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CORRESPONDENCE

Clinical and Laboratory Follow-up of Children with COVID-19

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To the Editor: During the current dynamic SARS-CoV-2 pandemic, emerging confounding evidence suggest that despite overall favorable outcome, persisting symptoms, defined as postacute or long COVID-19, have been observed in the pediatric population [1–4].

We aimed to prospectively follow up patients < 16 y old, diagnosed with COVID-19 by RT-PCR, three months post diagnosis to explore for any sequelae associated with COVID-19.

One hundred sixty-eight patients were identified from May 2020 to April 2021; of which, 106 were finally included (median age 8 y); 44.3% were male and 10.4% were obese. Six had underlying chronic conditions (chronic lung disease = 4, metabolic disorder = 1, autoimmune disease = 1); 15.1% were hospitalized (mean age 5.8 y); of which, 1 was admitted to high-dependency unit for monitoring. No patients suffered critical disease and none died. Mean follow-up time was 83 d. However, 3 patients presented earlier (at 52, 56, and 58 d, respectively), diagnosed with MIS-C. Underweight and younger children were more frequently hospitalized ($p = 0.07$ and $p = 0.044$). Sex was not associated with COVID-19 severity ($p = 0.423$).

At follow-up, ECG was performed in all patients with no new-onset electrocardiographic disturbances. Of the laboratory workup conducted, the abnormal values most frequently seen were prolonged APTT (82,7%), followed by high monocyte absolute count (74,5%). Troponin was normal in all subjects except MIS-C cases. A negative association between age group and IgG COVID-19 antibody levels was observed ($p = 0.03$), whereas no association was found between disease severity or weight status and IgG levels ($p = 0.36$ and $p = 0.38$). When questioned for persistent symptoms, 4 patients 8 to 15 y of age, reported fatigue and a female adolescent complained of anxiety since admission.

In our cohort, three months post-COVID-19 infection, children were mostly asymptomatic with no organ-specific damage, and showed mild disease sequelae mostly described as chronic fatigue. We aim to contribute this experience in the quest for the optimal timing for pediatric patients' re-evaluation after COVID-19 infection.

Declarations

Conflict of Interest None.

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