SARS-CoV-2 Vertical Transmission: Rare But a Potential Possibility

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To the Editor: Evidence about vertical transmission in Covid-19 is sparse and rapidly evolving [1]. We report one case with probable intrapartum transmission of severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) in a neonate with respiratory distress.

A primigravida mother delivered a 34 + 4 wk female by C-section due to preterm labour. Mother had no complaints of upper respiratory tract infection/breathing difficulty, fever or rash. Her throat swab for Covid-19 RT-PCR was positive for SARS-CoV-2. Strict infection control measures were taken during the delivery. Baby (2.6 kg) cried immediately but developed respiratory distress and was put on continuous positive airway pressure (CPAP) (FiO₂ 0.35 for 18 h), followed by oxygen at 3 L/min for 24 h. She remained hemodynamically stable throughout the stay. Sepsis screen and X-ray chest were within normal limits. Baby's nasopharyngeal swab for Covid-19 RT-PCR test was positive at 23 h of life. She was discharged on seventh day with negative report. Parents were explained about universal precautions to be taken at home. Baby is in close follow-up and is doing well so far.

Perinatal complications like preterm delivery, respiratory distress, shock, and death have been reported in neonates (SARS-CoV-2 negative) born to mothers with COVID-19 [2, 3]. Intrapartum infection is confirmed if SARS-CoV-2 PCR of nasopharyngeal swab at birth (after cleaning the infant) and at 24 to 48 h of age are both positive and an alternative explanation for symptoms is excluded [4]. In our case, the preterm baby born to Covid-19 positive mother developed respiratory distress soon after birth despite not coming in contact with mother or her secretions, and baby tested positive within 24 h of life, raises

the probability of vertical transmission of the disease. The fact that a significant proportion of maternal and neonatal infections can be asymptomatic creates difficulty in ascertaining the disease burden on neonates and the possibility of transmission to healthcare providers during resuscitation or admission to a unit. With limited data, we conclude that perinatal transfer although rare, can occur and should be suspected in all babies born to symptomatic/confirmed Covid-19 positive mothers and newborns should be managed with all universal precautions.

Compliance with Ethical Standards

Conflict of Interest None.

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