



Manifestations in Neonates Born to COVID-19 Positive Mothers

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To the Editor: We report two neonates born to coronavirus (COVID-19) or severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) positive women. Our first case was a term neonate born by emergency C-section in view of fetal distress. A healthy female baby, weighing 2.865 kg was delivered and roomed in with the mother. A pre-operative COVID-19 RT PCR of the mother was sent which was tracked after delivery and found to be positive. Baby's COVID-19 RT PCR was sent at 18 h of life and was negative. Mother wore mask and breastfed the baby. The dyad was asymptomatic and remained well on follow up. Repeat COVID-19 test of the neonate was not done. Another extra-mural term male neonate was delivered to a COVID-19 positive mother by C-section due to fetal distress and meconium stained liquor. Baby required resuscitation at birth, followed by mechanical ventilation. Investigations were suggestive of bilateral heterogeneous opacities on chest X-ray, severe metabolic acidosis, severe thrombocytopenia and sterile blood culture. Baby developed shock requiring inotropes for 2–3 d and was extubated on day 3. On day 6 of life, baby developed seizures and was referred to us. Neurological examination revealed reduced tone and depressed reflexes. MRI brain showed restricted diffusion in periventricular deep white matter of bilateral frontal and parietal lobes and subdural hemorrhage. Nasopharyngeal swab for COVID-19 RT PCR sent at day 3, 5 and 8 were negative. Baby was discharged on day 12 of life.

No evidence of transplacental transmission of SARS-CoV-2 infection has been reported in four recent publications, which is consistent with our findings [1–4]. However, two authors reported positive SARS-CoV-2 infection in neonates

born to COVID-19 positive mother [5, 6]. Second neonate in our report suffered from catastrophic sequelae of hypoxic ischemic encephalopathy. A similar case of birth asphyxia was reported by Zeng et al. in a preterm neonate born to COVID-19 positive mother [6]. In both the cases, it remains unknown whether events could be attributed to COVID-19 positive status of the mother or are manifestations of neonatal disease. Further research is warranted to determine risk of vertical transmission of COVID-19 infection in pregnancy and associated neonatal outcomes.

Compliance with Ethical Standards

Conflict of Interest None.

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