A moss sample from the OTC-5 setup (control, 05.02.2024) was frozen at -18 ^{0}C for 6 months and then transferred to -68 ^{o}C (for 7 days). After thawing the sample (moss at -68 ^{o}C), tardigrades, rotifers and nematodes began to revive after 6-7 minutes, which indicates their super- adaptability, allowing them to withstand sharp temperature fluctuations in Antarctica and ensure existence in such extreme conditions.

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EPIDEMIOLOGY OF MYCOPLASMA PNEUMONIA IN CHILDREN IN THE CONDITIONS OF COVID-19 INFECTION

O. Hanenko[1], A. Konokhova[2], O. Tonko[1], A. Zmitrovich[3], A. Hoilava[1]

Institution of Education «Belarusian State Medical University», Minsk, Republic of Belarus
[2]Belarussian State University, ISEI BSU, Minsk, Republic of Belarus
[3]Health Care Institution «City Children's Infectious Diseases Hospital», Minsk, Republic of Belarus
o_hanenko@mail.ru

This article analyses the impact of the COVID-19 pandemic on the incidence of pneumonia of mycoplasma etiology in the child population of Minsk in the period from 2016 to 2023.

Keywords: Mycoplasma pneumoniae, atypical pneumonia, children, epidemiology, pandemic COVID-19, post-pandemic period.

The aim of the study was to assess the impact of the COVID-19 pandemic on the incidence of pneumonia of mycoplasma etiology in the child population of Minsk, hospitalised and treated in the Health Care Institution «City Children's Infectious Diseases Hospital» (CCIDH).

We found that during 8 years of follow-up from 2016 to 2023, out of 693 cases of Mycoplasma pneumoniae pneumonias (MP-pneumonia) in children under 17 years of age reported in CCIDH, 534 or 77.1±1.6% of children were hospitalised from 2016 to 2019 and 159 or 22.9±1.6% were hospitalised during the pandemic and subsequent circulation of SARS-CoV-2 virus from 2020 to 2023. Thus, the proportion of pneumonias caused by Mycoplasma pneumoniae decreased in the covid period (+COVID-19) compared to the pre-covid period (-COVID-19) by 3.4 times, $p < 0.05$. At the same time, in the total structure of bacterial pneumonias, their specific weight was 75.3+1.6% (534/709) and 56.8+3.0% (159/280) in 2016-2019 and 2020-2023, respectively, i.e. during the -COVID-19 and +COVID-19 periods, MP-pneumonias consistently ranked first among all pneumonias of bacterial etiology.

The incidence of MP-pneumonia among children hospitalised in CCIDH during different periods of observation changed significantly. While in the 4-year period before the pandemic (2016-2019) there were 56.0±2.4 cases of lung lesions due to Mycoplasma pneumoniae per 1000 hospitalised children with pneumonia, in the four years in the pandemic and subsequent circulation of SARS-CoV-2 virus (2020-2023) there were 1.8 times fewer or 31.6+2.5 cases, $p < 0.05$.

At present, based on the results of surveillance of pneumonia cases in hospitalised children in 2024, there is a trend towards intensification of the epidemic process of pneumonias of mycoplasma etiology, which is comparable to epidemiological surveillance data in other countries. It is necessary to continue further study of clinical and epidemiological features of respiratory mycoplasma infections among the country's population in the postpandemic period of COVID-19, as well as molecular and biological characteristics and resistance to macrolides of the current circulating population of Mycoplasma pneumoniae, in order to better understand the mechanisms of pathogen prevalence and further improve prevention and treatment programmes for respiratory mycoplasma infections in children at the national level.

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