

## Letter

**Influenza and other respiratory viruses in the Covid-19 era**Luis Del Carpio-Orantes<sup>1</sup>, Jesús Salvador Sánchez-Díaz<sup>2</sup>

<sup>1</sup>*Department of Internal Medicine, General Hospital 71, Mexican Social Security Institute, Veracruz, Mexico (Instituto Mexicano del Seguro Social, Veracruz, México).*

<sup>2</sup>*Critical Care Unit, Specialty Hospital 14, Mexican Social Security Institute, Veracruz, Mexico (Instituto Mexicano del Seguro Social, Veracruz, México).*

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**Letter to Editor**

Following the 2009 H1N1 influenza pandemic, the respiratory virus study boomed again, showing that many had a role in the genesis of viral pneumonia and other acute respiratory conditions.

In addition to the various types of influenza, other viruses that are clinically relevant are rhinoviruses, respiratory syncytial virus, adenoviruses, parainfluenza, and in immunocompromised patients, those of the genus herpesviridae (herpes, varicella zoster, cytomegalovirus).

Respiratory viruses are recognized as generators of pandemics such as the Spanish flu (1918) caused by H1N1 influenza viruses, the Asian flu (1957) by the H2N2 influenza virus, the 1968 pandemic called Hong Kong influenza, by the influenza virus. H3N2 and the most recent 2009 pandemic for the H1N1pdm09 virus. These pandemics have been the most worrisome due to their epidemiological implications in the last 100 years, leaving the possibility of new pandemic outbreaks latent.<sup>1</sup>

Among the respiratory viruses that have been recognized as causative agents of acute respiratory infection are influenza A and B viruses; parainfluenza 1, 2, 3 and 4, human metapneumovirus (currently recognized as emerging virus), human respiratory syncytial virus, rhinovirus and enterovirus. Most of them are classified within the Paramyxoviridae family, genus pneumovirus and paramyxovirus; They are highly contagious and

responsible for annual epidemics, mainly during the winter period.<sup>2,3,4,5</sup>

Other viruses have recently been shown to condition pandemic outbreaks, such as the case of coronaviruses, with the SARS (2003) and MERS (2012) outbreaks conditioned by Sars Cov1 and Mers Cov, respectively. These coronaviruses demonstrated their pandemic potential with a high mortality rate as well as virulence affecting various Asian countries and in the Middle East. Since December 2019, a new rapidly progressive pandemic outbreak of acute respiratory disease that caused severe pneumonias as well as severe acute respiratory syndrome was demonstrated, in addition to mild respiratory symptoms and even asymptomatic carrier states, identifying a new coronavirus, today called Sars Cov2, which It has conditioned a global pandemic with almost 7 million infected and more than 401,000 deaths, affecting 188 countries and unfortunately even without specific treatment or vaccination.<sup>6</sup>

Although the Sars Cov2 virus pandemic is found in his acme, other respiratory viruses have been reported that warrant close monitoring, co-infections have even been reported between Sars Cov2 and other respiratory viruses such as rhinovirus, enterovirus, respiratory syncytial virus, and other coronaviruses. (HCoV-HKU1); Co-infections with influenza A and B viruses have also been reported.<sup>7</sup>

\* Correspondence: Luis Del Carpio-Orantes. Diaz Miron S / N, Floresta, Veracruz, Mexico, ZC 91900. E-Mail: neurona23@hotmail.com

Other viruses have been reported during the Sars Cov2 pandemic in the Americas region, after epidemiological surveillance of influenza in its 21st week, the presence of rhinoviruses (159 cases), adenoviruses (45 cases), metapneumoviruses (12 cases), respiratory syncytial (9 cases), influenza B (8 cases) and parainfluenza (7 cases). The countries with the highest report of respiratory viruses other than Sars Cov2 in America are Canada, Costa Rica and Chile.<sup>8</sup>

Given the above, the surveillance of other respiratory viruses is important since some may be susceptible to a specific treatment that helps improve morbidity and mortality rates, especially when they occur in coinfection. He emphasizes that despite the Sars Cov2 acme and that influenza persists at low rates, other viruses are becoming notorious for their incidence, mainly rhinoviruses, adenoviruses, and metapneumoviruses, so attention should be focused on these reports.

### Conflicts of Interest

None

### Acknowledgments

None

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Influenza and other respiratory viruses in the Covid-19 era

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