SARS-CoV-2 present much longer in stool than in respiratory samples

BY MARK S. LESNEY
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A STUDY FROM CHINA showed that the presence of SARS-CoV-2 lasts significantly longer in stool samples from COVID-19 patients than in respiratory and serum samples.

However, the virus also persists longer with higher loads and later peaks in the respiratory tissue of patients with severe disease than in those with mild disease, according to an analysis of 96 consecutively admitted patients with laboratory confirmed SARS-CoV-2 infection.

The retrospective study cohort data were collected from Jan. 19 to March 20 at a designated hospital for patients with COVID-19 in Zhejiang province. Among the patients, 22 had mild disease, and 74 had severe disease, according to the researchers.

Infection was confirmed in all patients by testing sputum and saliva samples. Viral RNA was detected in the stool of 59% of the patients and in the serum of 41% of patients. Only one of the patients had a positive urine sample. The median duration of virus in stool (22 days) was significantly longer than in respiratory (18 days; $P = .002$) and serum samples (16 days; $P < .001$).

In addition, the median duration of virus in the respiratory samples of patients with severe disease (21 days) was significantly longer than in patients with mild disease (14 days; $P = .04$).

"In the mild group, the viral loads peaked in respiratory samples in the second week from disease onset, whereas viral load continued to be high during the third week in the severe group," the authors stated.

Virus duration was also longer in patients older than 60 years and in men.

The longer duration of SARS-CoV-2 in stool samples highlights the need to strengthen the management of stool samples in the prevention and control of the epidemic, especially for patients in the later stages of the disease, the authors advised.

"Compared with patients with mild disease, those with severe disease showed longer duration of SARS-CoV-2 in respiratory samples, higher viral load, and a later shedding peak. These findings suggest that reducing viral loads through clinical means and strengthening management during each stage of severe disease should help to prevent the spread of the virus," the researchers concluded.

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mlesney@mdedge.com

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