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Vaginal delivery in COVID-19 pregnant women: anorectum as a potential alternative route of SARS-CoV-2 transmission



TO THE EDITORS: In a recently published article in the *Journal*, Cui et al¹ reported that they did not find severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in the genital tract of 35 patients of reproductive and postmenopausal age who received a diagnosis of coronavirus disease 2019 (COVID-19). All vaginal and cervical swabs were reportedly negative for SARS-CoV-2, whereas 1 anal swab sample tested positive. The authors concluded from these findings that the lower female genital tract may not be a transmission route for SARS-CoV-2 and that such evidence may guide the choice of delivery method in women with COVID-19.

Although the authors are to be commended, their conclusions warrant careful consideration. In a recent report, we described the first case of potential vertical transmission during vaginal delivery in a woman with rectal and stool swabs positive for SARS-CoV-2.² This transmission route has been underestimated, however, probably because of the high incidence of cesarean deliveries in pregnant women with COVID-19. Cases of infants with a positive test result for SARS-CoV-2 after vaginal birth have come to light without a clear explanation of the transmission route and with no anal swabs taken.

SARS-CoV-2 has been detected in the stools of 1 of 3 nonpregnant patients with COVID-19,³ but its prevalence in the anal swab of pregnant patients is still unknown. The low prevalence reported by Cui et al (1/35 [2.8%]) stems likely from several factors: small sample size, not all patients having a positive oropharyngeal swab, and time between onset of symptoms and sample collection (8–41 days). Furthermore, the article does not mention whether the patients had diarrhea or other intestinal symptoms or whether stool tests for SARS-CoV-2 were performed. These limitations might have underestimated the number of anal swabs positive for SARS-CoV-2.

In the current state, obstetricians should maintain their obstetrical indications because contamination does not mean infection. Indeed, preventive measures during vaginal delivery,⁴ reduced viral load exposure, and potential transplacental passage of antibodies from the mother to the fetus could reduce the risk of neonatal infection.

To shed further light on this topic, mothers whose newborns test positive for SARS-CoV-2 after vaginal birth should be tested using anal swab to establish the true incidence of this transmission route in large samples and to avert the risk of underestimating it. ■

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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.

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REPLY



We appreciate that Dr Carosso brought up several important points about our paper, which are worth discussing and clarifying.

We stated that we did not find severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in the lower female genital tract, and our results may provide evidence to guide