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ASSESSMENT OF THE DYNAMICS OF HUMORAL IMMUNITY FORMATION WHEN VACCINATION A GROUP OF CHILDREN WITH THE BNT162B2 VACCINE (Pfizer–BioNTech) AGAINST COVID-19 INFECTION

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Key words: COVID-19 infection, prevention, vaccine.

In the research work, the results of taxable samples of mining serum of 205 children in 16 family polyclinics were used. In a retrospective population taxile using epidemiological, serological, statistical methods, the effectiveness of the vaccine against SARS-CoV-2 was evaluated. 7,158 of the 584,181 children living in Tashkent City were vaccinated with 2 doses of the vaccine, 205 children in 16 family polyclinics where the vaccine was carried out were taught karshi IgG to SARS-CoV-2 and anti-cancer (at) belonging to IgM class. The verification process was carried out using a full-fledged automated chemiluminescent immunoanalyzer (medical equipment from Snibe (China)) of the MAGLUMI X3 series in an immunoxemiluminescent taxile (IXLT) method. IgM and IgG detection MAGLUMI 2019-nCoV was performed on IgM and MAGLUMI 2019-ncov IgG test-systems. For sampling, special test tubes with preservatives were used, the sample was placed in the refrigerator immediately and delivered to the bulgan laboratory with the appropriate license and certificate to carry out activities in the vehicle at a temperature of +2+8 degrees, and after the separation of the mining serum in this laboratory, IgM was checked for IgG in the

Results. After the approval of the use of the WHO protocol–compatible vaccine BNT162b2 (Pfizer-BioNTech) for children from January 2022, 10 months later, as of November 15, 2022, 7,238 children (1.23%) of the 5-11-year-old 584,181 children living in Tashkent City in our study received 1 dose, 7,158 received 2 doses, children with buster dose were not vaccinated, 576,946 children not vaccinated.

During the study period, 3,981 children were diagnosed with COVID-19 infection among children, of which 12 had severe cases. (12 of the 56 children hospitalized were placed in the intensive care unit)

We started my study on November 15, 2022 children received 2 doses of the vaccine after 28 days after taking 1 dose of mRNA Lee BNT162b2 vaccine.

An assessment of seroprevalence in the population, studying the shelf life of antibodies in dynamics depending on the state of immunity distinguish groups with a high risk of infection re-infection first of all vaccination in Ham in order to determine the necessary infected contingents, a study was carried out against SARS-CoV-2 against SARS-CoV-2 in blood serum samples of 205 children The research work was carried out from November 2022 to January 2023.

A 2-step vaccine against COVID-19 was carried out,with all of the children in the study being soglom tested for the presence of SARS-CoV-2 genome and immunoxemiluminescent taxile (ixlt) AT in the blood in the polymerase chain reaction (PZR) method prior to vaccination. The investigation did not include SARS-CoV-2 virus RNA si in the upper respiratory tract and micdorium ixlt da s-RBD antigen epitope in the Pediatric Research guru anicized to antitana. Aniclase of antibodies to the S-RBD antigen epitope in mycdorium IXLT. The amount of At was evaluated in dynamics on the 21st day after the introduction of the 1st component of the vaccine and on the 14th day after the introduction of the 2nd component, on the 30th day in the 2nd month of the vaccine. The results showed that on the 21st day after the introduction of the 1st component of the vaccine in the blood of vaccinated children, IgM-At against SARS-CoV-2 was anicized in a 100% state (the average value of the positivity ratio is 4.94), and on the 30th day, a natural decrease in the amount of IgM was observed against SARS-CoV-2 (the average It is worth noting that on the 21st day of vaccination, a significant decrease in the indicators of IgM was found, and on the 51st day, these indicators were equal

Those on the mixer of IgG-At against SARS-CoV-2 were anicized: on the 21st day after vaccination with Component 1, the lower IgG mixer against SARS - CoV-2 was anicized in 31.2% of those vaccinated (P=8) (positivity coefficient-24.07) the mixer of IgG-at increased significantly after vaccination with Component 2 and did not change for up to 30 days (average value of positivity coefficient – 35.87). In this case, on the 51st day after vaccination, the seroconversion rate was 100%. In a portion of those vaccinated (p=32; 71.1% of those observed), an increase in IgG was anicized on the 30th day after vaccination compared to the 14th day. On the 21st day after vaccination with components 1 and 2, a direct positive correlation bond of 0.69 to 0.29 ($r < 0.05$) was anicized between the mixor of IgM and IgG, according to the mechanism of

development of the primary and secondary immune response, this condition is lawful. A significant heterogeneity was found in the humoral immune response dynamics and the circulating duration of anti SARS-CoV-2 At occurring in th 2 cathores. In this, the enterprise of diversity can be a garden with the individual response of each human organization to a stranger, and heterogeneity is observed at the level of SARS-CoV-2. This may be due to changes in the amount of da in the process of dynamics and shaking of the development of the immune response to the information structure of the virus (SRBD ga, n-nucleoproteid, Matrix, etc. There may be association with feedback, and heterogeneity is observed at the da level against SARS-CoV - 2. This may be due to changes in the amount of da in the process of developmental dynamics and shaking of the immune response to the virus ' information structure (SRBD, n-nucleoproteid, Matrix, etc.

Conclusion

1. On the 21st day after the introduction of the 1st component of the vaccine in the blood of vaccinated children, IgM-At against SARS-CoV-2 was detected in 100% of cases (average value of the positivity coefficient – 4.94), low IgG was anicized in 31.2% of those vaccinated (P=8) (positivity coefficient-24.07);
2. On the 30th day after vaccination with the 2nd component, however, there was a natural decrease in the amount of IgM against SARS-CoV-2 (the average urine of the positivity coefficient-0.43), the mixer of IgG - at greatly increased and did not change until 30 days (the average value of the positivity coefficient-35.87).
3. In a portion of those vaccinated (p=32; 71.1% of those observed), an increase in IgG was anicized on the 30th day after vaccination compared to the 14th day.
4. On the 21st day after vaccination with components 1 and 2, a direct positive correlation bond of 0.69 to 0.29 (r <0.05) was found between the mixor of IgM and IgG