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Case Report

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Intrauterine fetal demise and covid-19: a case report from Eastern Democratic Republic of Congo

Abstract

Background: Pregnant women are at an increased risk for severe illness from COVID-19 compared to non-pregnant women. Additionally, they might have an increased risk of adverse pregnancy outcomes, such as abortion, preterm birth or fresh still birth.

Case presentation: We report a case of a 37-year-old woman, Gravida 4, Para 1, Abortion 2diagnosed with COVID-19 during her pregnancy complicated by an intrauterine fetal demise. This was the first case of covid 19 in pregnancy to be documented in our region.

Conclusion: We recommend further reseachers to take into consideration covid 19 in pregnancy and find out what to be done by treating them accordingly early enough to avoid casualty in view of their increased risk of severe forms.

Keywords: intrauterine fetal demise, pregnancy outcome, covid-19, case report

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Introduction

In December 2019, a novel coronavirus (SARS-CoV-2) -induced pneumonia, started in Wuhan and rapidly spread in China and other countries, causing a global health problem.[1] Pregnancy is a comorbidity situation.[2] In these epidemiological conditions, pregnant women were not spared against diseases like COVID 19.

Pregnant women are at an increased risk for severe illness from COVID-19 compared to non-pregnant women. Additionally, pregnant women with COVID-19 might have an increased risk of adverse pregnancy outcomes, such as preterm birth.[3]

It was not clear earlier in the pandemic whether pregnancy itself was a risk factor for severe illness from COVID-19. There is now growing evidence that pregnant women may be at increased risk of severe illness from COVID-19 compared with non-pregnant women, particularly in the third trimester.[4]

The pregnant woman can be considered to be more at risk of severe form than the non-pregnant woman. Their fragile immunity may expose them at higher risks of developing severe forms of the disease and to adverse pregnancy outcomes, especially during the third trimester.[5]

In the PregCOV-19 systematic review, the most common symptoms of COVID-19 in pregnant women were cough (41%) and fever (40%). Less frequent symptoms were dyspnoea (21%), myalgia (19%), loss of sense of taste (14%) and diarrhea (8%).[5]

Therefore, a pregnant woman with suspicion symptom of COVID 19 need investigations than isolation, close monitoring and follow up.[6]

The knowledge gained from previous human coronavirus outbreaks suggests that pregnant women and their fetuses are particularly susceptible to poor outcomes.[7]

COVID-19 may constitute a threat of premature delivery, intrauterine growth retardation, premature rupture of the membranes, in-utero foetal death or even a premature neonatal death during delivery or soon after.[5]

CA recent editorial on COVID-19 in pregnancy argues that management guidelines should be based on data from the current epidemic rather than drawing on the limited experience from previous outbreaks, as their epidemiology, clinical course and response to treatment may differ.[8]

The optimal laboratory evaluation of women who have had a stillbirth is controversial. Many lists have been proposed, but the most cost-effective approach has not been determined.

The author orders or reviews recent tests results as cause of fetal demise: Fetomaternal hemorrhage (eg, Kleihauer-Betke test, flow cytometry; Urine drug screen (eg, cocaine); Complete blood count (CBC) for evaluation for an inherited hemoglobinopathy or other maternal disorder (eg, infection); Serologic testing for syphilis; A fasting glucose concentration or glycated hemoglobin level for excluding gestational diabetes; Blood antibody screen to exclude red cell alloimmunization; Lupus anticoagulant and anticardiolipin and anti-beta2-GP I antibody titers (immunoglobulin M [IgM] and IgG) to exclude antiphospholipid syndrome; Thyroid function tests and liver chemistries are obtained in selected patients; Testing for inherited thrombophilias because of stillbirth is controversial; Cytomegalovirus titer (IgM, acute and convalescent IgG), toxoplasmosis titer (IgM, acute and convalescent IgG), parvovirus B19 titer (IgM), and a *Listeria* culture are obtained if indicated by maternal clinical, prenatal sonographic, or histopathologic findings.[9]

It is necessary to investigate the risk of increased coronavirus disease severity during pregnancy, the effects of coronavirus disease on perinatal prognosis.

Case presentation

A 37 year old para 1 with history of 2 abortions in follow up for precious pregnancy.

She aborted spontaneously at the first and third pregnancy at 7weeks of amenorrhea, the last one being two years back. She had no history of chronic illnesses and no allergies.

She was in outpatient for secondary infertility, as soon as she conceived, she started antenatal care.

She conceived one month later, initiated antenatal care during the first trimester and was managed with cardioaspirin, hematinics and progesterone. She had a fetal ultrasound performed at 12 and 22 weeks, both of which were unremarkable and revealed a viable intrauterine fœtus without malformations. She was seen at monthly intervals and completed routine antenatal testing. This included complete blood count, Blood group, malaria testing, syphilis test (VDRL), HIV test and urinalysis, all of which was found to be within normal limits. She was reviewed each month for close follow up.

At 25 weeks and 6 days gestational age, she then presented to the clinic with complaints of coldness, cough, flu and high temperature for the last 4days. On exam she was noted to be sick looking, a bit weak. She had normal pallor, no general edema or jaundice. Her temperature was 36.7°C, blood pressure 110/80mmHg and heart rate at 120bpm, oxygen saturation of 97% and the fetal heart rate of 136 beat per min. Laboratory tests revealed white blood cells of 11.000, hemoglobin of 11g /dl and positive for malaria with only 0-1 plasmodium parasites per microliter, the blood sugar level was in normal range. The fœtal movements were normal. With these presenting signs and symptoms, the differential diagnoses included pneumonia and malaria in pregnancy.

