STUDY OF CELLULAR-HUMORAL IMMUNITY INDICATORS IN CHILDREN UNDER 18 YEARS OLD WITH ACUTE SUPPURATIVE OTITIS MEDIA AGAINST THE BACKGROUND OF CHRONIC HEPATITIS

Bukhara State Medical Institute
Narzullaev N.U., Rahmatov A.A.

One of the important problems of modern otolaryngology is the problem of hearing organ pathology in children with liver pathology. Occurring in early childhood against the background of chronic active hepatitis, acute suppurative otitis media (AGOS) often acquires a recurrent character and develops into a chronic form. This is due to the fact that the main immune system parameters in children with OGCS are disrupted at an early age.

The aim of our work is to study the cellular and humoral immunity indicators of young children suffering from chronic hepatitis. Our observation in the ENT department of the regional multidisciplinary children's hospital in the city of Bukhara included 32 children with OGCS: up to 6 months of age. -7, from 6 months to 1.5 years - 11, from 1.5 to 3 years - 14.

Various methods were used to assess the immune status: T-lymphocyte levels were determined using the E-ROC method, while B-lymphocyte levels were determined using the EFS-ROC method. The state of humoral immunity: T-lymphocyte content was determined using the E-ROC method, B-lymphocyte content was determined using the EFS-ROC method. Humoral immunity status was assessed based on the level of serum immunoglobulins in the blood plasma. To quantify the A, M, and G class immunoglobulins in blood serum, the Mancini simple radial immunodiffusion method was used. Neutrophils' phagocytic activity was determined using a latex test. The control group (donors) consisted of 30 practically healthy children of the same age and gender.

The studies conducted showed that the relative number of T-lymphocytes in the control group of donors was 57.3 + 2.4%, and B-lymphocytes - 16.4 + 1.8%. Neutrophils' phagocytic activity was 68.6±5.3%.

Serum immunoglobulin levels (humoral immunity) were as follows: IgA - 108+ 21 mg%, IgM - 65+ 8 mg%, IgG782 + 43 mg%.

Children examined with OGCS exhibited impaired cellular immune function. The T-cell component of the immune system in them was reduced to 31.5+ 2.6%, which is 0.5 times lower,

compared to the control group (P<0.001). A decrease in the intensity of the phagocytic reaction was also found - to 47.7% +4.7%. On the B-lymphocyte side, statistically significant changes were not observed compared to the norm. The relative value of this parameter was 14.1+2.3% (P<0.05).

A study of the humoral immune response revealed that the examined young children with OGCS exhibited enhanced synthesis of the main classes of serum immunoglobulins. IgA concentration increased to 124+11 mg (P<0.001), IgG to 936 + mg% (P<0.05).

Children with OGCS exhibited a 1.2-1.9 times increase in IgA and IgM production. Significant increase in IgM and IgA production in children with OGCS in postnatal and early age, apparently, is an unfavorable sign, indicating intrauterine infection and the severity of the infectious-inflammatory process, which dictates the need for urgent sanitation of the suppurative focus in the antrum.

In patients with OGCS, cellular immunity was significantly suppressed. This was especially true for T-lymphocytes and phagocytic reactions. Simultaneously, an increase in the activity of the humoral link of immunity was observed, which was expressed in an increase in the level of the main classes of serum immunoglobulins, especially IgM. It can be assumed that the tension in the humoral link of the immune system develops due to insufficiency (deficiency) of the cellular link of the immune system.

It is likely that immune system disorders are "a contributing factor," against the background of which the disease (OGCO) and its complications of an inflammatory-septic nature may develop.

Thus, in the examined children with OGCS against the background of chronic hepatitis at an early age, the functioning of the main indicators of the cellular-humoral link of immunity is disrupted. A deficiency of the cellular link is accompanied by tension in the humoral link of the immune system.