

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active. test result provides no information regarding the individual's current or future ability to transmit the virus. We therefore recommend continued use of universal PPE during testing, limited to diagnosis in disease management, and as the foundation of a contact public health tracing program. We ask the authors whether there was any difference in the temperature upon admission between women who received positive test results for COVID-19 and women who received negative test results for COVID-19.

Cassandra E. Henderson, MD Maternal-Fetal Medicine Garden OB/GYN, Lake Success One Hollow Lane, Suite 315 New Hyde Park, NY 11042 mdwstmd@aol.com

Janelle M. Jackman, MD New Hope Fertility Center New York, NY

Shadi Rezai, MD Department of Women's Health and Prenatal Care Valley Community Healthcare North Hollywood, CA

All of the authors contributed to the writing of this manuscript.

The authors report no conflict of interest.

This communication has been published in the middle of the COVID-19 pandemic and is available via expedited publication to assist patients and healthcare providers.

REFERENCES

1. Vintzileos WS, Muscat J, Hoffmann E, et al. Screening all pregnant women admitted to labor and delivery for the virus responsible for COVID-19. Am *J* Obstet Gynecol 2020. [Epub ahead of print].

2. World Health Organization (WHO). Advice on the use of point-ofcare immunodiagnostic tests for COVID-19. Available at: https:// www.who.int/news-room/commentaries/detail/advice-on-the-use-ofpoint-of-care-immunodiagnostic-tests-for-covid-19. Accessed April 28, 2020.

 Centers for Disease Control and Prevention (CDC). Testing for COVID-19. 2020. Available at: https://www.cdc.gov/coronavirus/2019-ncov/ symptoms-testing/testing.html. Accessed April 27, 2020.

4. Cheng PK, Wong DA, Tong LK, et al. Viral shedding patterns of coronavirus in patients with probable severe acute respiratory syndrome. Lancet 2004;363:1699–700.

5. Wang W, Xu Y, Gao R, et al. Detection of SARS-CoV-2 in different types of clinical specimens. JAMA 2020;323:1843–4.

© 2020 Elsevier Inc. All rights reserved. https://doi.org/10.1016/j.ajog. 2020.05.040

REPLY



We would like to thank Dr Henderson et al for their interest in our article and for raising some interesting points. Dr Henderson et al disagree with our proposal for universal coronavirus disease 2019 (COVID-19) testing of women admitted to labor and delivery. To support their position, they cited the Centers for Disease Control and Prevention (CDC) report produced in the early stages of the COVID-19 pandemic.1 However, at that time, testing capacity was limited, and the degree of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) transmission from asymptomatic patients was uncertain. In addition, the CDC guidelines on testing were not exclusive to symptomatic individuals; furthermore, the guidelines left the decision for testing to "state and local health departments or healthcare providers." By the end of March 2020, testing capacity using rapid and accurate real-time polymerase chain reaction testing increased nationwide. At the same time, various reports, including recent studies cited by the CDC, suggested widespread viral transmission by both presymptomatic and asymptomatic patients who received positive test results for COVID-19.² We feel substantiated by these more recent findings that found strong epidemiologic evidence for transmission of the SARS-CoV-2 from presymptomatic and asymptomatic patients.² The aforementioned data, in conjunction with our study's finding that 66% of pregnant women who received positive test results for COVID-19 are asymptomatic, strongly support the logic of universal testing for SARS-CoV-2 among obstetrical patients admitted to the hospital.

The authors' second point about viral load peaking between 7 and 10 days after the onset of symptoms and declining in the next 3 weeks pertains to a study about symptomatic patients,³ whereas the main focus of our study was the detection and prevention of viral spread and transmission among presymptomatic and asymptomatic patients. The authors' third point about a 30% false-negative rate in asymptomatic patients who received positive test results for COVID-19 could not be verified in their cited reference.⁴ Finally, the authors' fourth point about temperature differences between mothers who received positive test results for COVID-19 and mothers who received negative test results for COVID-19 is not relevant because the main purpose of universal testing is not to detect symptomatic patients but to identify asymptomatic patients who may be transmitting the virus to others.

Universal testing ensures the correct cohorting of patients, the correct use of personal protective equipment, and the correct utilization of inpatient resources if the need arises. In addition, knowing who received positive test result increases the pool of people eligible for plasma donation, which is invaluable to those who are critically ill fighting COVID-19.

William S. Vintzileos, MD Jolene Muscat, MD Eva Hoffmann, MD Nicole S. John, MD Department of Obstetrics and Gynecology New York University Winthrop Hospital New York University Langone Health New York University Long Island School of Medicine Mineola, NY

Duc Vo, MD Department of Pathology New York University Winthrop Hospital New York University Langone Health New York University Long Island School of Medicine Mineola, NY

Anthony Vintzileos, MD Department of Obstetrics and Gynecology New York University Winthrop Hospital New York University Langone Health New York University Long Island School of Medicine 259 First Street Mineola, NY 11501 avintzileos@winthrop.org

The authors report no conflict of interest.

This study did not receive any financial support.

This communication has been published in the middle of the COVID-19 pandemic and is available via expedited publication to assist patients and healthcare providers.

REFERENCES

1. Centers for Disease Control and Prevention (CDC). Testing for COVID-19. 2020. Available at: https://www.cdc.gov/coronavirus/2019-ncov/ symptoms-testing/testing.html. Accessed May 18, 2020.

2. Furukawa NW, Brooks JT, Sobel J. Evidence supporting transmission of severe acute respiratory syndrome coronavirus 2 while presymptomatic or asymptomatic. Emerg Infect Dis 2020;26. https://doi.org/10.3201/eid2607.201595.

3. Cheng PK, Wong DA, Tong LK, et al. Viral shedding patterns of coronavirus in patients with probable severe acute respiratory syndrome. Lancet 2004;363:1699–700.

4. Sethuraman N, Jeremiah SS, Ryo A. Interpreting diagnostic tests for SARS-CoV-2. JAMA 2020. [Epub ahead of print].

© 2020 Elsevier Inc. All rights reserved. https://doi.org/10.1016/j.ajog. 2020.05.041