# THE NEW CORONAVIRUS INFECTION IN OTOLARYNGOLOGICAL PRACTICE: CLINICAL FEATURES IN DIFFERENT AGE GROUPS

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**Abstract.** The article presents the relevance of the problem of a new coronavirus infection (COVID 19) in children of different age groups, the symptoms according to age ranges, the course and prevention of the disease are considered.

*Keywords:* Coronavirus infection, childhood, otorhinolaryngology, symptoms, rhinopharyngitis, diarrhea.

**Relevance.** Coronavirus infection is a disease caused by the activity of the SARS-CoV-2 virus. Given the absolute novelty of the issue, many aspects concerning COVID-19 in children are not fully understood. It manifests itself mainly as an acute respiratory tract disease with a different clinical picture [1,5,6,13,15]. The main symptoms of the disease in children are: fever, cough, weakness, gastrointestinal symptoms (nausea, vomiting and abdominal pain, diarrhea), sore throat, nasal congestion. It should be noted that the symptoms may vary depending on the age of the child. Infants most often show lethargy, refusal to eat, and all this against the background of increased body temperature. At the age of 1-3 years, an asymptomatic course of the disease most often occurs, this is associated with a feature of the immune response. In the age range of 4-6 years, weakness and gastrointestinal symptoms with a possible increase in body temperature are characteristic [1,2].

In the period of 7-12 years, the same symptoms persist as in preschoolers. However, loss of sense of smell, nasal congestion and paroxysmal cough may be present. Adolescents have the same symptoms as adults: headache, fever (up to 10 days), weakness, cough [3,4,7,8]. However, some studies of scientists confirm that children and adolescents may have long-term clinical symptoms [8], but the frequency and characteristics of these conditions are still being studied. Symptoms of COVID-19 infection appear after an incubation period lasting approximately 2-5 days [10,12].

The virus mutates rapidly, and new stamps lead to dangerous complications in primary and school-age children. Possible complications: sepsis or infectious-toxic shock. The period from the onset of COVID-19 symptoms to death ranged from 6 to 41 days, an average of 14 days [9,11,14]. It is important to note that this period depends on the age of the patient and the state of the patient's immune system.

New infection stamps have led to a sharp increase in the incidence among children. In 2021, up to 14% of all patients are schoolchildren and adolescents and 1% of the child population complicated by concomitant diseases [1]. Recent observations confirm that coronavirus infection can occur even in infants up to 1 year old. A child can also suffer from a disease with severe complications, pneumonia, which increases the risk of death.

**The purpose of the study.** To investigate the features of the clinical course of COVID-19 in children in various age aspects in the practice of otorhinolaryngology.

**Patients and methods.** 180 children of different ages with a laboratory-confirmed diagnosis of COVID-19 underwent an otolaryngological examination. (Zangiata Infectious

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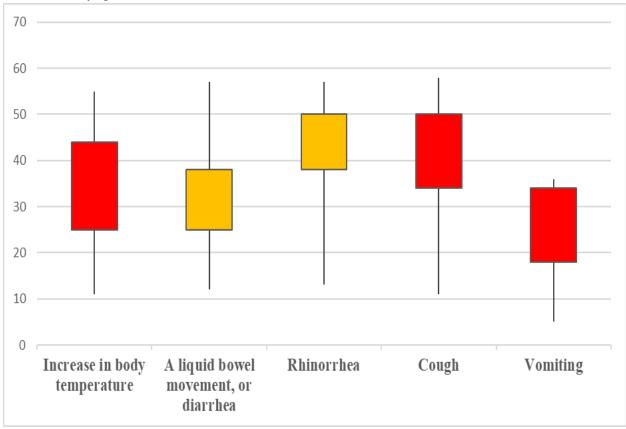
Diseases Clinical Hospital in the period 2022) The main epidemiological data were analyzed, including the age structure, as well as clinical signs, features of this disease.

Results. The development of COVID-19-rhinopharyngitis was recorded in 17,8% of cases (32 patients), while significantly more often ENT disease and pneumonia were registered in children of the first year of life, as well as older than 12 years (36 and 20% of cases, respectively) than in children of other age groups ( $p \le 0.05$ ). Analysis of anamnestic data showed that the duration of the disease in 107 patients (59,4%) was from 1 to 2 days, in 73 patients (40,6%) - from 3 to 5 days.

In all sick children aged 0-16 years, COVID-19 was most often registered in the age group of 9-13 years — 59/ 37.8%. Among the examined patients, urban residents were 156/86,66% more than rural residents 24/13.3%. According to the results of a general clinical study of patients (n=180) suffering from COVID 19 of various disease prescription, the following forms of COVID19 were diagnosed: mild COVID19 in 118 (65,5%), moderate severe COVID19 in 62 (34,4%).

All patients with SOVID 19 passed a general blood test, urine, biochemical analysis and blood serum. The study of general and biochemical blood analysis was performed on Konelab Corporation devices, Cell-Dyn 1800 models, Selective Chemistry Analyser.

In most cases (180 people), the disease occurred with a clinical picture of general and catarrhal symptoms from the upper respiratory tract in the form of rhinopharyngitis, pharyngitis, tracheitis, laryngotracheitis.



## Diagram .1. The main complaints in patients with SOVID19

The leading clinical symptoms of COVID-19 in children were: (Digram.1.) hyperemia of the mucous membranes of the pharynx — 100% (180 patients); fever — 96,7% (174 patients),

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the average values were 37.8 ° C; cough — 21,1% (38 patients); loose stools — 22,8% (41 patients); vomiting — 8,3% (15 patients); abdominal pain-8,3%;.

Infants with COVID-19 were statistically significantly more likely to have diarrhea resembling rotavirus infection, (19 patients) subfebrile fever, and renorrhea compared to patients in the age group older than 13 years. The development of dry cough was statistically significantly less frequently recorded in children of the first year of life in comparison with patients older than 12-13 years (11/6,11% of cases), they mainly had a wet cough.

### Conclusion.

1. Covid-19 in infants is characterized by rhinopharyngitis and pneumonia with a higher level of atypical course of the disease, while in adolescent children, pronounced and obvious clinical signs of Covid-19 are more often manifested.

2. In all patients with complaints of high fever and clinically symptoms like ARVI (acute respiratory viral infections), rhinopharyngitis with an unclear history, it is necessary to exclude COVID 19.

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