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Authors' reply

We are grateful for the concerns of Manuel Schmidt and colleagues about our previous guidelines¹ for pregnant women with suspected severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection. At the time we developed the algorithm (February, 2020), there were no data regarding potential vertical transmission from infected mothers and outcomes in newborns. To date, there has been no evidence of vertical transmission of coronavirus disease 2019 (COVID-19) based on two small clinical series.^{2,3} According to WHO, delayed umbilical cord clamping is highly unlikely to increase the risk of transmitting pathogens from the mother to the fetus even in the case of maternal infection.⁴ Because the vernix caseosa contains antimicrobial peptides, we recommend leaving it in place until 24 h after birth.⁵ New data examining neonates from infected mothers could be reassuring, but transmission after birth via contact with infectious respiratory secretions is still a concern, and physical separation of mother from child should be considered. Separation is a standard practice in pulmonary tuberculosis and is discussed in cases of maternal influenza infection.⁶ Therefore, separation of the mother and her newborn baby should be individually discussed by an interdisciplinary team, considering local facilities and risk factors for adverse neonatal outcomes, such as prematurity and fetal distress. Indirect adverse neonatal events stemming from maternal illness due to SARS-CoV-2 were shown in one series.² Six of ten infants had abnormal early clinical findings, including respiratory distress, fever, thrombocytopenia, or transaminitis, with one infant death. Although all nine tested infants had negative results for COVID-19 infection, neonatal complications following fetal distress were probably secondary to maternal illness. For these reasons, continued vigilance of mother-infant pairs affected by

COVID-19 is warranted. In case of symptom development, newborns should promptly be admitted to a neonatal unit and isolated, with initiation of supportive treatments as needed.

COVID-19 was not detected in the maternal milk of six patients.³ However, the primary concern is whether an infected mother can transmit the virus through respiratory droplets during breastfeeding. Breastfeeding during maternal COVID-19 infection is not contraindicated by the Centers for Disease Control and Prevention,⁷ and all possible precautions should be taken to avoid spreading the virus to the infant, including washing hands before touching the infant and wearing a face mask if possible. When separation of the mother from the newborn is initiated, mothers who intend to breastfeed should be encouraged to express their breast milk to establish and maintain milk supply, as suggested by Rasmussen and colleagues.⁸ Patients should be counseled regarding potential risks and benefits.

We do not recommend administration of routine corticosteroids to all women with confirmed COVID-19 infection between 34 and 37 weeks of gestation. We follow international recommendations on fetal lung maturation, discussing the utility of this treatment between 34 and 37 weeks of gestation considering additional risk factors.⁹ Finally, we mentioned a possible discussion of termination of pregnancy (when legal) in the unique situation of a non-viable fetus in a critically ill pregnant patient.

We therefore updated the guidelines according to the data available at the beginning of March, 2020 (appendix). It is our responsibility, as specialists working in different fields of perinatology, to improve our own recommendations and that of others for the benefit of our patients.

We declare no competing interests.

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See Online for appendix