SARS-CoV-2 infection testing at delivery: a clinical and epidemiological priority

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SARS-CoV-2 infection testing at delivery: a clinical and epidemiological priority

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ABSTRACT

Background: Universal testing has been suggested as a useful strategy for a safe exit from the total lockdown, without recurrence of COVID-19 epidemic, delivering women being considered a sentinel population. Further universal testing for pregnant women may be useful in order to define appropriate access to COVID19 areas, dedicated neonatal care, and personal protective equipment.

Methods: During the period 10–26 April, all consecutive women admitted for delivery at the Maternity Hospitals of the city of Milan and in six provinces of Lombardy were tested with nasopharyngeal swabs.

Results and conclusion: Out of 1566 women, 49 were tested positive for SARS-CoV-2 (3.1%, 95% Confidence Interval (CI) 2.3–4.0). This value is largely higher than Health Authorities estimate. Of tested positive women, 22 (44.9%) had symptoms or reported close contacts with positive patients, that is were found at risk by the itemized questionnaire. In conclusion, routine estimate of frequency of positivity among delivering women can be considered a useful method to monitor positivity at least in females in their fertile ages.

Universal nasopharyngeal testing for pregnant women admitted to be delivered has been recently suggested in order to define appropriate access to COVID19 areas, dedicated neonatal care, and personal protective equipment [1].

Pregnant women are also a sentinel population, because they are a relatively unselected cohort of women, and hence their prevalence of SARS-COV-2 may be extended to the general population of the same sex and age span [2].

We analyzed the frequency of positive nasopharyngeal tests by rRT-PCR assay in a consecutive sample of women delivering in Lombardy.

Methods

During the period 10–26 April, according to the indications of the Health Authorities of Regione Lombardia, consecutive women admitted for delivery at the Maternity Hospitals of the city of Milan and in...
The second major finding of this study is the observation that most positive delivering women were asymptomatic or did not report close contacts with positive patients at admission. In an analysis of 215 pregnant women delivered infants at the New York–Presbyterian Allen Hospital and Columbia University Irving Medical Center 27 (15.3%) were positive for SARS-CoV-2; of those 29 (87.9%) did not have symptoms of Covid-19 [1]. Likewise, about the 75% of SARS-CoV-2 positive pregnant women observed in a general hospital in Michigan were asymptomatic at admission [6]. The higher proportion of symptomatic positive women observed in our analysis in comparison with the proportion reported in the two US studies, is likely due to the fact that we considered also women who reported close contact with positive patients in the not asymptomatic group.

Pregnant women are younger and therefore are less likely to have typical COVID19 symptoms [7]. this may explain the high rate of asymptomatic women among delivering ones.

In conclusion, the present report underlines the clinical and epidemiological importance of routine testing for SARS-CoV-2 infection in delivering women, and confirms that a large proportion of positive women at delivery are asymptomatic.

Disclosure statement
No potential conflict of interest was reported by the author(s).

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