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## IDENTIFICATION OF THE CHARACTERISTIC FEATURES OF THE ZINC DEFICIENCY IN CHILDREN WHO HAVE UNDERGONE COVID-19 DISEASE

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### ABSTRACT

Treatment of Covid 19 in children from 1 to 18 is a guarantee of their health in the coming age periods. The difference between the incidence of children depends not only on the specificity of the area, but also on the methods of collecting and calculating materials in the identification and registration of diseases, as well as on the equipment of the treatment and preventive institution, the full provision of personnel, professional skills of doctors, the popularity of medical services and other factors. The article provides an in-depth analysis of the incidence and structure of children under 1-18 years of age, in particular disease of the Covid-19. Zinc has potent immunoregulatory and antiviral effects that are critical for growth, immunity, and neurologic development. The aim of this study was to determine the clinical significance of serum zinc levels in pediatric patients with COVID-19 and to demonstrate its association with disease severity.

**Keywords:** Covid-19, antiviral effects, micronutrient Zinc

**Relevance:** the coronavirus infection, which appeared in December 2019, spread rapidly around the world and became a global problem that can cause serious complications, and the relevant ministries of all states began to give their recommendations for protection against the virus.

The observed unpleasant epidemic situation has once again proved that it is necessary to be attentive to human health, how dangerous is the health of infectious diseases caused by viruses. Today, all protocols on the treatment of COVID-19 for adults and children include trace elements, the Zinc and are effectively used in treatment processes, while it is also recommended during the recovery period. Many authors note that taking the drug Zinc for three months has a positive effect on the elimination of diseases and infectious processes of the lower respiratory tract. Also, the use of the substance Zinc in combination with antibiotics has led to a decrease in the incidence and mortality of children. Currently, the issue of preventing the development of the virus is



being studied by US scientists by studying the nature of blocking the activity of the enzyme coronavirus infection RNA polymerase. It is also shown that zinc can reduce the activity of the APF2 enzyme, which is much more important.

**The purpose of the scientific work:** determination of zinc microelement dysbalance during the early recovery period of children who have undergone coronavirus disease on the basis of clinical and laboratory, biochemical tests and correction of zinc deficiency with differentiation.

**Object of examination:** in the central laboratory of the multidisciplinary clinic of the Tashkent Medical Academy, we identified micronutrients in the blood test of 50 patients with Covid-19 patients aged from 1 to 18 years.

## RESULTS OBTAINED

The following complaints were found in zinc failure during the recovery period for patients with Covid-19: decreased vision 10%, decreased sense of smell 16%, decreased taste awareness 24%, loss of appetite 84%, eating disorders 70%, depressed mood 44%, fatigue 84%, hair loss 34%, the appearance of white spots on the nails 24%, dermatitis 14%, frequent colds 46%. 32% of patients out of 50 of patients who were on the examination, had mild degree Zinc failure (9-11  $\mu\text{mol/l}$ ), 52% of them had moderately severe degree Zinc failure (6-8  $\mu\text{mol/l}$ ), and 16% of them had severe degree Zinc failure (5  $\mu\text{mol/l}$ ).

## CONCLUSION

In the recovery period of patients who have undergone coronavirus disease, various levels of micronutrient deficiency of Zinc were found: mild Zinc deficiency at 32%, moderately severe Zinc deficiency at 52%, severe Zinc deficiency at 16%. For this reason, the identification of a deficiency of the Zinc element and its correction in a differentiated manner leads to a decrease in the clinical signs of the disease and a faster recovery.

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## ТЕЧЕНИЕ ХРОНИЧЕСКОЙ ГАСТРОДУОДЕНАЛЬНОЙ ПАТОЛОГИИ У ДЕТЕЙ И ИНФЕКЦИЯ HELICOBACTER PYLORI

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### АННОТАЦИЯ

Высокая распространенность патологии верхних отделов пищеварительного тракта среди детского населения является важной и актуальной социальной и медицинской проблемой. В мире растёт число детей с хроническими воспалительными заболеваниями органов пищеварения. Патология верхних отделов пищеварительного тракта очень часто начинается в дошкольном и школьном возрасте.

Распространённость детей с патологией верхних отделов пищеварительного тракта, особенности течения, высокий риск ранней инвалидизации, среди которых центральное место занимает гастродуоденальная патология, актуальная проблема наших дней. Все это делает актуальным научные разработки в плане поиска наиболее эффективных мер диагностики, этиотропной и патогенетически обоснованной терапии, реабилитации и профилактики этой распространенной патологии.

**Ключевые слова:** гастродуоденит, особенности, нейровегетативные нарушения, патоморфоз, клиника, лечение.

### ABSTRACT

The high prevalence of pathology of the upper digestive tract among the child population is an important and urgent social and medical problem. The number of children with chronic inflammatory diseases of the digestive system is growing in the world. Pathology of the upper digestive tract very often begins at preschool and school age.

The prevalence of children with pathology of the upper digestive tract, course features, high risk of early disability, among which gastroduodenal pathology occupies a central place, is an urgent problem of our days. All this makes scientific developments relevant in terms of finding the most effective diagnostic measures, etiotropic and pathogenetically substantiated therapy, rehabilitation and prevention of this common pathology.

**Keywords:** gastroduodenitis, features, neurovegetative disorders, pathomorphosis, clinic, treatment.