Materials and methods. The object of the study were 1500 sick children hospitalized for OSA in the Bukhara branch of the Republican Emergency Scientific Center for Medical Care (RECMP). 24420 cards were analyzed - calls to the EMS of Bukhara for OSA in children. Allergological and epidemiological, clinical and laboratory, mathematical and statistical research methods were used in the work. The work was performed on the basis of the Bukhara branch of the Republican Scientific Center for Emergency Medical Care (RSCEMC). The materials of three substations were analyzed: central, 1 and 2 substations. The object of analysis was the registration documents of the Bukhara SMP and the medical history of hospitalized sick children suffering from OSA for 5 years (2001-2005). The analysis of patients' appeals to the EMS in connection with OSA was carried out based on the materials of the "Emergency Call Cards", from which the necessary information was written out (Appendix). The call map takes into account all aspects of the condition of a sick child. It contains 23 questions. Out of 387,793 EMS calls among the child population of Bukhara, 24,420 (6.3%) call cards for OSA were selected and studied: boys - 13,612 (55.7%), girls

- 10,808 (44.3%). The age of the children ranged from a few months to 14 years. Three age groups were created in accordance with the classification of Captain T.V. (2004): the first group consisted

of children from 0 to 5 years old - 6071 (24.9%), the second group - 6-10 years old - 9894 (40.5%), and the third group of 11-14 years old - 8455 (34, 6%). We studied 1500 case histories of children hospitalized for OSA. Among this contingent, a group of patients was selected to calculate the prognosis of OSA in 120 children with OSA and who received inpatient treatment at the Bukhara branch of the RNCEMC. Allergic anamnesis was collected according to a specially designed questionnaire, which takes into account various aspects of the etiology, clinic of allergic diseases in children.

Results and its discussion. The results of the research conducted among children living in the city of Bukhara showed that food allergens (68.2%) were of significant importance in the structure of the causes of food allergy. Anamnestic intolerance to cow's milk was detected in

15.1%, egg protein in 12.5% of cases. Along with this, the exacerbation of the disease was also associated with other foods: beef, fish, lemons, vegetables, and fruits. In a significant proportion of patients (31.8%), the causes of allergic reactions remained unclear (Table 1). The biggest cause of allergy was to an allergen from cow's milk. 1450 (15.1%) patients referred to this factor. Egg white was indicated in 1201 (12.5%) patients. 1037 (10.8%) patients pointed to beef meat. 950 (9.9%) patients indicated allergy to fish. Fruits and vegetables were considered the cause of allergy in 778 (13.9%) and 230 (6%) patients, respectively.

| JN₂ | Etiological agents | Abs. number |
|-----|----------------------------|-------------|
| 1 | Cow's milk | 1450 |
| 2 | Egg white | 1201 |
| 3 | Meat (beef) | 1037 |
| 4 | Fish | 950 |
| 5 | Lemons | 778 |
| 6 | oranges | 557 |
| 7 | cucumbers | 346 |
| 8 | Tomatoes | 230 |
| 9 | The reason remains unclear | 3053 |
| | TOTAL | 9602 |

History of food allergy (n=9602)

Table 1

It should be emphasized that the cause of the disease remained unexplained in 3053 patients, which is 31.8% of cases. When studying the causative factors of allergic dermatitis in children hospitalized with OSA, it was found out that in 35.3% of cases of allergic dermatitis the cause was various food allergens, drug allergens were also important - 27.4%, insect allergens (poison of stinging and biting insects) in 11.0% of cases. In 26.3% of sick children, the cause of allergic dermatitis remained unclear (Table 2).

Causes of allergic dermatitis (n = 4421)

| Та | b | le | 2 | |
|----|---|----|---|--|
| ιu | | | ~ | |

| N₂ | Causal factors | Abs. number | % | |
|----|----------------------------|-------------|------|--|
| 1 | food | 1560 | 35,3 | |
| 2 | Medicinal | 1211 | 27,4 | |
| 3 | Stinging insect venom | 279 | 6,3 | |
| 4 | Biting insect venom | 208 | 4,7 | |
| 5 | The reason remains unclear | 1163 | 26,3 | |
| | TOTAL | 4421 | 100 | |

The main causes of skin lesions in drug allergies are antibiotics of all groups, sulfa drugs, vitamins. Allergic reactions to insect stings were manifested both in the form of local and systemic changes. It should be pointed out that, in addition to causative factors, factors of a burdened premorbid background were important in the development of allergic dermatitis. So among children

with allergic skin diseases, there are often children who were on early artificial feeding (56%), who had feeding defects - early complementary foods, the introduction of foods that do not correspond to age or have highly allergenic properties (46%), with anomalies of the constitution, in particular with exudative-catarrhal diathesis (78%) and hereditary burden (72%). In order to clarify the hereditary burden of OSA in children from the city of Bukhara, we determined the blood level of total immunoglobulin E in 120 pediatric patients and their mothers (a total of 240 studies). In 110 (91.6%) sick children with OSA, the content of reagin-total IgE in the blood was increased compared to

