Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Case Report

A hospital-based COVID-19 abortion case in the early phase of the pandemic ☆

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ABSTRACT

In this case report we discuss changes in hospital-based abortion care due to the COVID-19 pandemic. We highlight our experience with exposure to an asymptomatic COVID-19 positive patient. We hope early lessons from the United States epicenter will guide clinicians providing abortion care during this and future pandemics.

The first confirmed case of SARS-CoV-2 (COVID-19) occurred in New York State on March 1, 2020; widespread community transmission followed. On March 7, New York declared a state of emergency. By April 15, the New York State Department of Health reported more than 123,000 confirmed cases in New York City [1,2].

We provide abortion care in New York City, the U.S. pandemic epicenter, and have continued to provide this care. Our hospital advised postponing non-urgent surgery beginning March 16. Between March 13 and 21, 32.6% of COVID-19 positive obstetric patients presented without symptoms [3]. Healthcare worker exposure to asymptomatic, untested women led to universal testing in the obstetric environment on March 22. Throughout this time, our hospital recommended N95 masks and face shields for healthcare workers and negative pressure rooms, if available, during aerosolizing procedures in known or suspected COVID-19 infection.

This case report describes our experience caring for an asymptomatic COVID-19 positive patient.

1. Case report

The Hematology and Maternal Fetal Medicine services contacted the Family Planning service regarding a 33 year-old pregnant woman with Hemoglobin SS disease admitted on March 24 at 13 weeks and 4 days by last menstrual period for vaso-occlusive crisis. In addition to anemia (hemoglobin 5.9 mg/dL), her history included avascular joint necrosis and acute chest syndrome requiring exchange transfusion. A previous pregnancy required weekly home blood transfusions, intravenous (IV) hydration and extended inpatient admissions. She initially intended pregnancy continuation. An admission nasal swab test for COVID-19 was negative.

Treatment included IV analgesia, hydration and oxygen throughout her hospitalization. The Hematology service advised that she would need care similar to that provided in her previous pregnancy which would prove challenging during the pandemic. Providers would face delays obtaining matched blood for transfusion given multiple antibodies and potential shortages of blood products. Further, home-based care or hospitalization would increase COVID-19 exposure.

After multiple conversations over the course of her inpatient treatment, the patient decided to proceed with surgical abortion. We utilized in-hospital telemedicine consultation to decrease face-to-face exposure. The dilation and evacuation (D&E), however, was delayed because preparing matched blood products required two days. Operating room committee approval (pandemic-specific) added two days due to acute reductions in available anesthesia and nursing staff.

At 15 weeks gestation (hospital day [HD] 11) she received doxycycline, 200 mg orally for surgical prophylaxis, and on HD 12, misoprostol 400mcg vaginally for cervical preparation. The patient remained unmasked until surgery given her COVID-19 negative

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status. Operating room staff and providers donned N95 masks, face shields, gowns and gloves. The Anesthesia service provided usual care with deep IV sedation and mask ventilation which is not considered an aerosolizing procedure. We performed a D&E without complications. Placental evaluation included a COVID-19 test which resulted negative.

On HD 13, the patient developed hypotension unresponsive to fluid resuscitation. A chest X-ray suggested pneumonia. The team empirically started doxycycline, aztreonam, flagyl and vancomycin to treat community or hospital acquired pneumonia as well as pneumonia due to aspiration or COVID-19. Her hemodynamic status improved. On HD 16, a COVID-19 retest returned positive. Hydroxychloroquine 400 mg orally was added. She was discharged home on HD 18. She declined contraception. The Family Planning providers remained asymptomatic and continued to work during the 14 days after the D&E. The providers were not tested after exposure, per hospital protocol at that time.

2. Comment

Both the patient and providers experienced preventable exposure to COVID-19. The pandemic strained the hospital system resulting in a prolonged preoperative process; this extended hospitalization increased her infection risk. The patient became COVID-19 positive likely due to nosocomial exposure. A test was negative on admission and a repeat test was positive 13 days later. Alternatively, the initial test may have been a false negative. Transmission of COVID-19 from healthcare workers to patients occurs in a variety of healthcare settings [4]. Exposure to healthcare workers should be minimized.

Early pandemic research has identified late suspicion or recognition of COVID-19 in patients as risk factors for provider infection [5]. In the setting of community transmission, pregnant women will present for abortion in the pre-symptomatic phase. In this case, even though the team did not suspect COVID-19 infection, providers used adequate PPE and remained asymptomatic. However, such protection may not be routine when patients deny COVID-19 symptoms or previously tested negative.

Providers cannot rely on the presence of COVID-19 symptoms to guide practice. Routine preoperative testing could identify COVID-19 positive patients but may not be widely available. We recommend staff providing surgical abortion or anesthesia universally use PPE advised for COVID-19 positive patients in settings with high rates of community transmission. Masking all patients provides a sensible approach to prevent transmission and aligns with current recommendations for face covering in many U.S. communities.

References:

[1] McKinley J, Sandoval E. Coronavirus in N.Y.: Cuomo Declares State of Emergency. New York Times. March 7, 2020. https://www.nytimes.com/2020/03/07/nyregion/coronavirus-new-york-queens.html. Accessed March 16, 2020.
[2] New York State Department of Health. NYSDOH COVID-19 Tracker. https://covid19tracker.health.ny.gov/views/NYS-COVID19-Tracker/NYSDOHCOVID-19Tracker-TableView?%3Aembed=yes&%3Atoolbar=no&%3Atabs=n. Accessed March 16, 2020.
[3] Breslin N, Baptiste C, Gyamfi-Bannerman C, et al. COVID-19 infection among asymptomatic and symptomatic pregnant women: Two weeks of confirmed presentations to an affiliated pair of New York City hospitals. Am J Obstet Gynecol MFM 2020:100118. doi:10.1016/J.AJOGMF.2020.100118.
[4] Black, James RM et al. COVID-19: The Case for Health-Care Worker Screening to Prevent Hospital Transmission. The Lancet 2020. https://doi.org/10.1016/S0140-6736.
[5] World Health Organization. Coronavirus disease 2019 (COVID-19). WHOT Situation Report – 82. April 11, 2020. https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200411-sitrep-82-covid-19.pdf?sfvrsn=74a5d15_2. Accessed April 16, 2020.