

Concentration of cytokines in blood serum of children suffering from acute obstructive bronchitis and thymomegalia

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Recently children suffering from acute obstructive bronchitis (AOB) need increased attention of Ukrainian doctors due to the fact that almost 30% of all patients having respiratory diseases suffer from this pathology. The immune system together with its main organs - thymus is one of the main components involved in the pathogenesis of bronchopulmonary diseases.

101 children having AOB were under the supervision. They were divided into 2 groups: group I - patients suffering from AOB having no TM, II group - patients having both TM and AOB.

In the acute stage of the disease children of group I had concentration of IL-6 3 times higher comparing with those children in the control group ((18,21±0,44 pg / ml, (p <0,001)), while the level of IL-10 increased to (11,12±0,29) pg / ml, (p <0,001). IL-6 content in the second group of children at the beginning of the disease increased 7 times ((27,42±0,89) pg/ml, (p <0.001)). Along with it IL-10 cytokines in serum decreased more than 2 times ((3,13±0,23) pg/ml, (p <0.001)).

Patients suffering both from AOB and TM had the content of IL-6 significantly higher than the patients having AOB without TM (p <0.001). Meanwhile, the concentration of IL-10 in the second group of children was significantly lower than in patients of group I (p<0.001).

Therefore, concomitant TM probably leads to harder imbalance of cytokine parts of the immune system and aggravates AOB in children on the early stages of the disease.

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