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SCIENTIFIC LETTER

Atypical HCoV-NL63 Infection in an Infant During the SARS-CoV-2 Pandemic

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To the Editor: Human coronaviruses (HCoVs) belong to *Coronaviridae* family which includes endemic and epidemic species, such as the recent SARS-CoV-2 [1]. The endemic HCoVs may cause co-infections with each other or with other respiratory viruses, resulting mostly in respiratory infections, while abdominal symptoms are not common [2]. This highlights the importance of maintaining alertness, especially during the current pandemic [3].

We present the case of an infant with atypical HCoV-NL63 infection during the SARS-CoV-2 epidemic. A 7-mo-old boy was admitted due to persistent high fever (up to 40 °C) while he was on oral antibiotics for pharyngitis. On admission, the regional rate of SARS-CoV-2 infection was low (0–4 cases per million) [4]. The physical examination revealed only mild erythematous pharyngitis and the chest radiographs and blood tests were normal, apart from low hemoglobin, and elevated C reactive protein (CRP, 81 mg/dL) and erythrocyte sedimentation rate (ESR, 27 mm/h). Intravenous ceftriaxone combined with *per os* azithromycin were initiated, on the basis of the high inflammatory indices and suspected SARS-CoV-2 infection.

During his hospitalization, he presented greenish diarrhea while stool exams were negative for all pathogens tested. High fever up to 40 °C every 4 h persisted for 5 d while inflammatory and liver markers were raised: CRP 114 mg/L, ESR 69 mm/h, ferritin 188 μg/L, aspartate transaminase 65 U/L, and alanine transaminase 49 U/L. Due to suspicion for Kawasaki disease, echocardiography was performed and was normal. Rhino-pharyngeal swab polymerase chain reaction (PCR) test for SARS-CoV-2 (ELITechGroup, Italy) was negative but a different multiplex PCR test (FilmArray Respiratory Panel 2 plus, Biomérieux, France) was positive for HCoV-NL63. The fever subsided on the 7th day, with amelioration of the laboratory findings on the 10th day.

We conclude that even during the course of the SARS-CoV-2 pandemic, the other corona viruses continue to circulate in the population, producing differential diagnostic problems, since, in children, infection by SARS-CoV-2 may be asymptomatic or cause mild respiratory and gastrointestinal symptoms [5]. This case illustrates the importance of maintaining a certain degree of suspicion for the "old" corona viruses in children with a compatible clinical and laboratory presentation, even under the co-existence of a possible bacterial infection.

Compliance with Ethical Standards

Conflict of Interest None.

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