



Applying the principle 'First Do No Harm' during the pandemic

AC Katheria, J Koo

Neonatal Research Institute, Sharp Mary Birch Hospital for Women & Newborns, San Diego, CA, USA

Linked article: This is a mini commentary on I Mejía Jiménez et al., pp. 908–915 in this issue. To view this article visit <https://doi.org/10.1111/1471-0528.16597>

Published Online 28 December 2020.

Jiménez and colleagues (BJOG 2021;128:908–915) present outcomes from 403 SARS-CoV-2-positive pregnant women and their newborns who received either delayed cord clamping >30 seconds (DCC) or early cord clamping <30 seconds (ECC). The recommendations from the Spanish Ministry of Health and the International Federation of Gynecology and Obstetrics (FIGO) have discouraged the use of DCC in efforts to reduce the potential for vertical transmission of SARS-CoV-2 (Poon et al. *Int J Gynecol Obstet* 2020;149:273–86). Jiménez and colleagues demonstrated that there was no increased transmission with DCC. Overall, the transmission rates were low. Infants who had DCC also had higher rates of breastfeeding and early skin to skin contact.

Two infants with ECC and three with DCC had a positive test within the first 12 hours of life, but all five of these cases were negative when the test was repeated at 12–48 hours of life. All infants were followed to 14 days. Only one infant tested positive between 12 and 48 hours of life after having a negative test <12 hours of life, likely due to horizontal transmission from a positive household member, and this was thereby deemed unlikely to be related to perinatal events.

There are many limitations in their analysis, such as the association with early clamping with earlier gestation, higher rate of ECC in symptomatic mothers with COVID-19 disease, increase in cesarean section and sicker mothers, and overall low number of positive neonatal cases. Despite these limitations, this is one of the larger prospective datasets comparing DCC with ECC in SARS-CoV-2-positive mothers. Longer-term follow up of these infants would provide further reassurance.

During this pandemic, hospital protocols for mother-baby care fluctuate frequently and cord management has evolved during the time span of this study from being predominantly ECC to mostly DCC. These changes took place concurrently as clinical practices progressively returned to allowing mother-baby dyad care without separation. With the shift to allow skin to skin contact and breastfeeding while SARS-CoV-2-positive mothers don masks and practise good hand hygiene, the risk of postnatal horizontal transmission is low. Moreover, existing literature suggests that rate of vertical transmission is low (Karimi-Zarchi et al. *Fetal Pediatr Pathol*. 2020;39:246–50). For these reasons, it is unlikely that an extra 30–60 seconds

spent on DCC would increase the risk of perinatal acquisition of the virus.

DCC allows recirculation of placental blood to return to the newborn infant as the lungs are recruited, which would not increase the risk of vertical transmission. In fact, guidelines for viruses known to occur with viral transmission such as HIV do not discourage delayed cord clamping (WHO Guideline. Geneva: World Health Organization; 2014). The benefits of improved survival in preterm infants and improved neurodevelopmental outcomes in term infants outweigh the rare and unlikely risk of acquiring SARS-Cov-2 by keeping the cord intact for a short duration. While we continue to practise medicine in uncharted territory where we have no protocols to govern our decisions, 'primum non nocere' would appear to be an extremely enduring phrase.

Disclosure of interests

None declared. Completed disclosure of interests forms are available to view online as supporting information.

Supporting Information

Additional supporting information may be found online in the Supporting Information section at the end of the article. ■