

SYNOPSIS

03/12/2020

Review of “Clinical manifestations and outcome of SARS-CoV-2 infection during pregnancy”

Article citation: Liu Y, Chen H, Tang K, Guo Y. Clinical manifestations and outcome of SARS-CoV-2 infection during pregnancy. *J Infect.* 2020 Mar 4 [Epub ahead of print]. Available from: <https://dx.doi.org/10.1016/j.jinf.2020.02.028>

One-Minute Summary

- A letter describing **clinical manifestations and perinatal outcomes of COVID-19 infection during pregnancy in 13 hospitalized patients** in China.
- The maternal **age ranged from 22-36 years**. Two patients were in their second trimester and 11 were in their third trimester at illness onset. None had underlying medical conditions.
- **Clinical characteristics were similar to those reported in non-pregnant adults**. The most common symptoms were **fever (10/13), fatigue (4/13) and dyspnea (3/13)**. **One patient was asymptomatic**.
- Three patients improved and were discharged with an uncomplicated pregnancy.
- 10 patients remained in hospital for caesarean section (C-section), of which **five were emergency C-sections due to pregnancy complications**, including fetal distress (3/10), premature rupture of membranes (PROM) (1/10) and stillbirth (1/10). **Six patients delivered preterm** (32-36 weeks), of which three were due to pregnancy complications.
 - One patient was admitted to the intensive care unit (ICU) with multi-organ failure, acute respiratory distress syndrome and septic shock. The stillbirth occurred in this patient.
- The **nine neonates (live births) appeared healthy** (APGAR score of 10).
- There was **no clinical or serological evidence of vertical transmission**.
- The authors suggest that pregnant women may be at-risk for COVID-19; however, it is not clear if the pregnancy complications in this study were a consequence of COVID-19 infection.

Additional Information

- This study included all hospitalized pregnant patients with laboratory-confirmed COVID-19 infection in China, excluding those in Wuhan, from December 8, 2019 – February 25, 2020.
- The asymptomatic patient had an uncomplicated pregnancy.
- All patients, except the one admitted to ICU, were discharged with no complications after delivery.
- The clinical criteria and serological methods to determine vertical transmission were not provided.

PHO Reviewer’s Comments

- No information was provided regarding testing for other pathogens and other potential causes for the pregnancy complications cannot be ruled out. Further, rates of pregnancy complications in uninfected pregnant women were not provided, thus making the correlation to COVID-19 difficult.
- The authors state that there was no serologic evidence of vertical transmission. It is not clear whether they mean that serological tests (i.e., antibody detection tests) on the infants suggested that there was no infection or that blood samples were collected from the infants and no COVID-19 nucleic acid was detected in the samples.
- There is no information provided in the article about the birth outcomes for the 3/13 mothers who were discharged before delivery.

Citation

Ontario Agency for Health Protection and Promotion (Public Health Ontario). Review of “Clinical manifestations and outcome of SARS-CoV-2 infection during pregnancy”. Toronto, ON: Queen’s Printer for Ontario; 2020.

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