

Screening strategies for SARS-CoV-2 in pregnant women at term gestation

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From the end of February 2020, SARS- CoV- 2 has dramatically impacted on Italy, which was the worst affected country in Europe, resulting in 233197 people infected and 33475 deaths.¹ Considering the wide spread of the virus and the frequent lack of symptoms in pregnant women, since May 1st, we have decided to have universal screening with nasopharyngeal swabs and the quantitative polymerase-chain-reaction exam, to detect SARS-CoV-2 infection, all women who wished to give birth at our hospital. Fatebenefratelli - San Giovanni Callibita Hospital in Rome, does not have an infectious disease department, and admitted only women afebrile and without symptoms.

From May 1st to June 30th 2020 a total of 412 pregnant women, who subsequently delivered their infants to our hospital, were screened with nasopharyngeal swabs. All women except one were afebrile and without symptoms on admission. The woman and her partner were tested with a swab, both of which were negative in the next two checks. However, while waiting for the result of the test, the couple has been inserted in the isolation path foreseen by our internal protocol.

One woman, afebrile on admission, developed fever and flu-like symptoms during labor, so she was moved to the isolated delivery room, to prevent infection², according with the internal procedures, but further tested negative twice for SARS- CoV- 2. Another woman, afebrile on admission, developed postpartum fever and was treated with antibiotics for presumed postpartum endometritis

Of the 242 nasopharyngeal swabs obtained, none was positive for SARS-CoV-2.

None test turned positive during the hospitalization.

Our experience of universal screening for SARS-CoV-2 in pregnant patients delivering at our hospital showed that the incidence of virus in our cohort (0%) was lower compared to Rome general population (10,04 X 10000) till 05/28/2020.³

Even in case of false negative results of tests to detect SARS-CoV-2, we didn't register any fever or symptoms in women screened during hospitalization, or cases of obstetricians or midwives or other professionals, being

in contact, infected throughout the month of May 2020.

There are various reasons that can justify this result. One of these was reported by Manfredi et al, which assessed how a lockdown declared without delays, in southern and central Italy, unlike in Lombardy, thanks to the cooperation between the Government and the opposition, could influence the achievement of adequate control results, that was reached in a shorter period in southern and central Italy, if compared to US and other European countries.⁴ Unlike MERS, where complications and adverse outcomes were more common among pregnant women.⁵ Another reason is Covid-19 infection probably affects and runs less severely in pregnant women. Nonetheless, further studies are needed to better understand the virus behavior in pregnant women.

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