**Study to know the Perinatal transmission of SARS CoV-2 and Outcome of Newborns born to Covid-19 positive Mother in a L3 Centre in Barabanki District of Uttar Pradesh**

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**Abstract:**

**Introduction:**Due to limited data on perinatal transmission,outcomes of SARS-CoV-2 infection,appropriate management and the risk of developing COVID-19 during the perinatal period,we aimed to know best practices regarding infection control in mother–newborn and identify associated potential risk factors.

**Aims & Objective:**To describe clinical outcomes and risk factors for transmission in neonates born to mothers with perinatal SARS CoV-2 infection and practices associated with these outcomes.

**Material and Methods:** Retrospective cross sectional study was conducted in a L3 Centre at Mayo Institute of Medical Sciences, Barabanki,Uttar Pradesh. Study includes all newborns born to SARS-COV-2 positive mother’s in both waves of COVID-19(March 2020 - June 2021). Maternal nasopharyngeal swab specimens were tested for SARS-CoV-2 at the Central Microbiology Laboratory,MIMS, Barabanki. Minimum of two nasopharyngeal specimen were obtained from each newborn for SARS-CoV-2 RTPCR. First test was done within 48 hours of birth and second in between 5th-7th day of birth.

**Results:** 53 SARS-CoV-2 positive deliveries. 20 neonates were admitted to the NICU and 10 received routine neonatal nursery care.23 newborns were handed directly to mother to be roomed in with proper protective equipment’s, mask and hand hygiene. A total of 48 (90.5%) newborns tested negative and only 5 (9.4%) tested positive. All neonates had a repeat RTPCR at 5–7 days of life and all were negative. All newborns after discharge were referred to outpatient clinic.

**Conclusion:** No clinical evidence of vertical transmission was identified.Our study provides important data on neonatal infection,clinical features and outcomes in neonates born to SARS-CoV-2 positive mother.