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Letter to the Editor

The dilemmas of the classification of SARS-CoV-2 infection without clinical manifestations: Asymptomatic or presymptomatic



Dear Editor

We have read the article by Cheng et al.,¹ about a case report of SARS-CoV-2/COVID-19 in Taiwan. As reported, the significant symptoms of that COVID-19 case were fever, dyspnea, and hypoxemia. However, their progression regarding fever appeared on day 5, dyspnea with mild hypoxemia, and radiographical pneumonia on day 9.¹ Then, in this case, the time period from day 1 to day 4 is the presymptomatic phase of the disease. Sometimes it would be misleadingly interpreted as asymptomatic, and in certain conditions, deserve follow-up.

Since the person-to-person transmission through respiratory droplets began to be recognized, one question is if asymptomatic patients may infectious to other people. Apparently viral loads in asymptomatic patients, compared to those symptomatic are similar.²

Reports from China assessing family clusters showed the index cases were asymptomatic. Nevertheless, many reported asymptomatic individuals developed disease over following days. They cannot be considered asymptomatic. Transmission can occur during the incubation period, these are presymptomatic.^{1–3}

Presymptomatic transmission remains relevant for SARS-CoV-2 containment and isolation of infected people.² Individuals developing symptoms should be diagnosed, isolated, and therefore tracing contacts and interruption of transmission chain should be performed.

In addition, studies showing transmission from asymptomatic individuals indicate that ground-glass pattern lesions at CT-scans are found. This is a common finding COVID-19. This is an early sign disease of individuals able to transmit the virus.³

By strict criteria, only one reported case in published literature was genuinely asymptomatic. However, it is striking that the first positive result was 19 days after the trip to Wuhan, the epicenter of the epidemic, which, although it is within the maximum incubation times described, is, at least striking, the late appearance of the test positivity.⁴

On the other side of the question, there are also reports of patients, mainly first cases in regions where the disease had not been detected, which have been followed up and evaluated without finding evidence of asymptomatic transmission to the contacts, with demonstrated exposure.^{3,4}

Finally, it is essential to highlight that, given the research shown, the probability that asymptomatic patients can transmit the disease cannot be denied, however, given the low frequency of reports in this regard, likely, this mode of transmission is not the most important, so the containment of symptomatic patients and their contacts is the measure that can give better results in the search to reduce the burden of the disease in the affected countries.

Author contributions

All the authors substantially contributed to the conception, design, analysis, and interpretation of data, checking and approving the final version of the manuscript, and agree to be accountable for its contents.

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Declaration of Competing Interest

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