

# Systemic inflammation rare in pediatric COVID-19 patients

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(HealthDay)—Pediatric patients with COVID-19 rarely have systemic

inflammation, according to a study published online June 3 in *JAMA Network Open*.

Huan Wu, Ph.D., from Wuhan Children's Hospital in China, and colleagues delineated and compared immunologic features of mild and moderate COVID-19 in a single-center case series with 157 pediatric patients with laboratory-confirmed severe acute respiratory syndrome coronavirus 2.

The researchers found that 38.2, 56.1, 3.8, and 1.9 percent of the [pediatric patients](#) with COVID-19 had mild clinical type with pneumonia, were moderate cases, were severe cases, and were critically ill, respectively. The median age was 84 months for the 148 children with mild or moderate disease, and 59.5 percent were girls. Increased levels of alanine aminotransferase, aspartate aminotransferase, creatine kinase MB activity, and lactate dehydrogenase were the most common laboratory abnormalities. The level of immune suppressive [interleukin 10](#) was increased in moderate versus mild cases, but levels of inflammatory cytokines, including interleukin 6, tumor necrosis factor  $\alpha$ , and interferon  $\gamma$ , were unchanged. The absolute number of lymphocytes, including T and B cells, did not differ significantly between mild and moderate cases, but a decrease in neutrophil levels was seen in moderate versus mild cases. There were [negative associations](#) noted for immunoglobulin G and the neutrophil-to-lymphocyte ratio with biochemical indices related to liver and myocardial injury; positive associations were seen for counts of lymphocytes, CD4+ T cells, and interleukin 10.

"Further research is required to determine the influence of B [cells](#) in the context of COVID-19," the authors write.

**More information:** [Abstract/Full Text](#)

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