms of food allergy have been established: gastrointestinal allergy - in **88 (.7%**) children; atopic dermatitis – in **35 (19.8%**); respiratory allergies – in **28 (15.8**%); acute urticaria and Quincke's edema – in **26 (14.7%**). Duration of illness from several months to 3 years.

Table 1

Frequency of manifestations of clinical symptoms of food allergy in young children*

Disease	Breastfeeding		
	Natural	Mixed	Artificial
Gastrointestinal allergy	6 (6,8)	36 (40,9)*	46 (52,3)*
Atopic dermatitis	2 (5,7)	15 (42,9)*	18 (51,4)*
Respiratory allergies	2 (7,1)	10 (35,7)*	16 (57,1)*
Acute urticaria and Quincke's edema	1 (3,8)	10 (38,58)*	15 (57,7)*

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Total	11 (6,2±7,2)	71 (40,1±5,8)*	95 (53,7±5,1)*

*Note: Here the percentage is in brackets.
*- Indicators that have significant p<0.05 differences with indicators with natural (breastfeeding) are noted.

Early symptoms of gastrointestinal tract damage were observed within 1 year of life in **79 (89.7%**) sick children.

Gastrointestinal allergy was manifested by abdominal pain (pain syndrome) in **66** (**75**%); intestinal dysfunction in **62** (**70.4%);** bowel dysfunction in **44 (50**%); flatulence in **26 (29.5%**); regurgitation and vomiting in **52 (59%**).

Abdominal pain was often persistent, but was also episodic up to 3-4 times a week.

They were localized mainly in the peri-umbilical region, epigastrium and in the right hypochondrium and always intensified after ingestion of foods containing obligate allergens and were not associated with the seasons of the year.

According to the literature[5], the symptoms of gastrointestinal allergies depend on the hyperreactivity of the gastrointestinal tract.

Atopic dermatitis, acute urticaria and angioedema are also considered one of the earliest clinical manifestations of food allergies in children.

The skin of young children is the target organ of an allergic reaction, because the skin and subcutaneous tissue contain many mast cells.

Respiratory allergies (allergic rhinitis, sinusitis, bronchitis, bronchial asthma) often manifests itself in children aged 2-3 years. There is often a combination of symptoms of gastrointestinal allergies, allergic dermatitis and respiratory allergies.

According to our data, the age at which the first symptoms of the disease began to appear depends on the form of food allergy (Table 2.).

Table 2.

Distribution of children depending on the age at which the first symptoms of food allergy appeared*

Age, months	Gastrointestinal allergy	Allergic dermatitis	Respiratory allergies
1-3	61 (69,3)	23 (37,7)	3 (10,7)
4-6	15 (17)	26 (42,6)	5 (17,9)
7-9	9 (10,2)	8 (13,1)	8 (28,6)
10-12	3 (3,4)	4 (6,6)	12 (42,8)

*Note: percentage in parentheses

Thus, in **69.3**% of cases, manifestations of gastrointestinal allergies debuted within 3 months of life, in **3.4%** - by the end of the first year of life (P<0.05).

Manifestations of allergic dermatitis in **80.3**% of sick children occurred within 6 months after birth, in **6.6**% - by the end of the first year of life (P<0.05).

The first symptoms of respiratory allergy in **48**% of children appeared by the end of the first year of life.

A thorough analysis of allergy history data, a food diary, the results of elimination-provocative tests and allergy tests made it possible to identify the cause of sensitization in the body.

Among exogenous allergens, the first place was occupied by cow's milk protein (**71.6**%) of cases, chicken eggs (**59.1**%) and fish (**50**%), the second place was taken by cereals (wheat, corn, rice).

Similar data are provided by other authors [2].

In 3-year-old children, in addition to food allergens, inhalation allergens (pollen, dust, epidermal) were also important in the etiology of concomitant allergies, and in allergic dermatoses - infectious (some viruses, fungi).

In the development and formation of food allergies, in addition to the cause, risk factors are of great importance.

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Among them, hereditary burden prevails (**70**%), and on the maternal side it occurs 2 times more often than on the paternal side, exudative catarrhal diathesis (**45.7%**), focal infections (**42.3%),** toxicosis of pregnancy in mothers of sick children (**45.2%**).

. Thus, food allergies in young children are clinically more often manifested in the form of gastrointestinal allergies, allergic dermatitis and respiratory allergies, focal infections, etc.

In the development of the disease, the lack of natural (breast) feeding and previously mixed or artificial feeding, as well as risk factors: hereditary burden, exudative catarrhal diathesis, focal infections, etc., are of great importance.

In the etiology of food allergies, food allergens are essential, and in the etiology of concomitant allergies, pollen, dust and epidermal allergens are essential

Bibliography

1. Абдурахманов К.Х., Юсупова О.И. Аллергические заболевания у детей //учебное пособие для студентов высших учебных заведений.Ташкент, 2018.
2. Абдурахманов К.Х. Распространенность симптомов пищевой аллергии у детей раннего возраста// Междисциплинарные проблемы детской аллергологии. Сборник научных трудов I - научно – практической конференции детских аллергологов с международным участием, Тошкент, 2019. - С. 43-45.
3. Баранов А. А., Намазова-Баранова Л. С., Боровик Т. Э., Макарова С. Г., Яцык Г. В., Скворцова В. А., Турти Т. В., Вишнёва Е. А., Алексеева А. А., Рославцева Е. А., Звонкова Н. Г., Лукоянова О. Л., Сновская М. А. Под ред. А. А. Баранова, Л. С. Намазовой-Барановой, Т. Э. Боровик, С. Г. Макаровой. Пищевая аллергия. Серия «Болезни детского возраста от А до Я». М. 2013. 160 с.
4. Варламов Е.Е., Пампура А.Н., Окунева Т.С. Взаимосвязь сенсибилизации к пищевым аллергенам и тяжести атопического дерматита у детей раннего возраста. Российский аллергологический журнал. 2018; 5: 19-24
5. Захарова, И. Н. Пищевая аллергия: типичные ошибки педиатров / И. Н. Захарова // Медицинский совет. - 2017. - № 9. - С. 162-164.
6. Макарова С.Г. Вишнева ЕА., Лаврова Т.Е., Петровская М.И. Пищевая аллергия: стратегия и тактика ведения больных с точки зрения доказательной медицины. Вопросы современной педиатрии. 2014; 13 (6): 46-51.
7. Макарова С.Г. Практические рекомендации по введению прикорма. Педиатрическая фармакология. 2015; 12 (6): 697-704.
8. Петровская, М. И. Часто совершаемые ошибки в диагностике и лечении пищевой аллергии у детей раннего возраста / М. И. Петровская, С. Г. Макарова // Практика педиатра. — 2015. — Февраль. — С. 4-11.
9. Эрназарова, Х.Х. Распространенность аллергических заболеваний в мире / Х.Х.Эрназарова, З.У.Адылова // International scientific review. – 2017. – № 2 (33). С. 111–113.
10. Braun, C. Prise en charge des allergies alimentaires de l'enfant / C. Braun, P. Eigenmann // Rev. Med. Suisse. — 2019. — Vol. 15, № 638. — P. 398-401.