

## Case report on Antenatal mother Infected with Corona virus disease -2019.

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### ABSTRACT:

**Introduction:** The World Health Organization declared a public health emergency on January 30, 2020, as a result of the coronavirus illness 2019 (COVID-19), which was caused by the novel severe acute respiratory syndrome coronavirus 2. (SARS-CoV-2). Newborns may show COVID-19 indications, according to the findings of current investigations. Despite the fact that the disease expresses itself differently in different cultures, only a few studies have been conducted on COVID-19-infected mothers. The World Health Organization termed the new coronavirus illness 2019, caused by severe acute respiratory syndrome. coronavirus disease on January 7, 2020. (COVID-19) reported in ANC-MOTHER : as a percentage of the total number of cases in the general population Because the United Nations Children's Fund (UNICEF) estimates that 0.35 million kids are born each year, screening pregnant women and providing perinatal care to babies of COVID-19 positive moms is critical. Initially, there was little evidence of mother-to-infant transmission, and only a few deaths in ANC- MOTHER and her newborn were reported, but now that transplacental transmission has been demonstrated, transmission can be controlled with good care or all preventive measures.

**Patient history:** Due to uterine contractions, a 35-year-old woman was referred to the AVBRH Hospital, Sawangi Meghe, Wardha. She was gravida4, para3, with a 39-week pregnancy and three previous caesarean sections. She had no underlying illnesses and had no previous exposure to COVID-19-infected people. On admission, she didn't have a fever or any other symptoms like cough, sore throat, or muscle weakness.

**Clinical Findings:** The patient had undergone with various investigations like blood test ,USG, physical examination and CT scan ,Computers tomography, and newborn assessment

**Medical Management:** Patient was treated with calcium supplement and iron supplement. Inj. Piptaz 4.45gm, it is antibacterial Drug, It's Prevent the growth or spread of bacteria .

Inj. clindamycin 600mg, it is a antibiotic drug, and it's action is slowing and stopping the growth of bacteria. Inj Levoflox 750mg, it is a antibiotic drug, Inj neomol 100ml, it is a painkiller ;Tab Limcee 500mg , it is vitamin supplement . Tab zincovit , it is nutrition suppliment and preventing vitamin and mineral deficiency ; Inj dexa 6mg, it is a steroid ,it is treat a condition such as a inflammatory and autoimmune condition , Tab ecosprin 75mg, it is (NSAID) non-steroid Anti inflammatory drug ,it decrease the formation harmful blood clots . Inj ramdesivir, it is antiviral drug used to treat Covid infection.

**Nursing management:** Administered fluid replacement i.e. DNS and RL, Fetal monitoring, monitored all vital signs hourly. Do physical examination, Give proper information regarding the disease condition, provide proper environment to the

patient, provide proper care to the patient, give psychological support to the patient, educate patient regarding the disease condition, discuss about the health issues of the patient with doctor .

**Conclusion :** In conclusion, the intensity of Covid -19 Antenatal mother's stage and degree of sickness.

**Keywords:** Vertical transmission, COVID-19, case report, Maternal–fetal transmission, Antenatal mother.

### **Introduction:**

Acute respiratory distress syndrome (ARDS) is a condition that occurs when the SARS-CoV-2 is the third coronavirus to pose a global threat in the twenty-first century. The World Health Organization has termed this virus coronavirus illness 2019 (COVID-19).<sup>1</sup>

Over 13.8 million cases have been reported in 188 countries and territories since July 17, 2020, leading in over 592,000 deaths. The impacted population has yielded around 7.77 million cases. According to a notice made by the People's Republic of China on February 2, 2020, people can be infected with SARS-CoV-2 due to their immaturity of immune systems. Despite the fact that the epidemic continues to expand, we have a limited grasp of COVID-19 infections and their clinical implications. The illness is frequently milder in People's, according to recent studies, but cases have been reported.<sup>2</sup>

Indeed, higher severity is linked to age, as well as pre-existing and underlying illnesses. Nonetheless, the disease's manifestation varies from person to person, and it sometimes necessitates strong treatment. People infected with SARS-CoV-2 have had their symptoms and signs researched extensively.<sup>3</sup> Despite the fact that COVID-19 has been mentioned in a few studies, pregnant women may be at a higher risk of severe COVID-19 infection based on documented outcomes from related viruses such as severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS); however, data for COVID-19 is insufficiency<sup>4</sup>.

Only a few studies have looked into the clinical aspects of SARS-CoV-2 in pregnant women, as well as vertical transmission, as far as we know. As a result, it's unknown if SARS-CoV-2 can be passed down through the family and cause serious infection. Cases of COVID-19 infection in a pregnant mother are documented in this study.<sup>5</sup>

### **PATIENT INFORMATION :**

A 35 yr. old women was referred to the AVBRH Hospital, Sawangi Meghe, Wardha. Contractions of the uterus She had no underlying illnesses and had no previous exposure to COVID-19-infected people.

