

Clinical and laboratory findings of COVID-19 in children younger than six months old; Neutropenia is more common not lymphopenia

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Abstract

Background: Studies on age-related differences in clinical and laboratory features on coronavirus disease 2019 (COVID-19) are limited. We aimed to evaluate the demographic, clinical, and laboratory findings of COVID-19 in children younger than six months old and compare them with older children. Methods: A single-center retrospective study, including 209 confirmed COVID-19 cases, was conducted between March 11, 2020, and September 1, 2021. The case group consisted of 47 patients younger than six months old, and the control group consisted of 162 patients older than six months old. Results: The mean age of the case group was 2.77 ± 1.52 months, and the control group was 101.89 ± 65.77 months. Cough was statistically higher in the control group, poor feeding was higher in the case group ($P=.043$, $.010$). The underlying disease ratio was statistically higher in the case group; however, the hospitalization rate was higher in the case group ($P=.001$, $.036$). The case group had significantly lower median values of the absolute neutrophil count, hemoglobin, and higher median values of white blood cell, absolute lymphocyte count, platelet than the control group ($P<.05$). C-reactive protein, fibrinogen values were significantly lower, and procalcitonin, D-dimer, troponin T, N-terminal pro-B-type natriuretic peptide significantly higher in the case group ($P<.05$). Lymphopenia was more common in the control group, whereas neutropenia was more common in the case group ($P=.001$, $.011$). Conclusions: We showed that most children younger than six months old had mild and asymptomatic COVID-19; however, the hospitalization rate was higher, and neutropenia was more common than older children.

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