



CONFERENCE ABSTRACT

Follow-up of children with covid-19 one to three months after symptoms onset: A Descriptive Retrospective Cohort Study

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Abstract

Since March 2020, when World Health Organisation (WHO) declared global pandemic caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), an overwhelming amount of information related to covid-19 has been published on a daily basis. At the beginning of pandemic only acute presentation of covid-19 was described. In recent months, increasing attention has been focused on long-term consequences of covid-19, which affect patients' everyday life. While an increasing number of publications emerge about long covid in adults, the data on children are limited.

This was a retrospective cohort study conducted in Children's Clinical Hospital of Latvia from March 2020 to March 2021. Patients were offered an in-depth face-to-face assessment by our research team 1 to 3 months after COVID-19 onset, according to specially designed post-covid-19 symptom assessment protocol. To identify the long-term consequences of SARS-CoV-2 infection, we defined post-acute covid-19 as extending beyond three weeks from onset of first symptoms. During the study, comparison group of 140 children (age ≤ 18 years) also was recruited. The inclusion criteria for this group were (1) no medical history of covid-19, (2) signs and symptoms of other seasonal infections, e.g., fever. Eligible subjects in the comparison group were asked the same interview questions as those in the cohort.

From March 2020 to March 2021 195 paediatric Covid-19 patients (age ≤ 18 years) with microbiologically confirmed (nasopharyngeal swab) covid-19 were enrolled in the study (the median (IQR) age was 11.0 years (range 1 month to 18 years), 112 (57.4 %) male). In covid-19 patient group, only 45 interviewees (28.0%) had returned to the previous level of health with no long-covid complaints at the time of the interview. The majority of children (n= 116, 72.0%) reported that they still had one or more persisting symptoms at the time of interview. Overall, the most dominant complaint in covid-19 patient group was about persistent fatigue (25.1%, n=44). All of the children who complained about fatigue also noted that they feel tired in the mornings after good quality night sleep. Second most prevalent group of long-term covid-19 symptoms was cognitive impairment. Thirty-two (18.2%) patients complained about irritability, moreover, 31 children (17.6%) had never-before seen mood swings. Many children also suffered from difficulties to concentrate (14.3%, n=25) and to keep attention (13.6%, n=24). Other common long-term symptoms in study group were related to physical activity disturbances. Twenty-two patients (13%) had trouble to walk for more than 15 minutes or to climb to 3rd floor. Approximately one-sixth of patients had recurrent headache (17.1%, n=30), 14.9% (n=26) of children reported anosmia and/or dysgeusia. Comparing long term symptoms prevalence in covid-19 patient group vs controls, it was evident, that in covid-19 patient group post-covid symptoms were statistically more often found than in any other infectious diseases.

Keywords: paediatrics, SARS-CoV-2, long-Covid, clinical sequel

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