She had no fever, cough, sore throat, or muscle weakness when she was admitted. When she was admitted, her vital signs were as follows: 110/70 mmHg blood pressure, 130 bpm heart rate, 37.5 °C temperature, 26 bpm respiration rate, and 80% oxygen saturation (SpO<sub>2</sub>)

The case was diagnosed as gravida 4, para 3, with a gestational age of 39 weeks and a history of three previous caesarean sections after the doctor performed an examination.

### **PATIENT SPECIFIC INFORMATION:-**

A35 yr old female had good obstetrical history , In past she had 1 miscarriage . Now she completed her 39 weeks of gestational age .

### **PRIMARY CONCERN AND SYMPTOMS OF THE PATIENT :-**

A 35 yr old female was visited in AVBRH hospital OPD on date -15/04/21 with vaginal distention 39 weeks of gestational age .

**MEDICAL FAMILY AND PSYCHOSOCIAL HISTORY :-**

Present case had no any medical history. In family history she is belong to nuclear family and her husband had medical history i.e. DM. She mentally stable, conscious and oriented. She was maintaining the good relationship with doctors and nurses as well as other patients also.

The family consists of four members. Covid test reports comes positive in my patient and her neonate admitted to the hospital, none of the other members had any health issue.

**RELEVANT PAST INTERVENTIONS WITH OUTCOMES :-**

Present case had the bad obstetric history (miscarriage) after miscarriage she took the treatment on regular menses and she was conceived the pregnancy.

**CLINICAL FINDINGS:-**

She was conscious and time, date, and location oriented, and her current case was unhealthy. Her blood pressure was 110/70 mmHg, her heart rate was 130 beats per minute, her temperature was 37.5 degrees Celsius, her respiratory rate was 26 breaths per minute, and her oxygen saturation (SpO<sub>2</sub>) was 96%.

On breast examination, breast was enlarged, tenderness and bluish vein visible. Nipple was large and erected. On abdomen inspection, stria gravidarum, linea nigra was present. Abdominal shape was cylindrical and fundal height was 35cm . In abdomen palpation, fundal grip show that hard rounded structure feel and presentation was breech. In lateral grip, right anterior curve was feel i.e. spine and left lateral side, felt small globular mass i.e. extremities, lie was longitudinal.

In Pawlick's grip movable small smooth masses was felt. In pelvic grip small smooth masses was felt. Foetal heart sound was 160 beat/min. On vaginal examination, discharge was seen, with uterine prolapsed.

**DIAGNOSTIC ASSESSMENT:-**

On the basis of patient history, physical examination, abdominal palpation and USG findings are 39 wks GA .

According to the laboratory results, the lymphocyte count was lower than normal (1 109/L), and the platelet count, liver enzymes, and creatinine level were all within normal ranges, but the C-reactive protein level (CRP) was significantly higher. The biochemistry of the blood and the operation of the coagulation system were both within normal limits.

Because of the elevated CRP level and the likelihood of COVID-19 infection, a GeneXpert COVID-19 ribonucleic acid (RNA) reverse transcription polymerase chain reaction (RT-PCR) test was done, with positive results.

**PROGNOSIS :-**

In blood investigation show the present case had Normal, ultra-sonography finding was Normal.

**THERAPEUTIC INTERVENTION :-**

Present case took medical management with Patient was treated with calcium supplement and iron supplement.

Inj.piptaz 4.45gm, it is antibacterial Drug, It's Prevent the growth or spread of bacteria .

Inj clindamycin 600mg, it is a antibiotic drug, and it's action is slowing and stopping the growth of bacteria.

Inj levoflax 750mg, it is a antibiotic drug,

Inj neomol 100ml, it is a painkiller

Tab Limcee 500mg , it is vitamin supplement

Tab zincovit ,it is nutrition suppliment and preventing vitamin and mineral deficiency

Inj dexta 6mg, it is a steroid ,it is treat a condition such as a inflammatory and autoimmune condition

Tab ecosprin 75mg, it is (NSAID) non-steroid Anti inflammatory drug ,it decrease the formation harmful blood clots

Inj ramdesivir, it is antiviral drug used to treat Covid infection.

No any changes in therapeutic intervention

#### **DIETARY MANAGEMENT :-**

A well-balanced diet rich in High Biological Value proteins and moderate carbs and fats. To address the expectations of the patients, provide Oral Nutrition Supplements and Antioxidants. Antioxidant vitamins and minerals, particularly Vitamin C And vitamin D should be encouraged.

The major goal of a COVID patient's diet is to eat items that will help them restore muscle, immunity, and vitality. Complex carbohydrates are abundant in whole grains such as ragi, oats, and amaranth. Protein-rich foods include chicken, fish, eggs, paneer, soya, almonds, and seeds. During these days, healthy fats such as walnuts, almonds, olive oil, and mustard oil are recommended.

Turmeric milk should be had once a day to increase one's immunity. When you have COVID, you must eat five servings of all colours of fruits and vegetables to receive enough vitamins and minerals. You can eat tiny amounts of dark chocolate with at least 70% cocoa content to improve your mood, relieve anxiety, and strengthen your immunity.

The majority of COVID patients have loss of smell and taste, as well as swallowing difficulties. It is critical to consume soft foods in little amounts at regular intervals and to include amchoor in the diet.

