showed exacerbated breathing sound. Laboratory tests were unremarkable and nasopharyngeal swab was negative. Antibiotics, bronchodilators, and corticosteroids were administered upon admission. The patient remained febrile despite the treatment with antipyretics. After a day, we noticed bluish crusted changes on the lower lip and aphthous changes on buccal mucosa and tongue. Over the next four days, mucosal changes of the oral cavity and tongue spread, with development of maculopapular changes on the thorax, extremities, left ear, and penis, along with intense hyperaemia of the mucous membranes followed by hypersecretion. Due to suspected diagnosis of Stevens-Johnson syndrome, antibiotic therapy was discontinued. Mycoplasma pneumoniae serum titers were analysed and returned positive. The diagnosis of SJS was confirmed and the patient was prescribed with parenteral rehydration and Midecamycin, along with topical treatment of the oral cavity, eyes and skin. After couple of days, the patient was stable, with excellent indicators for recovery.

Patient was initially diagnosed with Stevens-Johnson syndrome, but the diagnosis can subsequently be revised to Mycoplasma pneumoniae-induced rash and mucositis (MIRM), recently characterized entity clinically distinct from SJS, as it describes significant mucosal involvement with minimal or no skin lesions. The most commonly involved mucosal sites are oral, ocular, and urogenital, just as with the patient we presented. Both SJS and MIRM are rare conditions and it is important that discussion of the treatment strategies should always be interdisciplinary.

148 AMOXICILLIN ALLERGY IN CHILDREN... COMMON OR UNCOMMON?

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β -Lactam antibiotics are safe and cost-effective antibiotics, being amoxicillin the most common antibiotic used among the paediatric population.

Many patients report allergic reactions to this antibiotic, but amoxicillin allergy range between 1-10%. However, clinicians hesitate to prescribe it when a suspected, but unproven, allergy exists. Our aim is to confirm amoxicillin allergy in children with clinical suspicion.

This retrospective study was done between January 2018 and December 2019, in children younger than 18 years, admitted to the emergency room with suspicion of clinical allergic reaction to amoxicillin. According to the protocol of our hospital, they were referred for pediatric allergology appointment to perform prick tests and afterwards oral provocation test.

A total of 48 cases were referred for evaluation. The average age was 8.5

(1-17) years old, and 54% were female. The suspicion was based on late rash reaction presented in 75%, urticarial exanthema in 18.8%, edema in 8.3%, vomit in 8.3%, and dyspnea in 2.1%. In 18 patients, specific IgE screening for amoxicillin was performed, but all results were negative. All children did a prick test for amoxicillin and oral provocation test. There

were no positive results for prick tests, but two positive results in the oral provocation test (4.2%).

Confirmation of amoxicillin allergy, before deciding to use it is or not, is an important tool for antimicrobial stewardship and, consequently, to decrease the rate of antibiotic resistance. So far, in our hospital, there were only two positive results.

149 IMBALANCE OF IL-10 AND IL-13 UMBILICAL CORD BLOOD IN CHILDREN BORN TO MOTHERS WITH ASTHMA

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Introduction Genetic predisposition to atopy persons responding to allergens by the rapid proliferation of Th2 lymphocytes, which secrete cytokines that accelerate the synthesis of IgE antibodies.

Objectives Purpose of the research is to study cytokines rate in umbilical cord blood of children born to mothers suffering severe bronchial asthma (BA).

Material & methods: Umbilical cord blood samples were taken from 22 full-term babies born to mothers with BA. The comparison group consisted of

66 children born to mothers without allergies. The ratio of boys and girls in the studied groups was the same. The average age of mothers in the groups was the same (31.26 $\pm$ 2.32 years and 32.87 $\pm$ 2.03 years; $p > 0.05$).

Cytokines rate (TNF- α , TGF- β 1, IL-18, IL-13, IL-10 and IFN- γ) was quantified by IFA. Statistical processing of data was performed on a personal computer using licensed computer software 'Microsoft Excel 2016' and 'STATISTICA 12'. The Student t-test value was determined while analyzing the distribution of quantitative data. The criterion of statistical significance level was $p < 0.05$.

Results A significant rate decrease of IL-13 was found (6.67 $\pm$ 1.6 pg/ml versus 2.0 $\pm$ 0.23 pg/ml in the comparison group, respectively, $p < 0.05$) in umbilical cord blood of children born to mothers suffering from BA, which is associated with respiratory allergy. IL-13 rate decrease can be judged as a factor of the long-term intrauterine persistence of the inflammatory process in a child.

In addition, rate increase of IL-10 was found (66.69 $\pm$ 14.5 pg/ml versus

25.52 $\pm$ 3.1 pg/ml in the comparison group, respectively, $p < 0.05$), which is synthesized by T- and B-lymphocytes, monocytes and macrophages, reduces the activity of the Th-1 immune response more than Th-2.

Conclusion There is an imbalance of the main anti-inflammatory cytokines: a decrease in IL-13 and an increase in IL-10 in umbilical cord blood of children born to mothers with BA. That can be a reflection of the systemic reaction of body to local damage to organs and can be served as one of the indicators of the intensity and duration of the inflammatory process, as well as disease progression.