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.

Indian Journal of Medical Microbiology 40 (2022) 469

Contents lists available at ScienceDirect

Indian Journal of Medical Microbiology

journal homepage: www.journals.elsevier.com/indian-journal-of-medical-microbiology

Letter to Editor

Is it time to think beyond Covid!

ARTICLE INFO

Keywords
SARS-CoV-2
1st wave and 2nd wave of COVID -19
Seasonal flu viruses
Multiplex PCR

Dear Editor,

In the year 2019 National Health Portal of India reported 41, 996, 260 cases and 3740 deaths from respiratory infections across the country. India, while contributing to 18% of the global population, has a severe acute respiratory infection (SARI) as one of the prominent causes of mortality especially in children >5 years of age [1].

With the worldwide pandemic of SARS – CoV2 beginning in December 2019, screening for SARS CoV 2 took the centre stage among all the respiratory viruses whenever a case of mild, moderate, or severe URTI/LRTI was reported. Even though Respiratory viruses like Influenza A virus, Influenza B, Respiratory syncytial virus A, and B (RSV A, RSV B) mimic SARS-CoV2 in clinical presentations, they all have different clinical courses, therapies, and outcomes. Also, gradually a period there were cases of mixed infections where an Influenza virus was cohabitating the respiratory tract along with the SARS Co–V 2 virus making simultaneous detection of multiple respiratory pathogens important as each of these viruses runs its own course of illness and the treatment protocol also varies case to case [2,3].

The study was conducted with an emphasis on the need for surveillance of these common respiratory viruses using Multiplex PCR technology for better patient care.

The study aimed to understand the prevalence of SARS-CoV2, RSV A, RSV B, Influenza A virus, and Influenza B in patients having flu-like symptoms. Also, help understand the similarities and differences between the 1st and 2nd wave of the COVID-19 pandemic in terms of the prevalence of these respiratory viruses among adult as well as pediatric population.

Our retrospective study was carried out over 2 phases of 6 months (March 2020–August 2020 and March 2021–August 2021) considering the two COVID waves in the country. Nasopharyngeal and Oropharyngeal swabs from patients with flu-like illness requested for Viral Respiratory Multiplex as well as COVID PCR test were included in the study. SARS CoV-2 PCR and Viral Respiratory Multiplex PCR which simultaneously screens for Influenza A, Influenza B, RSV A, RSV B, Flu A H1N1, and Flu A H3N2 were performed using standard operating procedures.

During Wave 1, of the 75 samples received, 57 samples were found to be positive for SARS CoV2, 3 were positive for Flu A H1N1, 1 Positive for Flu A H3N2, 2 Positive for RSV A, 3 were positive for Influenza A virus. Of these, 9 samples were negative for all the screened viruses. During Wave 2, Of the 281 samples received, 24 samples were found to be positive for SARS CoV2, 28 were positive for Flu A H1N1, 15 Positive for Flu A H3N2, 102 Positive for RSV A, 58 were positive for Influenza A virus and 41 were positive for Influenza B virus. Of these, 13 samples were negative for all the screened viruses. There was no case of coinfections of influenza virus, and SARS-CoV-2 observed in our study.

Considering the ease of lockdown restrictions, and increasing prevalence of seasonal flu viruses, the need to screen respiratory viruses as a Multiplex PCR becomes imperative [1]. Also, a comparative analysis of the scenario of the first wave with that of the second wave would suggest to policymakers the way prepare for better management of COVID-19 recurrence or its severity, the need for diagnosis and surveillance by Multiplex PCR for all respiratory infections to discover their circulating types and estimate disease burden in our country.

Declaration of competing interest

None.

References

[1] Waghmode R, Jadhav S, Nema V. The burden of respiratory viruses and their prevalence in different geographical regions of India: 1970-2020. Front Microbiol 2021;12:723850. https://doi.org/10.3389/fmicb.2021.723850. PMID: 34531842; PMCID: PMC8438434.
[2] Loi Dao Thi, Hoang Van Thuan, Colson Philippe, Million Matthieu, Gautret Philippe. Co-infection of SARS-CoV-2 and influenza viruses: a systematic review and meta-analysis. J Clin Virol 2021;1(3):100036. ISSN 2667-0380.
[3] https://www.indiatoday.in/coronavirus-outbreak/story/florona-disease-in-israel-symptoms-1894912-2022-01-01.

Mukti Dave*
Department of Microbiology, InfeXn Laboratory Pvt. Ltd., Thane, 400604, India

Komal Thakare, Sakshi Pawar, Rajesh Roy, Sonal Bangde
InfeXn Laboratory Pvt. Ltd., Thane, 400604, India

* Corresponding author.
E-mail address: Mukti.dave@infexn.in (M. Dave).

https://doi.org/10.1016/j.ijmmb.2022.04.003
Received 31 March 2022; Accepted 13 April 2022
Available online 27 April 2022