#### **EXERCISE :-**

Exercise is very important thing of our lifestyle it helps to recover stress .some of exercises which ANC mother with Covid infections must do.

##### **1. BREATHING :-**

Because Covid-19 mostly affects the lungs and respiratory system, effective breathing exercises such as Kapalabhati and anulom-vilom can assist your lungs get stronger, allowing you to recover faster.

## 2. Go for a walk

Even if you were a marathon runner prior to catching the virus, you must convince your mind that now is the time to concentrate on recovery rather than breaking personal records. Begin by taking a 10-15 minute walk around your house. You can progressively extend your time by 5 minutes if you do not experience any shortness of breath.

## 3. Yoga

Yoga and meditation are recommended by doctors throughout the rehabilitation phase because they develop mindfulness and help to enrich your mental well-being. If you've never done yoga before, look for a beginner's class and adjust the motions to your comfort level; avoid any exercises that cause your heart rate to rise.

## 4. Breathing Exercise

Slowly and deeply inhale through your nose. Maintain a comfortable posture with your shoulders. Slowly exhale through your mouth. Purse your lips slightly as you exhale, but keep your jaw relaxed. Carry on with the breathing exercise. Repeat for a few minutes, or until you begin to feel better.

### PREVENTIVE MEASURES OF ANC MOTHER :-

Pregnant women should take precautions such as frequent hand washing, avoiding infected people, crowded environments, and public gatherings unless absolutely necessary. They should take their temperature on a regular basis and get medical attention if they develop shortness of breath, a cough, or a fever.

COVID-19-positive women should be quarantined for at least 14 days. The Chinese National Health Commission has proposed that instead of nursing, infants born to mothers with known or suspected illnesses be monitored. At this time, there is no proof that 2019-nCoV is transmitted through breast milk.

Women who are pregnant should keep a close eye on their vitals (pulse rate, respiration rate and temperature). They should also keep their maternity-care provider informed about their health and consult with them on a frequent basis. If hypoxia develops, utilise extracorporeal membrane oxygenation and oxygen inhalation (60–100% concentration at 40 L/min).

### NURSING PERSPECTIVE :-

IV fluid was provided to maintain the fluid and electrolyte. Monitored fetal heart rate and vital signs per hourly. Used a triple-layer medical mask and discarded after 8 hours of use or sooner if wet or obviously soiled. If a caregiver enters the room, both the caregiver and the patient should wear the N 95 mask. After disinfection with 1% Sodium Hypochlorite, the mask should be discarded. Maintain proper hydration by resting and drinking plenty of water. Always maintain proper respiratory hygiene. Handwash for at least 40 seconds with soap and water or clean with an alcohol-based sanitizer on a regular basis. Personal items should not be shared with other family members. Using a 1 percent hypochlorite solution, clean frequently touched objects in the room (tabletops, doorknobs, handles, etc.). Temperature should be checked on a regular basis. Daily, use a pulse oximeter to check your

oxygen saturation. If you observe any deterioration in your symptoms, contact your doctor right once. If you observe any deterioration in your symptoms, contact your doctor right once.

**Instruction for caregivers :-**

Mask: A triple-layer medical mask should be used by the caregiver. When in the same room as the sick person, a N95 mask may be considered. Hand hygiene must be maintained after interaction with an unwell individual or the patient's immediate environment.

Avoid direct contact with the patient's body fluids, especially oral and respiratory secretions, as well as the patient's surroundings. When handling the patient, wear disposable gloves. Hand hygiene should be practiced both before and after removing gloves.

**DISCUSSION :**

Positive RT-PCR assay results on throat swab samples taken within the first 24 hours validated the Antenatal's Covid -19 infection. Some of the most common symptoms of the sickness include fever, cough, tiredness, shortness of breath, and a loss of smell and taste. <sup>6</sup>

While most cases have minor symptoms, some can progress to acute respiratory distress syndrome, which can result in cytokine storms, multiorgan failure, septic shock, and blood clots. <sup>5</sup> COVID- According to a study, 19 people who have been sick can infect others through respiratory droplets.

Despite the researchers <sup>7</sup> best efforts to prevent respiratory droplets and aerosols from spreading, contamination of the operating room or medical personnel may have had an impact. the positive findings of the current study Previous research has connected the SARS-associated coronavirus and other respiratory viruses like influenza to a variety of maternal morbidities include spontaneous abortion, severe maternal sickness, and maternal mortality.<sup>8</sup>

Physiological and metabolic changes, as well as immunosuppressive settings, can reduce inflammatory immune responses during pregnancy, according to the findings of certain studies.<sup>9</sup> As a result, pregnant women are exposed to a wide range of respiratory infections; yet, these modifications are required to keep the pregnancy going. <sup>10</sup> Related studies on antenatal care<sup>11-15</sup> and effects of pandemic on healthcare<sup>16-19</sup> were reviewed.

**CONCLUSION:**

Finally, the intensity of the covid-19 infection in the Antenatal mother had little to do with the stage or severity of the illness.

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