She was put on Azythromicine 500mg daily for 5days, vitamin C 500mg TDS, nasal drops, arthemisinine for malaria and sekrol (anti-cough syrup) 10ml TDS.

Three days after admission she reported difficulty in breathing with Respiratory rate at 20bpm and oxygen saturation of 94%, and a SARS CoV- 2 RT-PCR was requested which was done by nasal and pharyngeal swabs and returned positive. Radiology was not available at our facility therefore no x-ray or CT scans could be performed for the patient. The patient was isolated and started on oral Zinc 20mg BD, oral Rovamycine one caps two times a day and IV ceftriaxone 1g two times a day. Five days after admission, and two days after diagnosis with COVID-19, she was improving with regression of cough, no fever and mild dyspnea. Eight days after admission with daily fetal check two times a day using fetoscope but 5 days after diagnosis of covid 19 she reported reduced fetal mouvements and an ultrasound scan revealed no fetal cardiac activity.

Given this diagnosis the plan was made to proceed with an induction of labor. Hemoglobin, blood group and coagulation profile were assessed and found to be unremarkable. Induction was initiated with misoprostol 100 micrograms inserted in the posterior fornix of the cervix.

Ten hours after insertion she reported lower abdominal pain with spotting and she was then monitored for labour like pains. Six hours later, she expelled a fresh still birth baby girl weighted 880g. The active management of the third stage of labour was done without any other complication.

The swabs were taken for the fetus and the placenta and it were revealed to be negative.

No pathological study of the placenta was performed because of no available pathologist but gross anatomy appeared normal.

The mother was stable until discharge on the fourteenth day after treatment.

Discussion

We were not able to determine the cause of that sudden intrauterine death despite the close monitoring which has been done; the previous abortions occurred at 7weeks of amenorrhea. She had received the appropriate medication for malaria and all routine antenatal testing were in normal limits.

Routine serologic testing for infection is unlikely to be useful because many women have positive serology from prior infections, which are unrelated to the stillbirth.[9]

Although the PregCOV-19 Living Systematic Review13 found that stillbirth and neonatal death rates were not raised for women with COVID-19, it is concerning that the preterm birth rate is raised to such an extent.[4]

The risk of mother-to-child transmission of COVID-19 seems to be low. Cases of perinatal transmission of COVID-19 have been described, but it is still unclear if this occurred via the transplacental or other routes during delivery.[5] The lab results of the swab for our patient' fetus and placenta were also negative.

The risk of perinatal transmission of SARS-CoV was low, as there was no evidence of the presence of virus/viral particles in the products of conception or the infants.[8]

A large study (1) from New York also reported reassuring neonatal outcomes during the pandemic. Of 1481 births overall, 116 (8%) women (giving birth to 120 neonates) tested positive for SARS-CoV-2. All 120 neonates were tested at 24 hours of life and none were positive for SARS-CoV-2. Of 79 neonates who had a repeat SARS-CoV-2 polymerase chain reaction test at age 5–7 days (66% follow-up rate), all tested negative; 72 neonates were also tested at 14 days old and again, none were positive. None of the neonates had signs of COVID-19.[4]

To find out whether an infectious agent can infect the fetus or newborn by vertical transmission is therefore of particular interest. Pregnant women and their newborns should be evaluated for being potential risk groups in the current COVID-19pandemic.[7]

Conclusion

Since COVID is real and women are at increased risk of severe forms, We recommend further reseachers to take into consideration Covid 19 in pregnancy and find out what to be done by treating them accordingly early enough to avoid casualty in view of their increased risk of severe forms.

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Author contributions

Olivier Mulisya was the main gynaecologist attending to the patient and wrote the first draft Tambavira was one of the physician taking care of the patient Jeff Mathe, Adeline Boatin, Baraka and Paluku pablo contributed to manuscript drafting and revision.

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Conflicts of interest

The authors declare that they have no competing interests.

References

1. Zaigham M, Andersson O. Maternal and perinatal outcomes with COVID-19: A systematic review of 108 pregnancies. *Acta Obstet Gynecol Scand*. 2020;99(7):823–829.
2. Coronavirus (COVID-19), pregnancy and women's health.
3. https://www.cdc.gov/coronavirus/2019-ncov/downloads/cases-updates/covid-fs-Pregnancy.pdf.
4. Birindwa EK, Guy MM, Olivier N, et al. A case study of the first pregnant woman with COVID-19 in Bukavu, eastern Democratic Republic of the Congo. *Matern Health Neonatol Perinatol.* 2021;7(1):6.
5. Chen S, Liao E, Cao D, et al. Clinical analysis of pregnant women with 2019 novel coronavirus pneumonia. *J Med Virol.* 2020;92(9):1556–1561.
6. Wong SF, Kam MC, Tse NL, et al. Pregnancy and perinatal outcomes of women with severe acute respiratory syndrome. *Am J Obstet Gynecol.* 2004;191(1):292–297.
7. World HealthOrganization. Infection prevention and control for the safe management of a dead body in the context of COVID-19: interim guidance, 24 March 2020. WHO; 2020.
8. http://www.santelaurentides.gouv.qc.ca/fileadmin/internet/cisss_laurentides/Sante_Publique/Maladies_infectieuses/COVID_employes/Documents_cliniques/DC_Obstetrique_et_pediatrie/MSSS_Directives_prise_en_charge_femmes_enceintes_et_nouveau-nes_COVID-19.pdf
9. Roberts Drucilla J, Lockwood CJ, Baras VA. Gross examination of the placenta. *UpToDate, Waltham, MA (Erişim: 31 Ağustos, 2015)*. 2014.