

A Case Report of Pregnant Lady having COVID-19 Delivered *via* Cesarean Section in Tertiary Care Hospital in Pakistan

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Abstract

This is case report of 40 years female who presented at term and was co-infected with COVID-19. She had history of previous 3 C-sections so another C-section was performed due to fear of uterine rupture. Her surgery went uneventful. She recovered after surgery from COVID-19. Her infant also tested negative for COVID-19.

Keywords: COVID-19, Tertiary Care Hospital

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(Received: April 19, 2020; accepted: April 25, 2020)

Citation: Tarar SH, Atta H, Khalid M, et al. A Case Report of Pregnant Lady having COVID-19 Delivered *via* Cesarean Section in Tertiary Care Hospital in Pakistan. *J Pure Appl Microbiol.* 2020;14(2):1121-1123. doi: 10.22207/JPAM.14.2.06

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INTRODUCTION

The epidemic of COVID-19 has spread from Wuhan, a city of China to almost every part of the world from December 2019¹. More than 2.2 million people have been affected globally with this pandemic as of today². There is evidence of the spread of the virus from person to person in close contacts and till now, there has been no treatment or vaccine that has been found effective³⁻⁵. Past studies have shown that pregnant females are more at risk of contacting a viral infection and are associated with poor outcomes such as stillbirth, preterm delivery, spontaneous abortion, or maternal death⁶⁻⁹. There is limited clinical data regarding outcomes of pregnant females who have COVID-19 during the pregnancy. In this case report, we report a case of a 40-year-old pregnant female who was 39 weeks pregnant and underwent a cesarean section for delivery of a healthy infant.

Case Report

A 40-year-old female who was G₄P₃A₀ with a history of previous 3 lower segment C-sections, having gestation of 39 weeks and expected date of delivery on 17th April 2020. She presented in outdoor of Aziz Bhatti Shaheed Teaching Hospital Gujrat with complaints of cough and breathlessness for the last 1 day on 12th April 2020. She had a history of contact with diagnosed COVID-19 patients on 6th April 2020. She was admitted in isolation of hospital as a suspected case of COVID-19 and RT-PCR of the nasopharyngeal swab was sent which came back positive for COVID-19. Her physical examination revealed that she had a pulse of 97 beats/min, a respiratory rate of 22 breaths/min, a temperature of 98.6 °F and blood pressure was 110/70 mmHg. She had bilateral fine crepitations at lung bases however rest of the examination was normal. Further investigations showed that she was anemic having Hb 7.0 g/dl, total leukocyte count 5500/mm³; on a differential count, she had a neutrophil count of 84% and lymphocytes count of 12% and her platelet count was 199000/mm³. She was negative for HBsAg, Anti-HCV-Ab, and HIV. She had a normal liver, renal function tests, PT, APTT, and serum electrolytes. Her ECG, chest X-ray, and fetal ultrasound were also in normal limits. She was transfused two pints of packed cell volumes. Her anesthesia fitness was taken and C-section was performed due to a high risk

of rupture as she had three previous cesarean sections. Her surgery went uneventful, which was performed under spinal anesthesia and the patient recovered without any complications. The infant was shifted to isolation in the pediatric nursery and a nasopharyngeal swab was sent for RT-PCR of COVID-19, which came back negative. The patient is still admitted in isolation and recovering well.

DISCUSSION

SARS-CoV-2 is a novel coronavirus that has been declared as a pandemic by WHO. It has spread from China to almost all countries of the world. The main routes of transmission include respiratory droplets as well as through contact³. Multiple studies have determined that respiratory viruses have poor outcomes and are associated with complications during delivery due to changes in immune responses in a pregnant female⁶⁻¹⁰. In one case series of ten pregnant patients infected with SARS in Hong Kong¹¹, it was associated with multiple complications including spontaneous abortion, preterm delivery, and/or maternal death. One recent case report of a pregnant patient with COVID-19 showed that it was not associated with any complications during delivery. However, normal vaginal delivery was performed in their case compared to C-section in this case¹². One recent review of 32 pregnant patients with COVID-19 determined that about 47% of patients had preterm delivery and 6.25% (2 patients) were needed intensive care¹³. Another review stated that mother to child transmission of SARS-CoV-2 is low in patients delivered *via* cesarean delivery¹⁴.

This case reported a pregnant female who was affected with COVID-19 and delivered *via* C-section at 39 weeks of gestation. A healthy infant was born who was not affected by COVID-19 after testing. The postpartum and neonatal course was without any event. All the healthcare workers remained asymptomatic. Although the patient had previous three cesarean sections, still her surgery was without any complicated event. This may be attributed to that patient was healthy and was on regular visits to the hospital before delivery and her fetus remained healthy throughout the pregnancy. Patients had no previous medical illness and her COVID-19 was mild. Thus making this an uncomplicated delivery and infant was free of COVID-19 as the vertical transmission is low¹⁴.

COVID-19 is a new challenge for this year. There is not enough data regarding the outcomes of pregnancy in COVID-19 positive pregnant mothers. This is probably the first case report in Pakistan regarding the delivery of COVID-19 patients *via* cesarean section. Further studies/case series/case reports are needed to be performed in this regard so that the exact nature of outcomes can be established.

ACKNOWLEDGMENTS

All listed author(s) are thankful to their representative universities/institutes for providing the related support to compile this work.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

AUTHORS' CONTRIBUTION

All listed author(s) have made a substantial, direct and intellectual contribution to the work, and approved it for publication.

FUNDING

None.

ETHICS STATEMENT

This is a case report of a patient which is just observation of event and was reported after the informed consent of patient and approval of ethical committee of hospital. No intervention other than standard treatment was done.

DATA AVAILABILITY

Not applicable.

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