

COVID-19 Disease With Positive Fecal and Negative Pharyngeal and Sputum Viral Tests

Lijuan Chen, PhD¹, Jianghua Lou, MD¹, Yan Bai, MD¹ and Meiyun Wang, PhD, MD¹

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An epidemic of the coronavirus disease 2019 (COVID-19) has spread in China and has affected 26 countries worldwide since December 2019 (1). The severe acute respiratory syndrome corona virus 2 (SARS-CoV-2) is transmitted from person to person, principally through respiratory droplets or contact (2). Severe acute respiratory syndrome coronavirus (SARS-CoV) and middle east respiratory syndrome coronavirus (MERS-CoV) are possibly transmitted through the fecal-oral route (3,4), suggesting similar transmission of the COVID-19 virus. We report a case of

COVID-19 with a positive result of virus nucleic acid in a fecal specimen and negative results on multiple pharyngeal and sputum samples.

A 25-year-old woman contacted her brother on January 18, 2020, after he had traveled from the epidemic center of Wuhan, China. On January 24, she had respiratory symptoms and fever (39.6 °C). Outpatient and inpatient symptomatic treatments were ineffective, and she was hospitalized at our facility on February 3. Laboratory tests revealed a leukocyte count of $6.2 \times 10^9/L$ (normal, 3.9–9.9), a lymphocyte count of $0.9 \times 10^9/L$ (normal, 1.1–3.2), an erythrocyte sedimentation rate of 27 mm/hr (normal, 0–20), and a serum amyloid A of 110.4 mg/L (normal, 0–10). Chest computed tomography revealed “ground-glass” pulmonary opacities bilaterally. The SARS-CoV-2 real-time reverse transcription-polymerase chain reaction test on a pharyngeal swab sample was negative. The following day, the SARS-CoV-2 reverse transcription-polymerase chain reaction test on a fecal sample was positive. During 7 days after admission, the test was negative on 2 more pharyngeal swab samples and 2 sputum samples. After anti-infective and antiviral treatment, her fever disappeared and symptoms and computed tomography abnormalities improved, allowing hospital discharge. Our understanding of SARS-CoV-2 infection routes is still limited. This case indicates that the virus can proliferate in the digestive

tract and potentially undergo fecal-oral transmission.

CONFLICTS OF INTEREST

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¹Department of Medical Imaging, Henan Provincial People's Hospital & the People's Hospital of Zhengzhou University, Zhengzhou, Henan, China. **Correspondence:** Meiyun Wang, PhD, MD. E-mail: mywang@ha.edu.cn.