

Researchers differentiate MIS-C from severe COVID-19 in children

March 9 2021



(HealthDay)—Patterns of clinical presentation and organ involvement

may distinguish between children with multisystem inflammatory syndrome in children (MIS-C) and severe acute COVID-19, according to a study published online Feb. 24 in the *Journal of the American Medical Association*.

Leora R. Feldstein, Ph.D., from the U.S. Centers for Disease Control and Prevention in Atlanta, and colleagues compared clinical characteristics and outcomes of [children](#) and adolescents with MIS-C versus those with severe COVID-19. The analysis included a case series of 1,116 [patients](#) aged younger than 21 years hospitalized between March 15 and Oct. 31, 2020 (with follow-up through Jan. 5, 2021) at 66 U.S. hospitals in 31 states.

The researchers found that 48 percent of patients were diagnosed with MIS-C and 52 percent were diagnosed with COVID-19. Compared with patients with COVID-19, patients with MIS-C were more likely to be 6 to 12 years old (40.8 versus 19.4 percent; adjusted risk ratios [aRR], 1.51 versus 0 to 5 years) and non-Hispanic Black (32.3 versus 21.5 percent; aRR, 1.43 versus White). Additionally, patients with MIS-C were more likely than patients with COVID-19 to have cardiorespiratory involvement (aRR, 2.99), cardiovascular involvement without respiratory involvement (aRR, 2.49), and mucocutaneous involvement without cardiorespiratory involvement (aRR, 2.29). A higher neutrophil-to-lymphocyte ratio, higher C-reactive protein level, and lower platelet count were seen among patients with MIS-C. Among patients with MIS-C who had reduced left ventricular systolic function (34.2 percent) and coronary artery aneurysm (13.4 percent), these conditions normalized within 30 days in an estimated 91.0 and 79.1 percent, respectively.

"MIS-C was distinguished by certain demographic features and clinical presentations, including being aged 6 to 12 years, being of non-Hispanic Black race, having severe cardiovascular or mucocutaneous involvement, and having more extreme inflammation," the authors write.

Several authors disclosed financial ties to the pharmaceutical industry.

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

Copyright © 2020 [HealthDay](#). All rights reserved.

Citation: Researchers differentiate MIS-C from severe COVID-19 in children (2021, March 9)
retrieved 6 May 2024 from
<https://medicalxpress.com/news/2021-03-differentiate-mis-c-severe-covid-children.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--