

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.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active. Contents lists available at ScienceDirect



## Travel Medicine and Infectious Disease

journal homepage: www.elsevier.com/locate/tmaid



## A pregnant woman with COVID-19 in Central America



Dear Editor,

Over the last three months, the pandemic of Coronavirus Disease 2019 (COVID-19) has caused significant concern in the world due to its rapid spreading [1,2]. Since February 25, 2020, it has also comprised the Latin America and the Caribbean region [3]. However, there is still limited evidence of the full spectrum and impact of COVID-19 in certain population groups, including pregnant women [4]. No case reports on COVID-19 from Central America are yet available in scientific journals, including its occurrence during pregnancy.

On March 9, 2020, a 41-year-old female, who was 31 weeks pregnant, with gestational hypertension and hypothyroidism, presented to the Hospital Escuela of Tegucigalpa, Honduras, with intermittent fever, dry cough, headache and myalgias for three days. She had a history of travelling in Madrid, Spain, she lived for the last six months there and returned to Honduras on March 4. Her neighbours in Madrid were diagnosed with COVID-19. Therefore, given the patient's travel history and fever, a nasopharyngeal aspirate sample was collected and tested following WHO guidelines for real-time RT-PCR at the National Virology Laboratory of Tegucigalpa, following the protocol Charité, Berlin, Germany [5]. The results were positive, and then she went into isolation at the hospital.

On admission, the physical examination revealed a body temperature of 36.0 °C, high blood pressure (130/100 mmHg), normal pulse, and normal respiratory rate. She presented bilateral conjunctival hyperemia. Lung auscultation revealed no alterations. An obstetric ultrasound revealed a fetus with a dysplastic and multicystic right kidney with no other alterations. On March 9, 2020, she was referred to the National Cardiopulmonary Institute of Tegucigalpa, for follow-up. After ten days of hospitalization, she was stable, remaining under observation until delivery. On March 19, 2020, at week 32, occurred a preterm delivery, with a male newborn obtained by spontaneous vaginal delivery. His birth weight was 1,500 grams. His nasopharyngeal and blood samples tested by SARS-CoV-2 rRT-PCR were negative. He was hospitalized in the Hospital Maria of Pediatric Specialties, Tegucigalpa. The nasopharyngeal sample of the mother at delivery persisted positive at the SARS-CoV-2 rRT-PCR. She remains asymptomatic.

According to previous reports for SARS in pregnancy in Hong Kong, SARS-CoV infection could be associated with poor pregnancy outcomes, including critical maternal illness, spontaneous abortion, or maternal death, preterm birth [6,7]. In this case, her clinical presentation showed no significant alterations related to COVID-19, as has also been reported recently in a case in China, except for the preterm delivery [6].

So far, there is currently no evidence for intrauterine infection caused by vertical transmission in women who develop COVID-19 pneumonia in late pregnancy [4]. A recent study confirmed that the outcomes of patients who were infected in late pregnancy appeared very good [8]. Nevertheless, this implies the need to further assessment, with rRT-PCR, after delivery, as we expect to perform in a few weeks in this case. Pregnant women are particularly susceptible to respiratory pathogens and severe pneumonia because of their physiological adaptive changes (e.g., diaphragm elevation, increased oxygen consumption, and oedema of respiratory tract mucosa) and immunosuppressive state. With the increase of the pandemic in Latin America, a region with high fecundity rates, we should expect to see more cases of COVID-19 among pregnant women that need to be studied in detail to understand better its clinical impact.

## Declaration of competing interest

Authors declare no conflict of interest.

## References

- Holshue ML, DeBolt C, Lindquist S, Lofy KH, Wiesman J, Bruce H, et al. First case of 2019 novel coronavirus in the United States. N Engl J Med 2020;382(10):929–36.
- [2] Li Q, Guan X, Wu P, Wang X, Zhou L, Tong Y, et al. Early transmission dynamics in Wuhan, China, of novel coronavirus-infected pneumonia. N Engl J Med 2020. https://doi.org/10.1056/NEJMoa2001316.
- [3] Rodriguez-Morales AJ, Gallego V, Escalera-Antezana JP, Mendez CA, Zambrano LI, Franco-Paredes C, et al. COVID-19 in Latin America: the implications of the first confirmed case in Brazil. Trav Med Infect Dis 2020:101613.
- [4] Chen H, Guo J, Wang C, Luo F, Yu X, Zhang W, et al. Clinical characteristics and intrauterine vertical transmission potential of COVID-19 infection in nine pregnant women: a retrospective review of medical records. Lancet 2020;395:809–15.
- [5] Corman VM, Landt O, Kaiser M, Molenkamp R, Meijer A, Chu DKW, et al. Detection of 2019 novel coronavirus (2019-nCoV) by real-time RT-PCR. Euro Surveill 2020:25.
- [6] Wang X, Zhou Z, Zhang J, Zhu F, Tang Y, Shen X. A case of 2019 Novel Coronavirus in a pregnant woman with preterm delivery. Clin Infect Dis 2020. https://doi.org/10. 1093/cid/ciaa200.
- [7] Wong SF, Chow KM, de Swiet M. Severe acute respiratory syndrome and pregnancy. BJOG 2003;110:641–2.
- [8] Yu N, Li W, Kang Q, Xiong Z, Wang S, Lin X, et al. Clinical features and obstetric and neonatal outcomes of pregnant patients with COVID-19 in Wuhan, China: a retrospective, single-centre, descriptive study. Lancet Infect Dis 2020. https://doi.org/10. 1016/S1473-3099(20)30176-6.

https://doi.org/10.1016/j.tmaid.2020.101639 Received 20 March 2020; Accepted 20 March 2020 Available online 25 March 2020 1477-8939/ © 2020 Elsevier Ltd. All rights reserved.

D. Katterine Bonilla-Aldana

Semillero de Zoonosis, Grupo de Investigación BIOECOS, Fundación Universitaria Autónoma de las Américas, Pereira, Colombia Public Health and Infection Research Group, Faculty of Health Sciences, Universidad Tecnológica de Pereira, Pereira, Risaralda, Colombia

Jaime A. Cardona-Ospina, Alfonso J. Rodríguez-Morales\* Public Health and Infection Research Group, Faculty of Health Sciences, Universidad Tecnológica de Pereira, Pereira, Risaralda, Colombia Grupo de Investigación Biomedicina, Faculty of Medicine, Fundación Universitaria Autónoma de las Américas, Pereira, Colombia E-mail address: arodriguezm@utp.edu.co (A.J. Rodríguez-Morales).

Lysien I. Zambrano Universidad Nacional Autónoma de Honduras, Tegucigalpa, Honduras

Itzel Carolina Fuentes-Barahona, Daysi Anabell Bejarano-Torres, Carolina Bustillo, Gloria Gonzales, Gissela Vallecillo-Chinchilla Hospital Escuela, Tegucigalpa, Honduras

Fredal Eduardo Sanchez-Martínez, Jorge Alberto Valle-Reconco Universidad Nacional Autónoma de Honduras, Tegucigalpa, Honduras

Manuel Sierra Universidad Tecnológica Centroamericana, Tegucigalpa, Honduras

<sup>\*</sup> Corresponding author. Public Health and Infection Research Group, Faculty of Health Sciences, Universidad Tecnológica de Pereira, Pereira, Risaralda, Colombia.