healthy children (in the latter, the concentration of total immunoglobulin E in the blood is 50.0±2.9 kU/l). When examining their mothers, it was found that in 95 (79.1%) of them, the indicator of the studied marker of allergic reactions was also above the norm (in healthy women, the level of total IgE in the blood is 72.0±3.5 kU/l). The obtained data once again confirm the hereditary predisposition of OSA in children, residents of the city of Bukhara. Drug allergy, caused by the participation of immune reactions of the humoral or cellular type, is characterized by intolerance to drugs. It can develop on the introduction of almost any medication, but the mechanisms of hypersensitivity to drugs are different. According to our data, allergic reactions to antibiotics were recorded in 35.6% of cases, sulfanilamide preparations in 15.9%, therapeutic sera and vaccines - 10.1%, vitamins - 2.9%, local anesthetics - 2.4%. The reason was not found out in

33.1% of patients (Table 3).

Medications that caused the development of OSA (n = 3056)

Table 3

| N⁰ | Medicines | Number of patients | % detections |
|----|-------------------------------|--------------------|--------------|
| 1 | Antibiotics | 1089 | 35,6 |
| 2 | Sulfanilamide preparations | 487 | 15,9 |
| 3 | Therapeutic sera and vaccines | 309 | 10,1 |
| 4 | vitamins | 89 | 2,9 |
| 5 | Local anesthetics | 71 | 2,4 |
| 6 | The reason remains unclear | 1011 | 33,1 |
| | TOTAL | 3056 | 100 |

It should be noted that among the factors supporting a high level of drug complications in children, in our studies, the following mattered:

• increase in the consumption of medicines by the population;

• widespread self-treatment due to the availability of drugs (possibility of acquiring them without prescriptions);

The leading role in the development of bronchial asthma belongs to the reactivity of the body, which is determined by congenital (genetic) and acquired properties with the participation of the neuroendocrine system. In most cases, asthma is caused by non-infectious allergens. Asthmogenic properties are also possessed by allergens of infectious origin: bacterial, fungal, viral, parasitic. The study of the anamnesis of sick children with bronchial asthma showed that the cause of asthma attacks were non-infectious allergens: house dust (60.1%), epidermal (14.7%); wool of domestic animals (cats, dogs) - 12.0%, pollen (0.1%). In a significant proportion of patients (13.1%), the cause remained unclear (Table 4).

100

Table 4

| N₂ Allergen | | Abs. number | % | |
|-------------|----------------------------|-------------|------|--|
| 1 | house dust | 1489 | 60,1 | |
| 2 | epidermal | 364 | 14,7 | |
| 3 | Cat hair | 186 | 7,5 | |
| 4 | Dog hair | 112 | 4,5 | |
| 5 | Pollen | 2,0 | 0,1 | |
| 6 | The reason remains unclear | 324 | 13,1 | |

Causes of sensitization in bronchial asthma (n=2477)

2477

| The | e follow | ing allerg | gens were | the cause of po | ollen and dust allergies | : pollen of cotton, |
|--------|----------|------------|-----------|-----------------|--------------------------|---------------------|
| uinoa, | cocoon | , wheat, | corn and | house dust in d | lifferent proportions. | Pollen allergens in |

quinoa, cocoon, wheat, corn and house dust in different proportions. Pollen allergens in 49.1% of cases caused sensitization of the body with subsequent development of OSA in children, dust allergens -

TOTAL

17.5%. It should be pointed out that, to a large extent, 33.4% of the observed cases of OSA, which manifested themselves as pollen and dust allergies, the cause remained unexplained.

Allergic reactions resulting from contact with insects and their metabolites: upon contact with them, inhalation of body particles of insects or their waste products, bites, stings manifested as insect allergy. In our example, the venom of stinging insects (wasps, bees, bumblebees and mosquitoes) played a decisive role (60.8%) in the etiology of insect allergy.

Conclusion. The frequency of appeals with acute allergic conditions to emergency medical care in children living in an ecologically unfavorable region of the city of Bukhara in the periods of

2001-2005. tended to increase by 1.2 times (2.9-3.4%), and boys with these conditions suffered almost 1.3 times more often than girls. Acute allergic conditions were clinically manifested as severe and moderate food allergies - 39.3%, allergic dermatitis - 18.1%, drug allergies - 12.5%, bronchial asthma - 10.2%, pollen and dust allergies - 10.1% and insect allergy - 9.8%. In the formation and development of acute allergic conditions, in addition to causative factors, such risk factors as hereditary burden - 70.3%, allergic diathesis - 60.5%, artificial feeding - 55.3% were of significant importance. An elevated blood level of total Ig E - markers of atopic, allergic reactions (type 1) in children with OSA and in their mothers indicates a hereditary predisposition with these diseases. The manifestation of OSA in children of residents of Bukhara in the spring period of the year was observed more often than in summer, which is confirmed by an increased level of total Ig E in the blood and an increase in positive cases of eosinophilia in the study of blood and nasal mucus. Among children aged 6-10 years with acute allergic conditions living in

Bukhara, there were almost 2.2 times more severe acute allergic conditions requiring hospitalization in the intensive care unit than acute allergic conditions with moderate severity.

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