



## Algorithm Predicting Differential Diagnosis and Clinic of Atypical Pneumonia

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**Abstract:** Symptoms of acute allergic diseases (AAD) are common among the population. It has been established that 20-30% of the world's population has suffered some form of acute allergic reaction during their lifetime. In addition, it is estimated that every 10 years the incidence of OAD increases by 2-3 times. It would not be an exaggeration to say that the prevalence of allergy symptoms throughout the world is epidemic.

**Keywords:** allergic diseases, anaphylactic shock, drug allergies, Bukhara.

According to the prognosis of the course and the risk of developing life-threatening conditions, acute allergic diseases can occur at any age, either for the first time in life or repeatedly. They are characterized by a sudden onset, unpredictable course, risk of developing life-threatening complications, and the need to provide immediate medical care “on the spot.”

In recent years, there has been an increase in the development of drug allergies in children. Most often its occurrence is observed with antibiotics. Allergic reactions often occur when prescribing sulfonamide and protein drugs, nonspecific anti-inflammatory drugs, antibiotics of other groups, and B vitamins [2]. Drugs are the most common cause of systemic allergic reactions (anaphylactic shock, urticaria, angioedema), acute toxic-allergic reactions (erythema multiforme exudative, Lyell's syndrome, Stevens-Johnson syndrome); in a number of patients they cause exacerbation of atopic dermatitis, bronchial asthma, allergic rhinitis and the occurrence of contact dermatitis [2].

**Materials and methods.** To determine the frequency of calls for acute allergic conditions (OSA) in children, we studied emergency medical service call cards in Bukhara in the last 4 years (2022-2023). A total of 22,640 children were registered for various OSAs. There were slightly more boys - 58.7% than girls - 41.3%. The age of the children ranged from 2 to 7 years.

**Discussion.** We analyzed the semi-valuable material, it turned out that the appeal of children with OSA to the CM P of the city of Bukhara for the studied period (2015-2018 gg.) tended to increase. The frequency of calls for OSA in children in relation to the total number of calls was in 2015 g - 3.3%, and in 2018 - 6.4%, that is, it increased almost 2 times.

The number of calls for OSA in children per 1000 urban child population has increased over the last 4 years from 6.1 (2015) to 8.4 (2018) year), that is, almost 1.4 times. Accordingly, the frequency of hospitalization increased by 1.4 times.

Children suffered from various clinical forms of OSA: drug allergy - 41.2%, food allergy - 24.4%, bronchial asthma - 14.5%, insect allergy 9.9%, and 9.1% of sick children had *cerebral* variant of shock (with a predominance in the clinical picture of symptoms of damage to the nervous system) - there was a dysfunction of the central nervous system, manifested by agitation, a feeling of fear, loss of consciousness, convulsions, cerebral edema or clinical manifestations such as epilepsy.

Children suffering from drug allergies most often visited the emergency medical service in the city of Bukhara. Over the past 4 years, the total number of acute allergic reactions of children with drug allergies, in relation to the total the number of calls was 9796 (37.5%). The causes of drug allergies in children in 53.7% of cases were antibiotics, sulfa drugs -19.0%, vitamins -17.3%, the remaining 10% were due to various drugs.

True drug allergies, which are caused by impaired functioning of the immune system, and pseudoallergic reactions (PAR) to medications were distinguished. True and pseudoallergic reactions to medications were distinguished by the mechanisms of development, but in both cases the trigger was contact with the drug.

Clinical symptoms of drug allergies, regardless of the mechanism of their formation, were characterized by multiple organs and polymorphism. Both systemic allergic reactions and those with predominant damage to individual organs and systems were observed. The most severe manifestations of drug allergies were the following: Lyell's syndrome and Stevens-Johnson syndrome (31.6%), serum sickness and anaphylactic shock (4.2%). Clinical manifestations of drug allergies with predominant damage to the respiratory system and damage to the skin, kidneys (43.2%), gastrointestinal tract and hepatobiliary system - 23.0%.

It should be noted that all cases of allergic skin lesions due to drug allergies were assessed as a severe reaction.

Respiratory manifestations of drug allergies ranged from rhinitis to severe asthmatic attacks. Their clinical course is the same as for allergic diseases of other etiologies. In combination with skin lesions, symptoms of atopic and contact dermatitis and various skin rashes appeared.

The most common gastrointestinal symptoms of drug allergies were: vomiting, colicky abdominal pain, stool disorders, and allergic enterocolitis. Along with gastrointestinal symptoms, patients experienced severe weakness, headache, loss of appetite, dizziness, skin rashes, nasal congestion and other respiratory allergy symptoms.

Clinical forms of manifestations of food allergies were in the form of acute allergic reactions from the gastrointestinal tract. Allergy symptoms were observed in any part of the gastrointestinal tract: swelling of the lips and tongue, combined with itching in the larynx and behind the sternum. These symptoms were accompanied by uncontrollable vomiting and repeated diarrhea with copious mucus.

Generalized urticaria with Quincke's edema was also observed, which was characterized by the appearance of itchy blisters of various sizes and shapes with swelling of the extremities, larynx, lips, eyes, eyelids, ears and face.

Anaphylaxis was observed in 2.2% of cases in the form of angioedema, urticaria, damage to the conjunctiva, nasal mucosa, shortness of breath, cyanosis, hypotension, nausea, vomiting, and abdominal pain.

When assessing the severity of patients with attacks of bronchial asthma, we adhered to the GINA classification "Global Initiatives to Combat Bronchial Asthma" (1992). According to our data, a mild form occurred in 9.0%, a moderate degree in 25.1%, a severe degree in 65.9%

Clinical forms of insect allergy were both local and systemic: generalized urticaria (65.6%), acute itching of the skin and Quincke's edema and laryngeal edema (28.6%), acute attack of suffocation, bronchial asthma (5.8%).

### **Conclusion.**

1. OSA is common and tends to increase further.
2. The incidence of OSA is significantly higher among the urban population.
3. The clinical picture is dominated by drugs. allergies and combined forms of OSA with severe clinical course,

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