

COVID-19 (Novel Coronavirus) and Pregnancy: What Do We Know So Far?

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Disclaimer: at the time of this writing, the author didn't care for any patient with COVID-19. This editorial is based on a literature search and author's familiarity with other viruses (flu, measles, HIV, etc.)

The current Covid-19 infection reminds me of the HIV infection decades ago, albeit on a much larger scale. The first immunosuppressed pregnant patient in Brooklyn with an unknown disease (HIV testing was not available yet), put the obstetrical team into fear of getting and dying from the disease.

With time, we gained an understanding of the nature of the HIV virus, its mode of transmission, course of illness, and finally, the means to contain and control it.

The novel coronavirus (COVID-19) is a global health emergency. Since the first case of pneumonia in Wuhan, China, in December 2019, the infection has spread rapidly to the rest of China and beyond. As of March 1, 2020, a total of 85,406 confirmed cases of the infection have been reported, together with 39,597 recovered and discharged patients and 2,933 deaths. Theoretically, pregnant women with naturally decreased immune system and lung capacity are more prone to coronavirus complications.

In 2009, pregnant women accounted for 1% of patients with influenza H1N1 virus, but they accounted for 5% of all H1N1-related deaths.

Acute respiratory syndrome coronavirus (SARS) and Middle East respiratory are known for severe complications during pregnancy, including the need for intubation, admission to an intensive care unit, and death.^{2,3}

However, at the time of this writing, the prognosis for pregnant patients affected by COVID-19 is more optimistic based on limited data.

Chen, et al.⁵ reported the results of a retrospective chart review of 9 pregnant patients with confirmed COVID-19 infection. All 9 patients had a cesarean section at term. Seven patients presented with a fever, cough (in four), and myalgia (in three). Five of nine patients had lymphopenia, pneumonia, none died. Nine livebirths

were recorded. All nine livebirths had a 1-min Apgar score of 8-9 and a 5-min Apgar score of 9-10. Amniotic fluid, cord blood, neonatal throat swab, and breastmilk samples from a six patient were tested for SARS-CoV-2, and all samples tested negative for the virus.

The authors concluded that pregnant women with COVID-19 pneumonia showed a similar pattern of clinical characteristics to non-pregnant adult patients.¹ The most important goal of the study was to investigate the possibility of intrauterine transmission of COVID-19 infection. The results show that SARS-CoV-2 was negative, suggesting that no intrauterine fetal infections occurred. These findings are in accordance with what was observed in SARS. Previous studies have already shown no evidence of perinatal SARS infection among infant born to mothers who developed SARS infection during pregnancy.^{6,7}

Neonatal aspects of COVID-19

Infection can occur in neonates via close contact. Two such cases of neonatal COVID-19 infection have been confirmed at 36 hours and 17 days after birth, and both appear to have been infected postnatally.⁸

Therefore, early cord clamping and temporary separation of the newborn for at least two weeks is recommended to minimize the risk of viral transmission by avoiding contact with the infected mother. The neonate should be cared for in an isolation ward and monitored for any signs of infection. During this period, direct breast feeding is not recommended. A possible option is for the mother to pump her breast milk, which can be fed to the baby by a caregiver.

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