Considering previous reactions, laboratory findings and results of the oral challenge test, we suggest that our patient meets the criteria for DIES by amoxicillin. We performed a comprehensive literature search and found three cases of DIES reported in children and one in an adult patient who developed a severe reaction with shock.

In our opinion, the clinical awareness on DIES and its potential severity should be improved and it is important to distinguish it from side effect of the drug.

### DRUG ALLERGY – 5-YEAR CASE SERIES

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Drug allergy suspicion is a frequent reason for referral to allergology specialty in pediatric age. However, this suspicion is rarely confirmed, and the drug provocation test (DPT) is fundamental for the diagnosis. Thus, with this work we intend to characterize the pediatric population with suspected drug allergy referred to the Pediatric Allergology consultation.

Retrospective analysis of the clinical processes of children (<18 years) with suspected drug allergy followed in the Pediatric Allergology consultation between 2015 and 2019. Demographic data, history of allergic disease, clinical manifestations, performed therapy and guidance were evaluated.

The sample included 118 children, 54% female, with an average age of 5 years and 2 months (range from 3 months to 18 years). 38 children had a personal history of atopy, including recurrent wheezing and atopic dermatitis, and 29 children had an history of allergy in first-degree relatives. The reactions that increased the suspicion of drug allergy were mostly mucocutaneous (n=49), gastrointestinal (n=11), 49 children were observed in the emergency service for this reason. They were medicated with isolated antihistamine (n=33), antihistamine + corticosteroid (n=11) and antihistamine + corticosteroid + adrenaline (n=5). IgEs were specifically quantified in 106 cases (for Amoxicillin, Ampicilloil and Penicilloic G and V), with a positive result in only 2. DPT were performed for antibiotics (amoxicillin (n=53), amoxicillin/clavulanic acid (n=49), penicillin (n=4), cefuroxime (n=2), azithromycin (n=1), cefixime (n=1), paracetamol (n=5) and ibuprofen (n=1), with a positive result in 4 children. Verified reactions were mucocutaneous and gastrointestinal, without cases of anaphylaxis.

Drug allergy in children is an important topic of debate, as overdiagnosis is quite common, hindering the clinical approach and leading to the eviction of several first-line therapies. Thus, we want to alert to the importance of an early referral in order to obtain a correct and clear diagnosis.

### ANALYSIS OF THE PREVALENCE OF ALLERGIC DISEASES IN ADOLESCENTS IN THE RUSSIAN FEDERATION

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To assess prevalence of allergic diseases among schoolchildren in the Russian Federation (RF) in the age groups of 11 and 15 years.

The data obtained during the screening of schoolchildren (which included surveys of parents and school doctors with specially designed questionnaires, an allergist’s examination, spirometry) -the project of the RF and the WHO European Office for the development of the school medicine network. 2114 schoolchildren were examined in the following federal districts: Central Federal District – CFD, Southern Federal District – SFD, North-Western Federal District – NWFD, Volga Federal District – VFD, Ural Federal District – UFD, Siberian Federal District – SibFD, Far Eastern Federal District – FEFD.

Analysis of the results suggests that the smallest number of children with manifestations of allergic diseases was noted in the SibFD n = 81 (24%), and the largest in the UFD n = 107 (36%); by districts: in the CFD n = 83 (31%), NWFD n = 87 (32%), FEFD n = 91 (30%), SFD n = 100 (30%), VFD n = 102 (32%).

At the same time, the average of bronchial asthma (BA) was 2%, seasonal allergic rhinitis (SAR) – 8%, allergic rhinitis (AR) – 8%, atopic dermatitis - 2%, food allergy (FA) – 13%, drug allergy (DA) – 3%.

Regional peculiarities were revealed: the prevalence of BA varied from 1-1.5% in the NWFD, VFD, FEFD, SFD to 6% in the UFD. The prevalence of seasonal AR ranged from 2% in the NWFD and 3% in the FEFD to 12% in the UFD and 16% in the North Caucasus Federal District. Perennial AR accounted for from 3% in the CFD to 11% in the UFO and 16% of the FEFD. The highest incidence of food allergy was registered in the Volga Federal District and CFD, 17% and 16%, respectively, and only 10% in the SFD and in the SibFD. AD was diagnosed in equal shares in the CFD and NWFD (3%), in the UFD – 2%, in the SFD, VFD and FEFD – 1%.

The true prevalence of allergic diseases among schoolchildren of the Russian Federation is significantly higher than data of official statistics but differs by regional peculiarities. The true prevalence has appeared to be in 2-20 times above the data of official statistics: data of official statistics for BA in 2015 amounted to 2,7%, for AR – 0,9%.

### NOVEL MARKERS FOR ATOPIC DERMATITIS PHENOTYPES AT CHILDREN

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To study the associations of onset and progression risks of atopic dermatitis (AD) phenotypes as a mono-nosology or combined with seasonal allergic rhino-conjunctivitis (SARC) and/or perennial allergic rhinitis (PAR) at children with serum concentrations of immunoglobulin (IgE) total, cutaneous T-cell attracting chemokine (CTACK) and thymus and activation regulated chemokine (TARC).

We recruited 39 patients into the main group suffering from different AD phenotypes (as mono-nosology and combined with SARC and/or PAR) and 47 patients – into the...