

## COVID-19 and Women: An Obstetrician's Perspective

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## **Abstract**

### **Keywords**

- ► pregnancy
- ► covid19
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## Introduction

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## Effect of COVID 19 on Pregnancy and Fetus

Clinical manifestations of COVID-19 in pregnant females seem to be similar to nonpregnant females. It is important to note that all pregnant women infected with COVID-19 are not more susceptible to complications. Pregnant women who are at a higher risk of developing severe illness include those who are overweight or obese women, age more than 35 years, and those who have pre-existing medical problems such as venous thromboembolism, hypertension, diabetes mellitus, and cardiac disease.<sup>1</sup>

So far an increased risk of abortion or fetal malformations has not been documented if the patient gets infected during the first trimester. Teratogenicity due to COVID-19 infection has not so far been reported.

Any increase in risk of abortions in the second trimester of pregnancy in patients infected with COVID-19 has not been documented. COVID-19 infection is not an indication for advising medical termination of pregnancy.

Pregnant females infected with COVID-19 may have an increased risk of preterm delivery in the third trimester.<sup>2</sup>

Transmission of the disease from the mother to the fetus in utero or during childbirth is possible. To confirm vertical transmission, we need to document presence of virus in cord samples of the fetus.Few centers have reported vertical transmission, although the proportion of pregnancies affected and the resulting morbidity in the neonate has yet to be analyzed. Many newborn babies detected as having COVID-19 infection in early neonatal period have had an uneventful course.<sup>3</sup>

# Antenatal Care during the COVID-19 Pandemic

Antenatal care aims at prevention, early diagnosis, and treatment of complications in pregnant females and their fetuses and this holds true in the current scenario as well. In addition, we need to prevent the transmission of the infection to the healthcare workers and others. So, all pregnant women are advised to follow social distancing, practicing hand hygiene, avoid touching face, avoiding all nonessential travels and observe all the safety guidelines being periodically issued by the government.

## **Antenatal Visits**

Pregnant women are advised to attend modified antenatal care protocol, with visits to the obstetrician at 12, 20, 28 and 36 weeks of gestation. These visits should be utilized for antenatal ultrasound, blood and urine investigations, and weight and blood pressure monitoring. Fetal kick count should be







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emphasized upon. If they have any mild flu-like symptoms, fever, cough and cold, they should opt for teleconsultation and report if the symptoms deteriorate.

## Dos and Don'ts for Obstetric Care Providers in COVID-19 Pandemic

COVID-19 testing should be done as per institutional protocol. Preferably, all patients reporting for admission should be tested for COVID-19 and treated as suspects till the reports come as negative. Awaiting the test results should not be a reason for delay in any obstetric management.

Elective procedures like induction of labor should be performed only if deemed necessary.

Any equipment like ultrasound machine, fetal Doppler, or cardiotocography (CTG) machine should be properly decontaminated if used in a suspect or positive patient.

### **Intrapartum Care**

Awaiting COVID-19 test results, all inpatient pregnant women should be settled in an isolation room till test results are available, and all the precautions required for a COVID-19 positive patient should be taken. Maternal and fetal monitoring should be done as per standard obstetrical protocols.

If a woman tests positive, and is not in labor, she should be advised to deliver in a tertiary facility, anticipating the complications during delivery. COVID-19 dedicated hospitals provide all the facilities to manage complications during or after delivery in patients with COVID-19 infection.

The list of COVID care centers (for management of mild cases), COVID dedicated healthcare centers (for managing moderate cases) and COVID dedicated hospitals (for managing severe cases) has been released by the government and keeps getting updated as an increasing number of centers get enlisted.

If one is already in labor and cannot be referred, assess the severity of COVID-19 symptoms, and involve an infectious diseases or medical specialist to follow a multidisciplinary team approach for management of the patient.

Monitor maternal temperature, respiratory rate and oxygen saturation. Fetal monitoring should be done using CTG.

Currently, there is not enough evidence to favor caesarean birth over vaginal delivery in patients with COVID-19 infection. Caesarean delivery should be performed for obstetrical reasons or if urgent delivery is deemed necessary due to medical condition. So, the route of delivery should not be altered in view of the COVID-19 positive status.

Artificial rupture of membranes may be done as per indication as COVID-19 virus has not been found in vaginal secretions as of now.

Regional (epidural or spinal) analgesia or anesthesia is considered safe in the presence of Coronavirus infection. Epidural analgesia should be offered to laboring women with suspected/confirmed COVID-19. An added advantage is that it minimizes the need for general anesthesia in case

urgent delivery is required at a later point in time during labor. Emergency caesarean delivery should be considered if the medical condition of the COVID-19 positive patient deteriorates.

All the healthcare workers should be wearing proper personal protective equipment (PPE) while delivering the parturient or while conducting any other operative procedure.

Instrumental delivery can be considered to shorten the length of the second stage of labor in a symptomatic woman with worsening respiratory condition.

#### **Postnatal Management**

There is a genuine concern regarding the transmission of infection to the neonate after birth from the mother's infectious respiratory secretions.

Patient and the family members should be counselled regarding the risks and benefits of breastfeeding, especially emphasizing that breastfeeding is not contraindicated in COVID-19 positive mother. There is no documented evidence suggesting an increased risk for severe complications in the newborns with COVID-19 infection. So, a mother infected with COVID-19 should be encouraged to take precautions like handwashing prior to each feeding session and using a face mask to avoid transmission of infection to her infant.<sup>3,5</sup>

Another option is temporary separation of the infected mother and providing expressed breast milk to the neonate.

#### **Conflicts of Interest**

None declared.

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