

FEATURES OF THE FORMATION OF ANTIENDOTOXIC IMMUNITY AGAINST ENDOTOXINS OF GRAM-NEGATIVE BACTERIA

Ro'zmetov F. N.

Urgench Branch of Tashkent Medical Academy

Relevance. The identification and evaluation of antiendotoxigenic immunity in inflammatory diseases of bacterial etiology is of critical importance for determining the early diagnosis of these diseases, the prospect of the end of the disease. These obtained results suggest that the creation of clinical-immunological criteria to prevent the transition of diseases of bacterial etiology among children to chronic manifestations increases the educational value of antiendotoxigenic immunity. On a global scale, the endotoxins of Gram-negative bacteria today, their induction of the synthesis of various cytokines and other mediators upon landing in the human body, the absence of organotropism of endotoxins from protein toxins, the property of suppressing the phagocytosis process, the difference in the presence of a non-specific effect, received various pathologies and pathogenetic mechanisms of causing pathological conditions were revealed, the problems of their use for diagnostic purposes remain relevant today, attracting attention in scientific sources with the fact that research work on this problem is rare [1.3.5.7].

The purpose of the study was to assess the educational value of the comparative determination of the clinical-immunological properties of antiendotoxigenic immunity in children's blood serum in inflammatory diseases of bacterial etiology.

Most of the reactions that occur in the body in response to any infection are initialized by the LPs complex of Gram - negative bacteria-endotoxin. After separation, it binds to whey proteins and forms a conjugating "endotoxin-protein" complex with all available SD14+-cell receptors, which is located in the membranes of macrophages, polymorphonuclear leukocytes, endotheliocytes, activating them, mediators of cytokines and other inflammatory response by cells - complement, vasoactive mediators, arachidonic acid metabolites, adhesion, quinine, platelet activation factors, histamine, the production of endothelin, coagulation factor, active oxygen radicals and nitric oxide (NO) increases. NO has the main pathological powers in the formation of endothelial dysfunction in any situation.

Endocytosis PRRS (Mannan and Scavenger-receptors) are expressed on the phagocyte surface. After the recognition of the corresponding RAMR, they mediate the absorption and delivery of pathogenic lysosomes, where its degradation occurs later with the formation of antigen determinants, triggering a classical immune response. Obviously, the response to vaccine antigens is carried out precisely through endocytosis PRRS. Among Signal receptors, the TLR and NOD (nucleotide-binding oligomerization domain) receptors are central. Nod-familyininnng belongs to NOD1 I NOD2 PRR from four proteins. All bacteria are exposed to the surface as a RAMR for PRRS, which is the main component of the cell wall - various fragments of peptidoglycan. NOD1 recognizes the diaminpimelate-preserving muramylchpeptide (GM - TriDap), and NOD2 recognizes the minimally biologically active fragment of peptidoglycan, glucosaminylmuramyl dipeptide (GMDP). In the case of adaptation to the early neonatal period in newborns, high levels of endotoxin are detected in the blood plasma against the background of a decrease in antiendotoxigenic antibodies titer. It is necessary to mention that with the replenishment of the adaptation period in newborns of the early neonatal period, the amount of LPs in the blood decreased, as well as the titers of antibodies to the Re-

glycolipid increased. In healthy newborns, free endotoxin levels in blood plasma range from 1.36 ± 0.1 PKG/ml (1.9 ± 0.25 PKG/ml in adults), to 0 to 1 EU in endotoxin units [2.4.6].

Conclusion. The level of antibodies against endotoxin of Gram-negative microflora has been determined in the blood serum of all children. The concentration is defined in the IFA method and expressed in Eats relative to the standard. In children with intestinal lyambliosis, the antiendotoxin antitelolar concentration varied from 1.21 to 8.87 eat, and in children without lyambliosis from 2.9 to 14.2 eat. In children suffering from this intestinal lyambliosis, the average level of antiendotoxin antibodies (4.88 ± 0.81) was significantly lower than in children without intestinal lyambliosis (7.07 ± 0.43). This was explained by the fact that lyamblia have the ability to break down serum and secretory immunoglobulins. Thus, with increased pathology of the upper sections of the digestive tract, the amount of anti-endotoxin antibodies in the blood serum increases. Differences in the amount of anti-endotoxin antibodies have been found depending on the presence of intestinal lyambliosis.

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